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# THE LANCET.

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VOLUME I.

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# THE LANCET.

# Lectures on Surgery,

DELIVERED IN

## THE THEATRE OF ST. GEORGE'S HOSPITAL,

DECEMBER 25TH, 1846.

BY SIR B. BRODIE, BART., F.R.S.

## LECTURE II.

### DISTORTIONS OF THE SPINE NOT CONNECTED WITH CARIES.

IN the last lecture I described several varieties of lateral curvature of the spine arising from different causes. That list, however, did not include the cases which are of most frequent occurrence. In fact, those which I have already mentioned form exceptions to the general rule. It is to the most common form of lateral curvature of the spine that I call your attention at present.

In private practice it will often happen—and, if you are in a large private practice, it will happen almost daily—that a mother will bring you her daughter, saying, "There is something wrong in my daughter's shape;" and, accordingly as one part or another most attracts her attention, she will add, "see how this hip projects;" or "that shoulder;" or, "how much higher one shoulder is than the other;" or, "what a difference there is between the two sides of the neck." In some instances, when perhaps a cousin, or a sister, or some other young lady of her acquaintance, has been affected in the same manner, the derangement is noticed at a very early period; while in others it has crept on gradually and imperceptibly, and has been disregarded for some years, until, when you are at last consulted, there is so great a degree of distortion, and the patient's age is so far advanced, that there is little likelihood of your being able to afford her any effectual relief.

If, in one of these cases, the dress be loosened behind, so that you may examine the figure more thoroughly, you find usually the following appearances. The spine being traced upwards from the pelvis has a slight inclination towards the left side. It then, in the lower part of the back, inclines to the right side, and then, in the upper part of the back, to the left side again, so as to form a convex line towards the right scapula. In the neck there is another but less distinct curvature, one effect of which is, that the patient unconsciously turns her face to the left side. If then you examine the different parts connected with the spine, you find their position to be altered also. The right ilium is rendered more conspicuous than the left, in consequence of there being an apparent depression or sinking in of the right ilium. The ribs below the right scapula are unnaturally prominent; while those of the opposite side are flattened and depressed. The left scapula is less prominent than the right, and it approaches nearer to the spine: in bad cases, indeed, some of the spinous processes are actually covered by it. Corresponding changes are to be seen in front: the sternal extremity of one clavicle projects more than that of the other; and the greater elevation of the ribs on one side causes one breast to appear actually larger than the other.

In other cases, the curvature of the spine has taken place in exactly the opposite direction. The appearances are the reverse of what I have just described, but otherwise similar. These changes exist in various degrees; from that which is so slight as to be scarcely perceptible, to that which occasions a hideous deformity.

As I observed in the last lecture, such displacement of the component parts of the trunk of the body cannot exist without an ultimate alteration of their figure. The bodies of the vertebræ become thinner on one side, that is, on the concave side of the curve, and thicker on that of the convexity. At a very early period, and even before the lateral curvature is very distinct posteriorly, the bodies of the vertebræ are actually twisted to one side. This curious circumstance was pointed out to me by M. Guérin, of Paris, who has some preparations in which the fact is very perceptible.

The ribs on one side are, as it were, squeezed together, while on the opposite side an opposite change is produced, the intervals between them being preternaturally increased. The preparations on the table illustrate these appearances. One of them shows another fact of great importance, not only in pathology, but also with reference to practice. The curvature of the lower part of the spine being considerable, a mass of newly formed bone has been deposited on the sides of the vertebræ, acting as a splint, and, in fact, uniting them with each other by a complete bony anchylosis. This kind of bony deposit is met with very commonly in bad cases of spinal curvature, and it shows how hopeless the attempt must be to restore to patients thus afflicted their natural or healthy figure.

In the class of cases of which I am now speaking, you find none of those causes operating to produce the curvature which I described in the last lecture. There is no rickety softness of the bones: the cylindrical bones are of their proper figure; there is no distortion of the pelvis; and young women thus affected may marry without having any special reason to apprehend difficult parturition. Neither is the curvature accounted for by any difference in the length of the two limbs, nor by any partial paralysis, nor by the effects produced by disease in the form of the chest.

The circumstances which, in a greater or less degree, are common to all these cases, and which seem to explain sufficiently the origin of this variety of spinal curvature, are a generally weak state of the muscular system, and a relaxed state of the ligaments. The former is indicated in a variety of ways. The effects of the latter are exhibited in a loose condition of the joints. There is a bending-in of the ankles, the feet being at the same time inclined outwards, in consequence of the ligaments of the ankles not being capable of supporting the weight of the body. The same thing may be observed in the fingers, which the patient can sometimes bend backwards, so that the back of the finger shall almost come in contact with the back of the hand.

I have told you that this kind of curvature is met with very frequently in private practice, and much more rarely in hospitals and dispensaries. It is one of the penalties of a high degree of civilization—a disease almost peculiar to those who have assumed to themselves the title of "the better classes of society;" though "the more affluent classes" seems to be the more appropriate appellation.

It is not difficult to conceive that the advantages which young women of the affluent classes possess should be counterbalanced by certain physical disadvantages. They are in a great degree confined to close and heated rooms. In large towns, the habits of society prevent them from taking more than a very moderate quantity of exercise in the open air; and even in the country (with a few exceptions) they enjoy much less freedom in this respect than their poorer neighbours. Thus, while their bodily powers are too little exercised, their minds are often exercised too much. Even in private education, under a governess, the hours which they spend in study of one kind or another, for the most part exceed those during which their brothers are similarly occupied at school; and at some schools, especially at what are called finishing schools, the business of mental education is carried to such an extent that the girls have scarcely any leisure for recreation. If they go out of doors at all, it is in too formal and decorous a manner to answer any really useful purpose. Let us not blame the ladies who preside over these establishments as being the authors of this erroneous system. To them it is as irksome as it is to their pupils. The fault lies altogether with the parents who send their daughters to school, expecting that within a given period of time they should obtain a certain amount of accomplishments, such as cannot be crammed into them without sacrificing what is really more important to this one object. It might, indeed, be further urged, that the injury thus inflicted on them is not merely physical; that the mind suffers as well as the body; that mere learning, without having leisure for reflection, tends, not to strengthen, but to weaken the intellect. But this is none of our business. It is only to the physical injury that I refer at present.

It is, as you well know, a law of the animal economy, that organs which are not exercised become reduced in size, and that their functions are impaired. If one eye were covered by a bandage for some years, it would, I doubt not, be rendered almost or wholly useless. Even the teeth, slightly organized as they are, are spoiled for want of use. There are no parts in which the operation of this law is so conspicuous as it is in the muscles; and the necessary result of the mode of life which I have just described, is a debilitated state of the whole muscular system. The ligaments of the joints are affected in the same manner, though the effect produced is not so universally perceptible in them as it is in the muscles.

But the mischief does not end here. The free action of the muscles and cheerful occupation of the mind are necessary to the healthy performance of all the more important animal functions. Where these are wanting the digestion is ill performed; the liver is torpid; the action of the bowels is

irregular; the menstruation is deficient, and the patient becomes liable to suffer from hysteria in all the various and mysterious forms which that disease assumes. Frequently the action of the heart is enfeebled; and in consequence of the weak circulation in the extremities, the hands and feet are unnaturally cold, and liable to chilblains. This state of the general health acting on the muscular system aggravates the original evil, rendering the muscles still weaker, and the patient less disposed to exercise them.

To say that the above is an exact representation of the condition of the majority of young women belonging to the affluent classes would be an absurd exaggeration, but with respect to no small proportion of them it would be no exaggeration at all; and the operation of these causes, even when they exist in a slight degree, and do not very sensibly affect the general health, will produce a tendency to distortion of the spine sufficient to justify a mother's anxiety on the subject. Let me take this opportunity of observing, that this state of things is not peculiar to this country of Great Britain. In France, in Germany, in the United States of America, wherever a high degree of civilization exists, these and not a few other disadvantages go *pari passu* with it.

Now observe in what manner muscular weakness must affect the figure of the spine. The column of the twenty-four vertebræ resting on the os sacrum has to support the weight of the head and shoulders. As a weight placed on the top of it would bend a cane to one side, so does the weight of the head and shoulders produce the same effect on the spine. The strong muscles of the spine are the counteracting force maintaining the spine in the erect position. If the muscles are deficient in power, the weight of the head and shoulders being unaltered, they are not equal to the duties which they are required to perform, and a double curvature of the spine is the consequence; the one the immediate result of muscular debility, and the other, of the effort made by the patient to keep the centre of gravity in its proper place.

The same cause operates in the production of spinal curvature in another manner. The patient, when required to stand for any considerable length of time, finds that she does this more easily by throwing the principal weight on one foot, and balancing herself with the other, than by supporting herself equally on both feet, with the pelvis horizontal, and the spine erect; and gradually she acquires the habit of standing in the first of these two positions. I need scarcely explain to you, that the effect of this must be the same as that of one leg or thigh being shorter than the other, and that a further deviation of the spine from its natural figure must be the consequence. Leaning to one side, when in the sitting posture, must have the same effect; and this also is a position which delicate girls are much inclined to assume. In illustration of this last remark, I may observe, that every now and then, I see even a strong and healthy schoolboy, who has made himself, not only perceptibly, but disagreeably awry, by a merely wanton habit of leaning to the right side while engaged in writing his lessons.

The prejudices of modern society have made young ladies the victims of an absurd practice, of which we cannot doubt that it contributes in a very great degree to the prevalence of spinal curvature, and which, on account of the evils which it produces, not only in this but in other ways, it is the duty of every medical practitioner, and of every physiologist, to expose.

There are tribes of Indians who flatten their infants' heads by compressing them between two pieces of board. I do not know whether this compression ever does any actual injury to the brain, but it is well known that it alters the shape of the head. The Indians alluded to believe the alteration to be an improvement on the natural figure; but we, and I suppose all other nations under the sun, with the exception of the aforesaid Indians, regard it as a great deformity.

In China, a young lady, at a very early period after her birth, is placed in the hands of an artist, who squeezes the great toe into the side of the foot, fixes it in this position by strong bandages, and then applies other bandages to the whole foot, pressing the different parts together, thus wholly altering its shape, and preventing its growth. The result is, that when arrived at a maturer age, the girl has such a foot as you have all seen in drawings and models—as unlike the human foot as a foot can be, and almost useless for the purposes for which a foot is designed. This small, distorted, and useless member is esteemed to be a beauty, and held in respect, as distinguishing the individual who has it as belonging to a superior caste in society.

We may well say, "How monstrous, how absurd a custom!" But the Chinese may with perfect justice retort our censure, and say, "You have yourselves a custom not less absurd than this."

Here, in civilized Europe, and among ourselves, who claim to be at least as far advanced in civilization as any other nation in the world, it is thought that the beautiful human figure, that which we admire in the Venus de Medicis or the Venus of Canova, is not beautiful enough, and that it requires to be improved by art. Generally, when a young lady is only a few years old, she is made to wear stays with pieces of whalebone in them; and as she grows older these are increased in number, and a long plate of steel, called a busk, is superadded to them in front. These pieces of whalebone and this plate of steel act as splints to the pelvis and trunk, in a great degree supporting the figure independently of muscular action; and of this the necessary result is, that the muscles become weak and reduced in size. Then it is by some thought necessary that the stays should be laced as tight as possible, especially at the lower part, so as to make the waist unnaturally slender. This interferes with the free action of the muscles of respiration; not only of those which produce the respiratory movements of the ribs, but of the diaphragm also. It compresses the thorax, and distorts the ribs. That any one should regard the figure thus artificially distorted as more beautiful than the female figure in its natural state, is strange enough:—but that is not our concern at present. There can be no doubt, that in all cases, by weakening the muscles of the spine, and in some cases indirectly, by interfering with the freedom of respiration, and thus depressing the physical powers of the whole system, the effect of wearing stays, such as I have described, must be to produce or aggravate the tendency to spinal curvature. You should all of you, as you advance in reputation, use your influence in society to get rid of this absurd custom, and especially to prevent children, who have never yet wore stays, from undergoing this infliction. In the case of those young ladies who have for some time wore them, it may not be safe all at once to take away the whole support; but the number of pieces of whalebone may be gradually reduced, until at last they are removed altogether.

A knowledge of the causes of disease is the first step towards its cure, and the observations which I have just offered will render what I have to say, as to the treatment of this the most frequent variety of spinal curvature, sufficiently intelligible.

In every case there are some preliminary questions. Is it one in which there is a reasonable chance of our doing the patient service? and if there be, how much time may yet elapse before the period of her growth is concluded, and her figure made for life, so that no further improvement is to be expected? The plan to be recommended must depend in a great degree on the answer which may be given to these inquiries. If the patient be nineteen or twenty years of age, any treatment that is had recourse to must terminate in disappointment. If she be only 13 or 14 years of age, or still younger than this, she has sufficient time before her to justify you, even if there be a considerable curvature, in employing the simplest means in the first instance, reserving other methods of treatment until those first employed, having had a reasonable trial, have been found to be insufficient. At a later age, such as that of sixteen or seventeen years, you are to bear in mind that there is little time to spare, and the treatment, which, though most inconvenient, is the most certain in its effects, must be resorted to in the first instance.

I shall first consider the plan to be pursued in the slighter cases of the disease, premising, however, that this includes at least nineteen-twentieths of the cases about which you will be consulted.

The objects to be kept in view are—first, the improvement of the general health, and the increase of the muscular power generally. Secondly, the increase especially of the power of the muscles which are connected with the spine, and whose office it is to support the weight of the head and shoulders. Thirdly, the taking off the weight of the head and shoulders, as far as this can be accomplished by simple means, and without interfering with what is required for the two first-mentioned purposes. Fourthly, the avoiding various habits, which, although not in themselves an adequate cause of spinal curvature, may tend to aggravate it when it has been produced in other ways.

As to the first of these objects, it is plain that no general rule can be laid down, except that it is important that the patient should, if possible, live in the country rather than in a crowded city; that she should be as much as possible in the open air, taking whatever amount of exercise she can bear without being exceedingly fatigued; and that she should not devote more than a few hours daily to intellectual studies, and

to the acquirement of accomplishments. Some may require an occasional visit to the seaside; others may be benefited by residing there constantly. A cold shower-bath is very generally useful. Others require, or if they do not absolutely require, may take with advantage, preparations of iron, or quinine, or some other tonics.

With a view to strengthen in particular the muscles of the back, particular exercises may be had recourse to: and many kinds of exercise have been contrived for this purpose. All climbing exercises are useful in this respect, bringing all the muscles of the spine into vigorous action. They are at the same time beneficial in another way, the weight of the lower limbs tending to elongate and strengthen the column of the vertebræ. A rope with worsted wound round it, that it may not hurt the hands, may be suspended from the ceiling, and the patient will soon become a dexterous climber. There are often two or three girls in a family for whom this exercise will be beneficial, and that which would be a tedious and irksome task to a girl alone, will become an amusement when pursued in the company of others of her own age. The hand-swing affords a very useful exercise in these cases also. This is a triangle composed of a double rope with a cross-bar of wood forming the base of the triangle, suspended from the ceiling at such a height that the individual who uses it can just reach the cross-bar with her hands as she stands on tip-toe. She is to hold the bar with both her hands, and swing with her feet raised a little from the ground. The effect of this exercise also is to bring the muscles of the spine into action, at the same time that the weight of the lower limbs operate, in the same manner as when she climbs a rope. At first, probably, she will not be able to continue to use the hand-swing for more than a few seconds at a time, but as she grows stronger she will swing for a much longer period. Another mode of exercising, and thus strengthening the muscles of the back, is the following:—Let one pulley be fixed to the ceiling, and another to the floor. Let a small rope pass over the upper pulley and under the lower pulley, a box containing a light weight being fastened to that end of the rope which is nearest to the upper pulley, and a handle to that which is nearest to the lower pulley. The patient, standing with her face towards the pulleys, is to raise and lower the weight, holding the handle in both her hands. The effort used in raising the weight necessarily calls the muscles of the back into action, and as the patient becomes accustomed to it, the required effort may be increased by putting an additional weight into the box. This exercise may be varied by taking off the handle, and fixing the rope to a bandage fastened round the head, so that the weight is raised by the action of the muscles of the neck and back without the aid of the arms. The latter method of using the pulleys, however, is wearisome to the patient, and, practically, much less useful than the other.

I offer these as examples of the kind of exercise which may be supposed to be especially adapted to cases in which there is deficiency of power in the muscles of the spine. Understanding what is required, you may easily invent others equally efficacious. Those which I have described have the advantage of simplicity, and of being easily adopted in a private house. One or the other may be had recourse to according to circumstances: and it is better that the patient should practise her exercises at different periods of the day, rather than be exhausted by practising them for a very long time at any one period: anything like over-exertion should be carefully avoided.

Friction and shampooing acts upon the muscles to a certain extent in the same manner as exercise, and in the case of delicate girls, who in the first instance are not able to take exercise in any efficient manner, may be substituted for it. It will, however, be of little service unless it be employed for one or two hours daily, and it should be applied, not only to the muscles of the back, but to those of the chest and extremities.

The third object to which our treatment is to be directed, in ordinary cases of spinal curvature, (that is, in those which are not of a very inveterate character,) is very easily obtained. When not engaged in exercise, the patient should spend either a portion or the whole of her time in the recumbent posture. If the curvature be very trifling, it will probably be sufficient if she always lies down for half an hour after taking exercise; if it be greater, it may not be too much to require that she should never stand for more than a few minutes at a time, and never sit except at her meals.

In order that this part of the treatment should be successfully carried out, it is important that it should be made as little irksome as possible to the patient. I sometimes see young ladies made to lie on their backs on the floor, with nothing to support the head, remaining there, motionless, for hours together. Such a system cannot be long pursued, for it makes those who are subjected to it miserable. Neither is it prudent. When Jacob could get nothing better, he was contented to rest his head on a pillow of stone; and for those especially whose cheeks are naturally of a high colour, indicative of a considerable supply of blood to the head, to lie long with the head unsupported is actually dangerous. In these cases, nothing more is really necessary than that the patient should be recumbent, and that she should vary her position, so that she may not lie more on one side than on the other. There should always be some sort of cushion under the head, so as to keep it raised above the level of the body, and there is no objection to the shoulders being in some degree elevated also. The apparatus known by the name of "the inclined plane" is useful to a certain extent. If, however, it be used during any considerable part of the day, it is not only irksome, but produces a feeling of exhaustion, sufficient to interfere with the necessary exercises. I refer, of course, to the inclined plane, properly constructed; that is, a smooth board, raised at a small angle from the ground, with a space or hollow made to receive the back of the head, and a leathern strap to support the chin.

I sometimes see an inclined plane in which there is nothing to receive the head or support the chin at the same time that there is a foot-board to support the feet. A little consideration will satisfy you that the author of this last invention was entirely ignorant of the principle on which the use of the inclined plane has been recommended. The effect of the feet being made to rest on the foot-board is, that instead of the weight of the lower limbs tending to straighten and elongate the spine, the weight of the head and shoulders tends to produce exactly the opposite effect. In fact, there is the same objection to it as to the sitting or standing posture, and lying on a couch is much to be preferred. The prone couch, the invention of a gentleman who is now no more, and who (under the patronage of a long list of ladies) offered it as a remedy, not only for all diseases of the spine, but for a multitude of other diseases, (if my recollection be accurate, pulmonary consumption was one of them,) may be used with advantage, with a view to an occasional change of posture. The lying on it constantly, however, or even during any large portion of the day, is by no means to be recommended. The pressure being thrown altogether on the forepart of the body cannot fail to interfere with the due performance of the functions of the abdominal viscera, and still more with the respiratory movements, and I have myself witnessed one very ill effect of the long continued use of it—namely, a flattening of the forepart of the chest, causing a greater disfigurement than that which it was pretended the couch would remedy.

I have observed that there are certain employments and habits which have a tendency to increase spinal curvature, and which therefore should be avoided. Of these none is more mischievous than the practice of standing on one foot. But this the patient does unconsciously, and the only way to prevent it is for her to stand as little as possible. Playing on the harp, drawing, and even much writing, are on this account objectionable. A young lady who is threatened with spinal curvature, if she rides on horseback, should sit alternately on the right and left side, being provided with a saddle which admits of this change of posture. In like manner, if she plays with a battledore, or trundles a hoop, she should use sometimes one hand and sometimes the other. Even when in bed she should be careful to vary her position, and should endeavour to accustom herself to lie alternately on the right and left side. As I have already explained, it is important that her head should be raised above the level of the rest of the body; but a single bolster or pillow is sufficient, and a very high pillow, which cannot be used without giving a considerable curve to the spine, should be avoided.

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"Dr. Hope often spoke of the imprudence of a man commencing his career in style, or setting up his carriage at too early a period. Of course, a certain respectability of appearance must be maintained from the first, and after some time the removal to a handsome house, and the setting up of a handsome carriage, may be beneficial, as giving an impression of professional success. But if these are assumed at an early period, when it must be evident to all, that they are supported from private, not professional, resources, the owner loses all benefit from them at the time, and the power of resorting to them, when he is legitimately entitled to do so."—*Memoir of the late Dr. Hope.*

# Hospital Reports.

## ROYAL SOUTH LONDON DISPENSARY.

### PLEURITIC EFFUSION AND MALIGNANT DISEASE.

Reported by WILLIAM TIFFIN ILIFF, Jun., Surgeon to the Dispensary.

It is with no little interest that I have perused, in the last volume of the *Guy's Hospital Reports*, Dr. Addison's succinct and practical remarks on the fallacies attending physical diagnosis in diseases of the chest. Of the importance of the subject there can be no doubt; and the following case will afford an illustration of the seventeenth and twenty-seventh propositions, which I here quote:—"Auscultation and percussion alone are insufficient to distinguish malignant disease, hydatids, or a tumour, from more ordinary diseases of the chest. . . . . When serous effusion is very considerable, giving rise to unequivocal bronchophony, tubular respiration, and want of resonance and vocal vibration, physical examination has repeatedly led to a mistaken belief that these signs resulted from pneumonic or other consolidation of the lung."

Joseph H——, aged forty-eight, was admitted as out-patient, Oct. 20th, 1846. He is a spare, but apparently healthy man; rather short stature; keeps a gingerbeer-stand in the streets; drinks freely of beer, not much spirits. Lost the sight of one eye many years ago by the explosion of a cracker; states that he has been ill two or three months with the following symptoms:—Pain at the pit of the stomach and left hypochondriac region, aggravated very much by eating, as the food seems to "scrape the bowels;" a sense of constriction and fulness, and frequent eructations,—these, however, causing relief. He is very irregular in his meals, owing to the pain occasioned, and has even gone two or three days almost without food, to avoid the suffering consequent on its being taken. He has not, however, been confined at home, but has continued his occupation. Tongue clean, somewhat red at the edges; no sickness; no pain on pressure; pulse regular and normal; rest bad at night. He attributes his suffering entirely to flatulence. His treatment consisted of opium, alkalies, bismuth, demulcents, &c., internally, with repeated applications of counter-irritants in the shape of mustard poultices, blisters, and turpentine stupes; but with only temporary relief. Towards the end of November, however, he began to complain of cough, which at first he had merely casually alluded to; and I examined his chest on the 24th, with this result:—The left side was very dull on percussion throughout, anteriorly, laterally, and posteriorly; the right side resonant, except in the infra-mammary region, towards the sternum, where there was dulness. In inspiration, both to the eye and hand, no movement of the left chest was perceptible; and there is, I think, slight rounding of that side. The superficial veins of the thorax are large and easily traced, so also are one or two on the left side of the abdomen. Below, and to the right of the left nipple, there is a small dense body, the size of a pea, quite loose, and subjacent to the skin.—Right side: Anteriorly, respiration puerile, harsh, very loud, and also posteriorly, with, in addition, some little large mucous crepitation.—Left side: Anteriorly and superiorly, respiration distant and blowing, giving the idea of its being laryngeal, or conducted from the opposite side; inferiorly, tubular breathing, as also posteriorly and laterally, though near the spine there was an approach to puerile respiration, with some slight mucous crepitation. Bronchophony audible superiorly and anteriorly, and especially posteriorly, even to the bottom of the chest, nowhere entirely absent, though most faint in the infra-mammary region. Heart's sounds faint and confused, heard over increased space, and most clear beneath and to the right of the sternum. No bruit. By closely questioning the patient and his wife, I learned this additional history:—That he was a bell-ringer of some repute, and was last so occupied at St. Saviour's, Southwark, on the 9th of November; and on finishing the peal, he had felt perfectly exhausted, and experienced great difficulty in breathing. About five months ago he was struck by the shaft of a cart on the left side, where the little tumour is now felt, (it did not, however, then exist,) and complained for a day or two of pain; but he was not laid up. Shortly after this he caught cold by sitting long in wet clothes, and this was succeeded by cough, dry and tickling, so violent at times as to cause epistaxis. Two or three months before I saw him, his stomach symptoms began to cause suffering, and he had been out-patient at one of the hospitals until the time he came under my care. Of late he has been only able with comfort to assume the semi-recumbent position in bed; he cannot lie upon the right side, his dyspnœa being thereby aggravated, and something seems to drag across his chest; nor on the left, as this causes pain there. He has slight pain between the shoulders; no marked tenderness on pressure; expectoration clear and scanty; spirits good; tongue as before; bowels rather irregular; urine free; appetite good; pain after eating rather less; sleep bad; pulse 80, regular, soft, and rather weak. For the last two days he has kept his bed. At the close of my examination of his chest, he was seized with severe dyspnœa and gasping, from which he was some minutes recovering. I may here remark, that in moving or shifting any article of dress, he cannot be induced to take time; his movements are rapid and excitable. A little gin-and-water was allowed. Broth and arrow-root. Castor-oil and tincture of opium every morning. A large blister to the left side. Hydrochlorate of morphia, half a grain, every night; an emulsive draught every six hours.

Nov. 29th.—Has been much relieved by the regular action of the bowels, and has felt, on the whole, improved, until yesterday evening, when his breathing became worse, and his symptoms more urgent. I found him to-day on his back, as usual, raised to about an angle of 35°; clammy perspiration; anxious countenance; respirations 48 in a minute; more gasping; words uttered in jerks, he being unable to speak continuously; pulse 102, intermittent and irregular, soft, weak, and rather small. Great restlessness and inability to bear the least article of dress across his chest, at times even insisting on the door and windows being opened, (weather frosty, wind north-east;) cough in paroxysms; inability to expectorate; tongue furred; urine high-coloured, loaded with lithates. Mustard poultices every eight hours to the chest. Vinegar of squills, half an ounce; spirits of sulphuric æther, six drachms; spirits of nitric æther, half an ounce; syrup of white poppies, three drachms; camphor mixture to a six-ounce mixture. Mix. One tablespoonful to be taken frequently. Compound squill pill, four grains; powdered ipecacuanha, one grain, every six hours.

30th.—One P.M.: Very little alteration; has had a bad night; sounds of chest much the same; rather more bronchial obstruction; heart's sounds confused; expectoration purely bronchitic, rather viscid, speckled with carbonaceous particles; position the same; face pallid; feet warm; pulse much the same, rather weaker. To continue the treatment.—Half-past seven P.M.: Much lower; pulse 100, very weak, irregular, and intermittent; respirations 50; not much pain, but extreme sense of constriction; left side inferiorly, tympanitic from distended stomach; respiration more obstructed; heart's sounds more clear, and audible to the left of the sternum. He was able to sit up in bed for a minute or two, when the sounds of the left chest were remarked to appear close under the ear; but careful examination was out of the question. Urine loaded with lithates, moderately coagulable, sub-acid.

Dec. 1st.—After much suffering and great distress, especially at the last, he died at nine o'clock A.M., retaining consciousness to the last.

*Necropsy, twenty-four hours after death.*—Present, Dr. Birkett, Mr. Callaway, jun., and myself: weather frosty. Body slightly emaciated, destitute of fat; muscles of a dark red colour, and well developed; axillary glands on both sides strumously enlarged; a scirrhous tubercle below the left nipple. On opening the thorax, the pleura on the left side was firmly adherent to the ribs, and the heart was centrally situated. In the right pleura was found rather more than a pint of clear serous fluid, and the pleura pulmonalis was sprinkled here and there with flattened patches of white matter (very much like drops of tallow) of malignant character; there were also rounded elevations of emphysema; the apex of the lung was hard, and a little puckered, and the whole lung of a darker colour, and rather more solid than natural, and in the apex were observed some spots of malignant matter. In the left pleura there were four pints and a half of sanguineous and glutinous serum; the lung was small, compressed, dark coloured, fleshy, and contained but little air; the tubes were large, hard, gaping, and in some parts surrounded by hard white deposit, especially at the point of entrance of the great vessels, (indeed, the whole posterior mediastinum was filled with the same matter;) the apex of the left lung was attached by firm adhesions to the posterior wall of the upper part of the cavity, and a little below, on the same wall, was attached the mass of the lung, occupying a space of about six inches in length, and three in breadth, and reaching to a point between the sixth and seventh ribs. A little below this, and rather anterior, was attached one end of a strong bridle of adhesion, about two inches in length, the other extremity being attached to the

pleura over the pericardium. The whole internal surface of the left pleura was drawn and puckered like old strumous scars, and deeply and profusely inlaid, and elevated with flattened white malignant tubercles. The floor of the cavity was contracted and drawn up. The pericardium contained about two ounces of clear serum; its reflected surface was marked with small flattened nodulated elevations, and the subjacent structure was much thickened and indurated; the attached surface, except a large point of attrition anteriorly, was healthy. The substance, cavities, and valves of the heart, were generally healthy, except perhaps a little thickening of the mitral valve. Right side distended with fibrinous coagula; aorta natural; around and in the muscular substance of the œsophagus were found points of hard malignant matter; the mucous membrane was healthy; no trace of any rib having been broken.

*Abdomen.*—Peritonæum healthy; mesenteric glands enlarged, one consisting of a hardened cretaceous mass. The stomach was distended; vessels on the inner aspect somewhat injected and arborescent; mucous membrane softened here and there, of a dull greyish-white colour, and easily scraped off; in several parts irregularly dotted, of a dusky colour. Liver rather large, dark, firm. Spleen healthy. Kidneys rather large and congested; structure healthy.

*Remarks.*—The symptoms for the relief of which this patient first applied were clearly to be attributed to the stomach, and the result of the necropsy showed the justice of this opinion. No history of any acute attack was given, nor any symptom, other than to be accounted for by a state of chronic inflammation of the mucous membrane of the stomach, and which, from his occupation, I was induced to think likely, with probably some chronic disease of the liver. His cough was but cursorily mentioned, as he considered it of secondary importance to the suffering caused by the stomach derangement. Though very excitable, he was, withal, most unwilling to give way, and avoided rather than willingly imparted any extended account of himself or his feelings. The relief was but slight, and on his cough beginning to assume a more prominent position, I examined his chest carefully, and was at once convinced of the presence of advanced disease on the left side. Leading questions and the statement of his wife furnished the additional history, which was, however, with difficulty obtained, even in its incomplete form. The succession of symptoms seem to be, a blow some months ago on the left side, followed by pain there for a day or two, exposure to wet, and after an interval, dry cough of a very severe character, occurring in paroxysms, dyspnœa, inability to lie on the sound side, scanty and clear expectoration, without febrile symptoms, or anything to indicate active mischief. In the course of the attack, gastric symptoms arose, which for a time were very prominent. Lastly, universal dulness, and fixed condition of the left chest, and altered position of the heart, the very faint sounds of which induced me to suspect a preternatural quantity of fluid in the pericardium.

The symptoms, so far, were those commonly met with in pleurisy of a sub-acute or chronic form, succeeded by persistent effusion; they were, however, equally compatible with a solid growth in the chest, of malignant character, and to this opinion I was inclined throughout, and for the following reasons: the veins of the chest were enlarged; a scirrhous tubercle followed the blow; it is not general to have much pain on lying on the affected side in mere effusion; the dulness on percussion was perfectly wooden; and the peculiar sounds elicited by the stethoscope appeared to require more than mere effusion to account for them. The existence of enlargement in the axillary glands would have been an additional reason for suspecting malignant disease, but I did not notice this fact during life. The voice also was peculiar, and showed great obstruction to respiration, and the inability to sit up in bed is not a usual sign in effusion. The heart may be displaced in either case, and malignant disease may exist without characteristic expectoration.

With this uncertainty in my own mind I was desirous of another opinion, and Dr. Addison was kind enough to examine this patient's chest, and investigate his case, the result being that the presence of fluid alone did not satisfy him, and he was inclined to suspect malignant disease to be the cause of the peculiar symptoms.

Increased severity of the weather, and perhaps debility from insufficient nourishment, owing to his gastric mischief, tended to accelerate and rapidly bring on the more urgent symptoms.

On the 30th, Dr. Birkett (to whom I am also greatly indebted for valuable assistance in recording the appearances found after death) saw him with me, and examined his chest as far as could be without distressing the patient—indeed, only anteriorly,—and was rather inclined to the belief that there was fluid present. In the evening of that day, I again visited the patient, in company with my father and Dr. Birkett, and took with me the tapping instruments, intending, should our examination of his chest seem to justify it, to explore at least, and if fluid were present, to remove it, as affording the only hope of relieving the extreme oppression. The reasons which deterred me from this were—1st. The inability to find by auscultation any one spot where the sounds conveyed to the ear might seem, as far as could be, to ensure the safety of exploring. 2nd. The heart was more audible in the left infra-mammary region, and its sounds clearer than heretofore. (Could this have been at all occasioned or influenced by the accession of a tympanitic condition of the stomach?) And 3rd. On applying the ear briefly to the posterior parietes of the left chest, the sounds were too close to the ear. Careful examination was out of the question, as in the semi-recumbent position alone did he seem able to breathe, I may almost say, at all. The exploration was reluctantly abandoned, and death soon terminated the patient's sufferings.

In concluding, it may be well briefly to consider the connexion between the symptoms during life and the morbid condition displayed by the post-mortem examination.

1st. The presence of the extensive collection of fluid, the result of that form of disease denominated by Laennec hæmorrhagic pleurisy, fully explained all the symptoms supposed during life to indicate effusion; and the commencement of this, I think, may justly be assigned to a period shortly after the blow. The effusion on the right side was evidently very recent.

2ndly. The condition of the contents of the posterior mediastinum will explain the sounds heard in the left infra-clavicular region, and account for the transmission of the sounds of the opposite lung, or apparent laryngeal respiration.

3rdly. The density of the fluid rendered it a better conducting medium for sound; and the position of the lung against the posterior parietes, and its not being quite impermeable to air, will explain the sounds posteriorly. And

4thly. The gastric symptoms are fully and sufficiently accounted for. What, then, would have been the effect of tapping? Unquestionably, relief, but only temporary, for the malignant disease would have very probably been excited to increased action by the withdrawal of the fluid, and speedily terminated life, even supposing his powers had rallied, and his cough had been subdued. I am, however, quite convinced, that though the position of the lung was against the ribs, yet had exploration been performed, (where it was intended, if possible, to have done so—viz., in the posterior lateral region, five or six inches from the spine, and not low down,) that the whole of the fluid might have been removed also, with perfect safety, as regards any injury likely to have been inflicted by the trocar.

## Original Papers.

### SURGICAL OPERATIONS PERFORMED DURING INSENSIBILITY,

PRODUCED BY THE INHALATION OF SULPHURIC ETHER.

(*Communicated by* FRANCIS BOOTT, M.D.)

*To the Editor of* THE LANCET.

SIR,—I beg to call your attention to the report of an anodyne process, by means of which surgical operations have been performed without pain. I think it would be interesting to the profession if published in THE LANCET. I also send a letter from Dr. Bigelow, bearing date more than three weeks after the report drawn up by his son. I wish to add, that Dr. Bigelow is one of the first physicians of Boston, a Professor of the Medical School of Harvard College, and a man of great accomplishment.—Yours sincerely,

Gower-street, Bedford-square, Dec. 1846. F. BOOTT.

*Extract from a private letter from* Dr. BIGELOW *to* Dr. FRANCIS BOOTT.

"Boston, Nov. 23, 1846.

"MY DEAR BOOTT,—I send you an account of a new anodyne process lately introduced here, which promises to be one of the important discoveries of the present age. It has rendered many patients insensible to pain during surgical operations, and other causes of suffering. Limbs and breasts have been amputated, arteries tied, tumours extirpated, and many hun-

dreds of teeth extracted, without any consciousness of the least pain on the part of the patient.

"The inventor is Dr. Morton, a dentist of this city, and the process consists of the inhalation of the vapour of ether to the point of intoxication. I send you the *Boston Daily Advertiser*, which contains an article written by my son Henry, and which is extracted from a medical journal, relating to the discovery.

Let me give you an example. I took my daughter Mary, last week, to Dr. Morton's rooms, to have a tooth extracted. She inhaled the ether about one minute, and fell asleep instantly in the chair. A molar tooth was then extracted, without the slightest movement of a muscle or fibre. In another minute she awoke, smiled, said the tooth was not out, had felt no pain, nor had the slightest knowledge of the extraction. It was an entire illusion.

"The newspaper will give you the details up to its date, since which other operations have been performed with uniform success.

"*Dr. F. Boott.*"

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The following paper, by Henry Jacob Bigelow, M.D., one of the Surgeons of the Massachusetts General Hospital, was read before the Boston Society of Medical Improvement, Nov. 9th, 1846, an abstract having been previously read before the American Academy of Arts and Sciences, Nov. 3rd, 1846.*

It has long been an important problem in medical science, to devise some method of mitigating the pain of surgical operations. An efficient agent for this purpose has at length been discovered. A patient has been rendered completely insensible during an amputation of the thigh, regaining consciousness after a short interval. Other severe operations have been performed without the knowledge of the patients. So remarkable an occurrence will, it is believed, render the following details relating to the history and character of the process, not uninteresting.

On the 16th of October, 1846, an operation was performed at the hospital, upon a patient who had inhaled a preparation administered by Dr. Morton, a dentist of this city, with the alleged intention of producing insensibility to pain. Dr. Morton was understood to have extracted teeth under similar circumstances, without the knowledge of the patient. The present operation was performed by Dr. Warren, and though comparatively slight, involved an incision near the lower jaw, of some inches in extent. During the operation, the patient muttered, as in a semi-conscious state, and afterwards stated that the pain was considerable, though mitigated; in his own words, as though the skin had been scratched with a hoe. There was probably, in this instance, some defect in the process of inhalation, for, on the following day, the vapour was administered to another patient with complete success. A fatty tumour, of considerable size, was removed by Dr. Hayward from the arm of a woman, near the deltoid muscle. The operation lasted four or five minutes, during which time the patient betrayed occasional marks of uneasiness; but upon subsequently regaining her consciousness, professed not only to have felt no pain, but to have been insensible to surrounding objects—to have known nothing of the operation, being only uneasy about a child left at home. No doubt, I think, existed in the minds of those who saw this operation, that the unconsciousness was real; nor could the imagination be accused of any share in the production of these remarkable phenomena.

I subsequently undertook a number of experiments, with the view of ascertaining the nature of this new agent, and shall briefly state them, and also give some notice of the previous knowledge which existed of the use of the substances I employed.

The first experiment was with sulphuric ether, the odour of which was readily recognised in the preparation employed by Dr. Morton. Ether inhaled in vapour is well known to produce symptoms similar to those produced by the nitrous oxide. In my own former experience, the exhilaration has been quite as great, though perhaps less pleasurable, than that of this gas, or of the Egyptian *haschish*.† It seemed probable that the ether might be so long inhaled as to produce excessive inebriation and insensibility; but in several experiments the exhilaration was so considerable that the subject became uncontrollable, and refused to inspire through the apparatus. Experiments were next made with the oil of wine, (ethereal oil.) This is well known to be an ingredient in the preparation known as Hoffman's anodyne, which also contains alcohol, and this was accordingly employed. Its effects upon the three or four subjects who tried it were singularly opposite to those of the ether alone. The patient was tranquillized, and generally lost all inclination to speak or move. Sensation was partially paralyzed, though it was remarkable that consciousness was always clear, the patient desiring to be pricked or pinched, with a view to ascertain how far sensibility was lost. A much larger proportion of oil of wine, and also chloric ether, with and without alcohol, were tried, with no better effect.

It remains briefly to describe the process of inhalation by the new method, and to state some of its effects. A small, two-necked glass globe contains the prepared vapour, together with sponges, to enlarge the evaporating surface. One aperture admits the air to the interior of the globe, whence, charged with vapour, it is drawn through the second into the lungs. The inspired air thus passes through the bottle, but the expiration is diverted by a valve in the mouth-piece, and escaping into the apartment is thus prevented from vitiating the medicated vapour. A few of the operations in dentistry, in which the preparation has as yet been chiefly applied, have come under my observation. The remarks of the patients will convey an idea of their sensations.

A boy of sixteen, of medium stature and strength, was seated in the chair. The first few inhalations occasioned a quick cough, which afterwards subsided; at the end of eight minutes the head fell back, and the arms dropped, but owing to some resistance in opening the mouth, the tooth could not be reached before he awoke. He again inhaled for two minutes, and slept three minutes, during which time the tooth, an inferior molar, was extracted. At the moment of extraction the features assumed an expression of pain, and the hand was raised. Upon coming to himself he said he had had a "first-rate dream—very quiet," he said, "and had dreamed of Napoleon—had not the slightest consciousness of pain—the time had seemed long;" and he left the chair, feeling no uneasiness of any kind, and evidently in a high state of admiration. The pupils were dilated during the state of unconsciousness, and the pulse rose from 130 to 142.

A girl of sixteen immediately occupied the chair. After coughing a little, she inhaled during three minutes, and fell asleep, when a molar tooth was extracted, after which she continued to slumber tranquilly during three minutes more. At the moment when force was applied, she flinched and frowned, raising her hand to her mouth, but said she had been dreaming a pleasant dream, and knew nothing of the operation.

A stout boy of twelve, at the first inspiration coughed considerably, and required a good deal of encouragement to induce him to go on. At the end of three minutes from the first fair inhalation, the muscles were relaxed and the pupil dilated. During the attempt to force open the mouth he recovered his consciousness, and again inhaled during two minutes, and in the ensuing one minute two teeth were extracted, the patient seeming somewhat conscious, but upon actually awaking, he declared "it was the best fun he ever saw," avowed his intention to come there again, and insisted upon having another tooth extracted upon the spot. A splinter which had been left afforded an opportunity of complying with his wish, but the pain proved to be considerable. Pulse at first 110, during sleep 96, afterwards 144; pupils dilated.

The next patient was a healthy-looking, middle-aged woman, who inhaled the vapour for four minutes; in the course of the next two minutes a back tooth was extracted, and the patient continued smiling in her sleep for three minutes more. Pulse 120, not affected at the moment of the operation, but smaller during sleep. Upon coming to herself, she exclaimed that "it was beautiful—she dreamed of being at home—it seemed as if she had been gone a month." These cases, which occurred successively in about an hour, at the room of Dr. Morton, are fair examples of the average results produced by the inhalation of the vapour, and will convey an idea of the feelings and expressions of many of the patients subjected to the process. Dr. Morton states, that in upwards of two hundred patients, similar effects have been produced. The inhalation, after the first irritation has subsided, is easy, and produces a complete unconsciousness at the expiration of a period varying from two to five or six, sometimes eight minutes; its duration varying from two to five minutes; during which the patient is completely insensible to the ordinary tests of pain. The pupils in the cases I have observed have been generally dilated; but with allowance for excitement and other disturbing influences, the pulse is not affected, at least in frequency; the patient remains in a calm and tranquil slumber, and wakes with a pleasurable feeling. The mani-

* From the Boston Medical and Surgical Journal.
† Extract of Indian hemp.

festation of consciousness or resistance I at first attributed to the reflex function, but I have since had cause to modify this view.

It is natural to inquire whether no accidents have attended the employment of a method so wide in its application, and so striking in its results. I have been unable to learn that any serious consequences have ensued. One or two robust patients have failed to be affected. I may mention as an early and unsuccessful case, its administration in an operation performed by Dr. Hayward, where an elderly woman was made to inhale the vapour for at least half an hour without effect. Though I was unable at the time to detect any imperfection in the process, I am inclined to believe that such existed. One woman became much excited, and required to be confined to the chair. As this occurred to the same patient twice, and in no other case as far as I have been able to learn, it was evidently owing to a peculiar susceptibility. Very young subjects are affected with nausea and vomiting, and for this reason Dr. Morton has refused to administer it to children. Finally, in a few cases, the patient has continued to sleep tranquilly for eight or ten minutes, and once, after a protracted inhalation, for the period of an hour.

The following case, which occurred a few days since, will illustrate the probable character of future accidents. A young man was made to inhale the vapour, while an operation of limited extent, but somewhat protracted duration, was performed by Dr. Dix upon the tissues near the eye. After a good deal of coughing, the patient succeeded in inhaling the vapour, and fell asleep at the end of about ten minutes. During the succeeding two minutes, the first incision was made, and the patient awoke, but unconscious of pain. Desiring to be again inebriated, the tube was placed in his mouth and retained there about twenty-five minutes, the patient being apparently half affected, but, as he subsequently stated, unconscious. Respiration was performed partly through the tube, and partly with the mouth open. Thirty-five minutes had now elapsed, when I found the pulse suddenly diminishing in force, so much so, that I suggested the propriety of desisting. The pulse continued decreasing in force, and from 120 had fallen to 96. The respiration was very slow, the hands cold, and the patient insensible. Attention was now, of course, directed to the return of respiration and circulation. Cold affusions, as directed for poisoning with alcohol, were applied to the head, the ears were syringed, and ammonia presented to the nostrils and administered internally. For fifteen minutes the symptoms remained stationary, when it was proposed to use active exercise, as in a case of narcotism from opium. Being lifted to his feet, the patient soon made an effort to move his limbs, and the pulse became more full, but again decreased in the sitting posture, and it was only after being compelled to walk during half an hour that the patient was able to lift his head. Complete consciousness returned only at the expiration of an hour. In this case the blood was flowing from the head, and rendered additional loss of blood unnecessary; indeed, the probable hæmorrhage was previously relied on as salutary in its tendency.

Two recent cases serve to confirm, and one, I think, to decide, the great utility of this process. On Saturday, November the 7th, at the Massachusetts General Hospital, the right leg of a young girl was amputated above the knee, by Dr. Hayward, for disease of this joint. Being made to inhale the preparation, after protesting her inability to do so, from the pungency of the vapour, she became insensible in about five minutes. The last circumstance she was able to recall was the adjustment of the mouth-piece of the apparatus, after which she was unconscious until she heard some remark at the time of securing the vessels—one of the last steps of the operation. Of the incision she knew nothing, and was unable to say, upon my asking her, whether or not the limb had been removed. She refused to answer several questions during the operation, and was evidently completely insensible to pain or other external influences. This operation was followed by another, consisting of the removal of a part of the lower jaw, by Dr. Warren. The patient was insensible to the pain of the first incision, though she recovered her consciousness in the course of a few minutes.

The character of the lethargic state which follows this inhalation is peculiar. The patient loses his individuality, and awakes after a certain period, either entirely unconscious of what has taken place, or retaining only a faint recollection of it. Severe pain is sometimes remembered as being of a dull character; sometimes the operation is supposed to be performed by somebody else. Certain patients whose teeth have been extracted, remember the application of the extracting instruments; yet none have been conscious of any real pain.

As before remarked, the phenomena of the lethargic state are not such as to lead the observer to infer this insensibility. Almost all patients under the dentist's hands scowl or frown; some raise the hand. The patient whose leg was amputated, uttered a cry when the sciatic nerve was divided. Many patients open the mouth, or raise themselves in the chair, upon being directed to do so. Others manifest the activity of certain intellectual faculties. An Irishman objected to the pain that he had been promised an exemption from it. A young man taking his seat in the chair and inhaling a short time, rejected the globe, and taking from his pockets a pencil and card, wrote and added figures. Dr. Morton supposing him to be affected, asked if he would now submit to the operation, to which the young man willingly assented. A tooth was accordingly extracted, and the patient soon after recovered his senses. In none of these cases had the patients any knowledge of what had been done during their sleep.

I am, as yet, unable to generalize certain other symptoms to which I have directed attention.* The pulse has been, as far as my observation extends, unaltered in frequency, though somewhat diminished in volume, but the excitement preceding an operation has, in almost every instance, so accelerated the pulse that it has continued rapid for a length of time. The pupils are, in a majority of cases, dilated; yet they are in certain cases unaltered, as in the above case of amputation.

The duration of the insensibility is another important element in the process. When the apparatus is withdrawn, at the moment of unconsciousness, it continues, upon the average, two or three minutes, and the patient then recovers completely or incompletely, without subsequent ill effects. In this sudden cessation of the symptoms, this vapour in the air tubes differs in its effects from the narcotics or stimulants in the stomach, and as far as the evidence of a few experiments of Dr. Morton goes, from the ethereal solution of opium when breathed. Lassitude, headach, and other symptoms, lasted for several hours when this agent was employed.

But if the respiration of the vapour be prolonged much beyond the first period, the symptoms are more permanent in their character. In one of the first cases, that of a young boy, the inhalation was continued during the greater part of ten minutes, and the subsequent narcotism and drowsiness lasted more than an hour. In a case alluded to before, the narcotism was complete during more than twenty minutes; the insensibility approached to coma.

The process is obviously adapted to operations which are brief in their duration, whatever be their severity. Of these, the two most striking are, perhaps, amputations and the extraction of teeth. In protracted dissections, the pain of the first incision alone is of sufficient importance to induce its use; and it may hereafter prove safe to administer it for a length of time, and to produce a narcotism of an hour's duration. It is not unlikely to be applicable in cases requiring a suspension of muscular action, such as the reduction of dislocations or of strangulated hernia; and finally, it may be employed in the alleviation of functional pain, of muscular spasm, as in cramp and colic, and as a sedative or narcotic.

The application of the process to the performance of surgical operations, is, it will be conceded, new. If it can be shown to have been occasionally resorted to before, it was only an ignorance of its universal application, and immense practical utility, that prevented such isolated facts from being generalized.

It is natural to inquire with whom this invention originated. Without entering into details, I learn that the patent bears the name of Dr. Charles T. Jackson, a distinguished chemist, and of Dr. Morton, a skilful dentist, of this city, as inventors,—and has been issued to the latter gentleman as proprietor.

It has been considered desirable by the interested parties that the character of the agent employed by them should not be at this time announced; but it may be stated that it has been made known to those gentlemen who have had occasion to avail themselves of it.

I will add, in conclusion, a few remarks upon the actual position of this invention as regards the public.

No one will deny that he who benefits the world should receive from it an equivalent. The only question is, of what nature shall the equivalent be? Shall it be voluntarily ceded

* Since the above was written, I find this irregularity of symptoms mentioned in the case of poisoning by alcohol. Dr. Ogston, according to Christison, has in vain attempted to group together and to classify the states of perspiration, pulse, and pupil.

by the world, or levied upon it? For various reasons, discoveries in high science have been usually rewarded indirectly by fame, honour, position, and occasionally, in other countries, by funds appropriated for the purpose. Discoveries in medical science, whose domain approaches so nearly that of philanthropy, have been generally ranked with them; and many will assent with reluctance to the propriety of restricting by letters patent the use of an agent capable of mitigating human suffering. There are various reasons, however, which apologize for the arrangement, which I understand to have been made with regard to the application of the new agent.

1st. It is capable of abuse, and can readily be applied to nefarious ends.

2nd. Its action is not yet thoroughly understood, and its use should be restricted to responsible persons.

3rd. One of its greatest fields is the mechanical art of dentistry, many of whose processes are by convention, secret, or protected by patent rights. It is especially with reference to this art, that the patent has been secured. We understand, already, that the proprietor has ceded its use to the Massachusetts General Hospital, and that his intentions are extremely liberal with regard to the medical profession generally; and that so soon as necessary arrangements can be made for publicity of the process, great facilities will be offered to those who are disposed to avail themselves of what now promises to be one of the important discoveries of the age.

*To the Editor of* THE LANCET.

SIR,—I forwarded a few days ago, for publication in THE LANCET, Dr. H. J. Bigelow's report on the anodyne effects of the inhalation of the vapour of strong, pure sulphuric ether; and since that time I have received an Address, delivered by the Hon. Edward Everett, (late Minister from the United States to the Court of St. James's,) at the opening of the new Medical College in Boston, an extract from which will be interesting, as affording his high testimony to the safety and efficacy of the process. In a note, Mr. Everett, the President of Harvard College, says—"I am not sure that, since these remarks were delivered, a discovery has not been announced which fully realizes the predictions of the text. I allude to the discovery of a method of producing a state of temporary insensibility to pain, by the inhalation of a prepared vapour. I witnessed a very successful instance of its application, on the 18th of November, and was informed at that time by Dr. Morton, that he had employed it in several hundred cases of dentistry. It has also been made use of with entire success at the Massachusetts General Hospital, and elsewhere in Boston, in capital operations of surgery. The few cases of failure may, perhaps, be ascribed to irregularities in the process of inhalation, or to peculiarities of temperament or constitution on the part of the patient. I understand that great confidence is placed in the discovery by the most distinguished members of the medical profession of this vicinity, and that they are disposed to regard it as an effectual method of inducing complete insensibility under the most cruel operations, by means easily applied, entirely controllable, and productive of no subsequent bad consequences. It seems not easy to overrate the importance of such a discovery."

I beg to add, that on Saturday, the 19th, a firmly fixed molar tooth was extracted in my study from Miss Lonsdale, by Mr. Robinson, in the presence of my wife, two of my daughters, and myself, without the least sense of pain, or the movement of a muscle. The whole process of inhalation, extracting, and waking, was over in three minutes; yet the same apparatus was used in three or four cases afterwards, and failed in each case to produce insensibility. I attribute the failure to the defect in the valve of the mouthpiece, by which the expired air was returned to the bottle, instead of passing into the room. The valve was a ball-and-socket one, and required a very strong expiration to make it act freely. I would add, that the efficacy of any apparatus must depend upon the facility of breathing the vapour, and the perfect action of the valve, admitting the expired air to pass easily into the room. In Miss Lonsdale's case, we all observed she breathed strongly, and thus, no doubt, opened the valve. In all the other cases, we had great difficulty in making the patients breathe through the mouthpiece.

Yours sincerely, F. BOOTT.

ower-street, Dec. 21, 1846.

*To the Editor of* THE LANCET.

Gower-street, Dec. 22, 1846.

SIR,—If you have not heard of Mr. Liston's success in the se of the inhaled ether, the following note I have received from him will interest you, as confirming the American report:—

"Clifford-street, Dec. 21, 1846.

"MY DEAR SIR,—I tried the ether inhalation to-day in a case of amputation of the thigh, and in another requiring evulsion of both sides of the great toe-nail, one of the most painful operations in surgery, and with the most perfect and satisfactory results.

"It is a very great matter to be able thus to destroy sensibility to such an extent, and without, apparently, any bad result. It is a fine thing for operating surgeons, and I thank you most sincerely for the early information you were so kind as to give me of it. "Yours faithfully,

"To Dr. Boott." "ROBERT LISTON.

I hope Mr. Liston will report of these cases more fully.

Yours sincerely, F. BOOTT.

*To the Editor of* THE LANCET.

SIR,—Having noticed, in several periodicals and newspapers, reports of two operations recently performed by Mr. Liston, at the University College Hospital, upon patients under the anodyne influence of inhaled vapour of ether, in which amputation of the thigh in one case, and evulsion of the nail of the great toe in the other case, were effected without pain to the patients, I take this earliest opportunity of giving notice, through the medium of your columns, to the medical profession, and to the public in general, that the process for procuring insensibility to pain by the administration of the vapour of ether to the lungs, employed by Mr. Liston, is patented for England and the Colonies, and that no person can use that process, or any similar one, without infringing upon rights legally secured to others.

I am aware that doubts exist in the minds of some as to the liberality of rendering inventions or improvements, which tend to alleviate suffering, subjects of patents; but I cannot see why the individual who, by skill and industry, invents or discovers the means of diminishing, or, as in this instance, annihilating human suffering, is not fall as much entitled to compensation as he who makes an improvement in the manufacture of woollen or other fabrics. Indeed, he is entitled to greater compensation, and for a stronger reason,—he has conferred upon mankind a greater benefit.

With this view, I have accepted from the American inventors, or their representatives, the agency of affairs connected with the English patent; and it is my intention, while I hold the trust, to adhere to such a course, that the charge of illiberality shall rest upon any persons rather than upon the proprietors of the patent, or upon their agent,

Duke-street, St. James's, Dec. 28, 1846. JAMES A. DORR.

ON

# CRITICISMS UPON PHRENOLOGY.

## A REVIEW REVIEWED.

BY GEORGE COMBE, ESQ., Edinburgh.

(*Remarks on an article in the British Quarterly Review, for November*, 1846.)

(*Concluded from last volume, p.* 663.)

DR. SKAE does not quote Mr. Noble's work, or allow him fairly to speak for himself on these topics; but as if, in the fifty years before mentioned, no step had been made in the investigation, either by friend or foe, he comes forward with new principles, new measurements, and new results, all of his own devising; and he does so under the pretence that his method is one of strict scientific accuracy, fairly entitled to supersede all the others. Let us, then, briefly consider its merits.

First, he asks, "What, then, is the size of an organ in the estimate of a phrenologist's eye?" The true answer has already been given—*Its length* AND *its breadth*. But Dr. Skae's answer is different. He informs us, that "It can be *only* its degree of prominence, as compared with the neighbouring surface of the cranium, *or* its distance from some central point. Of the breadth of the organ, it is impossible that he can form any estimate, except such as depends upon the breadth or size of the entire head; for if the organs do not always occupy the same relative part of the surface of the entire cranium, it is impossible for any phrenologist to define the precise surface of their cranial limits. Will any phrenologist undertake to say that the organ of Benevolence occupies a greater relative portion of the surface of the cranium in one

head than in another; that in one it encroaches upon Veneration, and, in another, Veneration encroaches upon it? We think not."

Can any representation of what the phrenologists "undertake to say" be more absurd than this? We have elsewhere stated,* that "when one organ is very largely developed, it encroaches on the space usually occupied by the neighbouring organs, the situations of which are thereby slightly altered." "In these cases, the shape should be attended to; for the form of the organ is then easily recognised, and is a sure indication of the particular one which is largely developed." Nay, the very foundation of phrenology rests on the asserted fact, that in one head "the organ of Benevolence does occupy a greater relative portion of the surface of the cranium than in another," and so with the other organs. The phrenological works specify skulls and casts (exhibited to public inspection) which are intended to prove this averment; and phrenology could have had no foundation, if the case were otherwise.

But Dr. Skae chooses to take his own course. He leaves out of view altogether the peripheral expansion of individual organs, and assumes, in opposition to the most palpable evidence to the contrary, that the breadth of each individual organ "depends on the breadth or size of the entire head." What should we think of a scientific inquirer who should apply this canon of research to the human countenance, and tell us that "if the eyes, nose, mouth, cheeks, and chin, do not always occupy the same relative portion of the surface of the face, it is impossible for any physiognomist to define their relative sizes or the precise limits of their respective surfaces. Of the width of the mouth, or the length of the nose, or the circumference of the orbits, or the magnitude of the chin, it is impossible he can form *any estimate*, except such as depends upon the breadth or size of *the entire face*." Who would listen to such nonsense? and yet this is literally what Dr. Skae has said in regard to the cerebral organs. Their demarcations are not, *in every head*, so palpable as the limits of the nose or mouth; but in particular heads, quite sufficient in number to enable us to determine both their position and form, they *are* very distinctly indicated; and in every head, a skilled hand and eye, and an intelligent, honest mind, may with due care discriminate them.

Dr. Skae, then, dispenses with all consideration of the peripheral expansion of individual organs, "except such as depends upon the breadth or size of the whole head;" and proceeds to estimate the size of each organ by its length alone, and even that not ascertained by a measurement from one of its ends to the other, as common sense as well as philosophy would suggest, but by measuring from the *external ear*, which has no fixed structural relation whatever to *any* cerebral organ. Nay, he not only measures from a point *known to himself*, as well as to phrenologists, not to be the termination of the organ, but he sometimes abandons that point capriciously, and starts from another equally incongruous, and all, too, by way of exemplifying a rigid method of investigation! Thus, he has measurements from "Meatus of right side to Adhesiveness of left," "Wit to Wit," "Tune to Tune," and so on.

This strange mode of proceeding may seem philosophical and exact in Dr. Skae's eyes, but assuredly no man who knows anything of the subject will consider it as a test of phrenology. It would afford presumptive evidence that our science could not be true, if the results obtained from such discordant elements rigidly harmonized with Gall's discoveries. The conclusions obtained by it could no more resemble those reached by Dr. Gall's method, than measuring the length and breadth of the entire face could suffice to indicate the proportions of the nose, eyes, mouth, cheeks, and chin, to each other!

Farther, instead of resorting to the crania of individuals not beyond the middle period of life, in full health, and whose mental peculiarities can be ascertained with a reasonable degree of minuteness and accuracy, Dr. Skae selects, apparently *as more scientific*, the following specimens:—

"The skulls of four murderers, Haggart, M'Kaen, Pollard, and Lockey. For the purpose of drawing a comparison between these and heads of persons characterized by intelligence, wit, imagination, the kindlier affections of our nature, the sentiments of firmness, courage, and morality, we measured the casts of the skulls of Burns, Swift, La Fontaine, King Robert the Bruce, and those of two females, Heloise and Stella."

Having made this selection, he "took the cranium of Swift," and "converted the measurements of all the other crania into those of a cranium having the same capacity as Swift's," and proceeded to compare the results. Even had this proceeding been mathematically sound in principle,—which Mr. Straton, in an article in the *Phrenological Journal*, (No. xc. p. 43,) has shown that it was not,—Dr. Skae acted preposterously in selecting, for the purpose of testing phrenology, not the skull of a sane individual, not beyond the middle period of life, but that of a morbidly irritable and eccentric man, who, as his biographers inform us, died at the age of seventy-eight, in a state of idiocy so complete and long-continued, as, with other evidence, to render it next to certain, that a great change had taken place in both the brain and its coverings. Had the phrenologists perpetrated any similar folly, under the plea of "scientific" investigation, they would have been scouted as fit to become the inmates of a lunatic asylum; but Dr. Skae's solemn farce is quietly admitted, under the garb of science, into the pages of a philosophical and enlightened Review! The phrenologists have all along rejected the skull of Swift as affording evidence of the forms and dimensions of his head at forty years of age, and in sound health, (see *Phrenological Journal*, vol. ix. pp. 468, 559, 607;) and have, from the first, given ample reasons for not seeking proofs of the truth of phrenology from cases of disease. But Dr. Skae, without either refuting their reasons, or proving the adequacy of diseased heads to furnish conclusive evidence of normal phenomena, deliberately prefers *morbid* and *inconclusive*, to sound and conclusive, evidence, as the best calculated to promote *exact* science!

Of the cast of the cranium of Heloise, the following history is given in the Catalogue of Dr. Gall's collection. It is described as a "copy, in plaster, of a skull which came from the Museum at the Petits Augustins, and which is believed to be that of Heloise, so famous for her love to Abelard." (*Phrenological Journal*, vi. 499.) Heloise *died in* 1163, and her bones have been several times removed.* In the same Catalogue, (ibid., vi. 584,) the following account is furnished of the cast of the reputed skull of La Fontaine:—"It is a copy, in plaster, of a skull *which is said* to be that of John La Fontaine; the skull itself was in the hands of M. Lenoir, Director of the Museum of Arts in Paris."

Now, although Gall accepted casts of these skulls as reputed curiosities, and the Phrenological Society, viewing them in the same light, have admitted duplicates of them into their collection, neither he nor his followers have founded upon them any point of doctrine whatever, or even (to our knowledge) taken the trouble to compare the mental characteristics of Heloise and La Fontaine, so far as these are authentically recorded, with the forms of the skulls. They viewed the genuineness of both skulls as unascertained, and might, moreover, have regarded the mental character of at least the lady as too little known to serve as a basis for philosophical induction. But these elements of uncertainty form no stumbling-block in the way of Dr. Skae, and apparently *because of their existence* he has selected them in preference, as peculiarly adapted to the purposes of the *more exact* science which he delights so much to honour.

On the skull of Lockey I remark, that from its great size, and the bulging of its sides and front, coupled with a slight want of symmetry, there is much reason to infer the presence of scrofulous enlargement and distortion, rendering this head inapplicable to the purpose of *testing* Phrenology. Accordingly, no account of the case has been published by any phrenologist. Whether normal or not, however, the form of the skull corresponds most strikingly with the probable dispositions of "a poacher and a murderer." The basilar and occipital regions (including destructiveness, secretiveness, acquisitiveness, and combativeness) are enormous; constructiveness and most of the intellectual organs are rather largely developed; while the organs of the moral sentiments are far from being adequate to balance those of the propensities.

In a paragraph exceeding all the others in extravagance, Dr. Skae selects for emphatic remark the skull of Pollard, a frantic murderer, whose history (without any reference to his head, concerning which nothing was known at the time) was introduced by Dr. Combe as an illustration of the subject of "Insanity and Crimes," in a paper so headed, which is quoted by Dr. Skae himself, (see *Phrenological Journal*, iii. 392.) From the published facts of this case, it is pretty evident that Pollard, who was a butcher by trade, and "a man of very depraved habits," (including, no doubt, the habit of drunkenness,) was raving mad at the time when the murder which immediately preceded his suicide was perpetrated. If such was really the case, the existence of cerebral disease would

* System of Phrenology, vol. i. p. 152, 4th edition.

* See Gorton's Biographical Dictionary, vol. i. pp. 7, 8.

at once remove the skull of Pollard from the category of *evidence*, although it might still be legitimately used as an illustration of apparent insanity. Even supposing him to have been perfectly sane, we have no hesitation in affirming, that any phrenologist who looks at the cast will perceive with half an eye, that its form indicates a most decided preponderance of the basilar and posterior regions of the brain over the coronal and frontal. Instead of being (as Dr. Skae, distrusting his eyes, and relying on his most incongruous figures, with great solemnity affirms) "the finest head of the whole ten in its phrenological development," it presents a large development of combativeness, destructiveness, amativeness, and alimentiveness, with moderate ideality and conscientiousness, full benevolence, and a strikingly shallow, low, and narrow forehead. Of the owner of this head, Dr. Skae has actually written as follows:—"What, it may be asked, made this man a murderer? What induced him to be a butcher? How did he acquire depraved habits? Why, with such a head, did he not educate himself and become another Shakspeare? We wish we had the skulls of Shakspeare, Milton, and Bunyan; we think we could match them, and show a head that (phrenologically) *should* have beat them all—but it did not."!!

It would be tedious to discuss in detail the history of the other skulls, and the characters of their owners, but we refer the reader who may be curious to know what uses have been made of them by phrenologists, to the *Transactions of the Phrenological Society*, p. 247, (King Robert Bruce;) *Phrenological Journal*, vol. ix. pp. 466, 559, 603, (Swift;) ib., vol. ii. p. 97; iii. 593, (M'Kaen;) ib., vol. ix. p. 52, (Burns;) and in one sentence we venture to affirm, that no ordinary observer, who will honestly and intelligently apply to these skulls the method of observation laid down by Gall and his followers, will experience any greater difficulty in estimating the relative proportions of the cerebral organs, and the relation of these to the mental characteristics, than are met with in other anatomical and physiological investigations into the nervous system and its functions; and that the conclusions which Dr. Skae has deduced from *his method* of treating the organs, are, in general, palpable and preposterous absurdities. If the size of the different organs in relation to each other, in each of the authentic heads in question, be studied and *estimated by the method acknowledged by phrenologists*, and compared with what is known of the natural qualities of their owners, the results will be found to support phrenology. That results apparently subversive of it should be reached by a method which it disclaims,—and which, in relation to the object in view, is absurd,—is favourable, not adverse, to phrenology, however much they may militate against the newly-invented method of Dr. Skae. A few additional illustrations may be given.

Speaking of Combativeness, Dr. Skae informs us, "that Lockey, a poacher and a murderer, has the smallest organ; Pollard, another murderer, has less than either Heloise or Stella;" while "Haggart, who was extremely apt to strike, has an organ which measures *one inch* less than Swift's, and half an inch less than Stella's, a patient and peaceable woman, and scarcely more than La Fontaine, a man of the utmost apathy." Now, we venture to say that no intelligent person who has studied the phrenological method of observation, can examine these skulls, and fail to perceive that Combativeness is small in the reputed skull of La Fontaine, corresponding with his alleged apathy, full in Heloise, whose skull and dispositions are uncertain, and *large* in all the others, in relation to the other organs in the same head. The skull of Swift (who, by the way, was quarrelsome enough) is, as we have seen, an abnormal one; but Haggart was hanged when under twenty-one years of age, and Stella died in her forty-fourth year. Now, Dr. Skae himself records that Haggart "was extremely apt to strike," which corresponds with his large organ of Combativeness, as distinguishable by the hand and eye; while Swift gives the following description of Stella, in whom also the organ was large. (Combativeness is mentioned in all the phrenological works as giving "courage.") "With all the softness of temper," says Swift, "that became a lady, she had the personal courage of a hero. She and her friend (Mrs. Dingley) having removed their lodgings to a new house, which stood solitary, a parcel of rogues, armed, attempted the house, where there was only one boy: she was then about four-and-twenty, and having been warned to apprehend some such attempt, she learned the management of a pistol; and the other women and servants being half dead with fear, she stole softly to her dining-room window, put on a black hood to prevent being seen, primed the pistol fresh, gently lifted up the sash, and taking her aim with the utmost presence of mind, discharged the pistol, loaden with bullets, into the body of one villain, who stood the fairest mark. The fellow, mortally wounded, was carried off by the rest, and died the next morning, but his companions could not be found." Does this trait of character correspond with a large Combativeness, and a full Destructiveness, too, or not? Yet Dr. Skae, for the sake of damaging phrenology, represents Stella as having been *only* "a patient and peaceable woman."*

After remarking that "of the whole five (Haggart, Heloise, Burns, M'Kaen, and Stella) amativeness formed a distinct feature in their history,"† Dr. Skae proceeds:—"Nor can it be answered, that these organs, although absolutely smaller than those of Swift and Bruce, were yet large in relation to the other faculties and organs of the individuals themselves; for, on referring either to history or the subsequent tables, it will be seen that the intellectual and moral faculties of Swift and Bruce were many of them less, and the organs less, than those of the five persons just named." History tells us nothing of the organs of any of the individuals, and the main point in dispute is the relation of their organs to their mental qualities. The size and proportions of the organs, therefore, rest exclusively on the "subsequent tables;" and their demerits we have already sufficiently characterized.

It is unnecessary to pursue these remarks; I leave the public to judge for themselves between Dr. Skae and phrenology, and only add, that I am perfectly aware that several physiologists have stated the estimated surface of some of the nervous tissues in cubic inches, in illustration of the power of the function; while others have weighed the encephalon, the cerebrum, the cerebellum, and the medulla oblongata, in man and animals, and compared them, with a view to discovering the functions of their different parts; but Mr. Noble has shown, that no results satisfactory to physiologists in general have been thus obtained, and to these attempts must now be added those of Dr. Skae. I am aware, also, that Mr. Straton and some other phrenologists have laboured to apply mathematics to the measurement of the cerebral organs; but however desirable this may be, (and I acknowledge it to be very desirable,) the obstacle before mentioned—namely, that the central terminations or limits of the organs are still unascertained, and beyond the reach of accurate measurement—appears to me to present difficulties towards the accomplishment of the object which have not hitherto been overcome. In vol. xix. of the *Phrenological Journal*, p. 72, some remarks were made on this subject, to which the reader is referred. Assuming the crura to be the internal point of departure of the organs, as many circumstances seem to indicate, Mr. Straton's method of measurement, although not scientifically complete, is rational and self-consistent, and gives approximations more or less close to the results obtained by the hand and the eye; but Dr. Skae's method is at once inaccurate and absurd.

In the foregoing remarks, I have used strong expressions; but they appear to me to be justified by the occasion. Dr. Carus, Dr. Carpenter, and Dr. Skae, have each refused to test Dr. Gall's physiology of the brain by Gall's method, so as to

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* In one of his poetical epistles to Stella, Swift, her partial lover and admirer, thus speaks of that "patient and peaceable woman:"—

"Resolved to mortify your pride,
I'll here expose your weaker side,
Your spirits kindle to a flame,
Moved with the lightest touch of blame;
And when a friend in kindness tries
To show you where your error lies,
Conviction does but more incense;
Perverseness is your whole defence;
Truth, judgment, wit, give place to spite,
Regardless both of wrong and right;
Your virtues all suspended wait
Till Time hath opened Reason's gate;
And, what is worse, your passion bends
Its force against your nearest friends. . . . .
Yet, when I find your passions rise,
And anger sparkling in your eyes,
I grieve those spirits should be spent,
For nobler ends by nature meant."

Of her courage he elsewhere says:—

"She thinks that nature ne'er designed
Courage to man alone confined:
Can cowardice her sex adorn,
Which most exposes our's to scorn?
She wonders where the charm appears
In Florimel's affected fears;
For Stella never learned the art
At proper times to scream and start;
Nor calls up all the house at night,
And swears she saw a thing in white.
Doll never flies to cut her lace,
Or throw cold water in her face,
Because she heard a sudden drum,
Or found an earwig in a plum."

† As to Burns's amativeness, see Phren. Journ., ix. 59.

prove its inefficacy and the falsity of its results. Each has insisted on trying it by a new method not related to it in principle; but Dr. Carus alone has had the consistency to claim the results of his method as his own. He has announced a new phrenology. This is fair. Let his method and its results stand or fall by their own merits; but do not allow them to be proclaimed as scientific tests of Gall's method, and necessarily setting it aside. Dr. Carpenter, also, has adopted a new method, that of comparative anatomy, as the *foundation* of his researches, and reached certain conclusions. He, therefore, has not tried Gall's method, as Gall prescribes; and his conclusions are not tests of phrenology, but new inferences of his own. Let him, therefore, stand father to his own productions. And lastly comes Dr. Skae, also rejecting Gall's method, substituting one of his own invention, setting at defiance all the recognised rules of conducting the investigation, and then presenting tables of results. These, like the preceding, cannot be admitted to be *tests* of phrenology, as taught by Gall, but new products of Dr. Skae's genius; and which are either *his* phrenology, or they are nothing.

Viewed in this light, justice is done at once to Gall, and to these new and intrepid investigators; but I cannot consent to their shrinking from the paternity of their own offspring. They recognise them only as evidence that Gall's conclusions are illegitimate. But this they do not prove, and therefore their authors must themselves be responsible for them. Let Drs. Carpenter and Skae, for example, stand answerable for the following conclusions, as unquestionably their own. Dr. Carpenter first announced them, and Dr. Skae has adopted them. "Comparative anatomy," says the latter, "and the growth of the human brain, *alike prove* that the last part of the organ to be developed is the posterior part,—that *the posterior part is peculiar (to) and distinctive of man.*—(p. 416.) Now, few persons will deny that the peculiar and distinctive *mental attributes* of man are his moral, religious, and reflective faculties. According to Dr. Carpenter and Dr. Skae, therefore, these faculties must have their seats in the posterior lobe of the brain. This is no caricature of Dr. Skae's statement; for he finishes his sentence thus:—"The lower animals, while they may possess the anterior lobes, the seat of the intellectual faculties, or even the central portion, the seat of the moral sentiments, are destitute of those parts where love of offspring, adhesiveness, destructiveness, and combativeness, are found. These facts, in the history of the brain, are incompatible with the organology of the phrenologists." They certainly are so, and we entirely reject them; but as Dr. Skae, in his character of a rigidly scientific investigator, states them *to be proved* by "comparative anatomy and the growth of the human brain," of course he adopts them as *exact ascertained sciences.* Be it so: but let him and Dr. Carpenter enjoy the honour of the discovery,—let them henceforth be the fathers of the doctrine, that in man, a large hind head is the natural indication and accompaniment of a high, moral, religious, and intellectual character; while an elevated and expanded forehead, and high coronal region, are the natural signs of strong grovelling animal propensities. Dr. Skae has apparently been guided by this rule, when he described the head of Pollard as equal to that of Shakspeare, Milton, and Bunyan. Let him stand by the discovery, and cease to look for the moral and intellectual faculties of man in the anterior and middle lobes. One of three inferences every man of common sense must arrive at, either, first, Dr. Skae's conclusion is *not* proved; or, secondly, there is no strict analogy between the brain of man and those of the lower animals, and therefore his facts are of little value; or, thirdly, in man, intellect, religion, and morality, are located in the posterior lobe of the brain. He affirms that his conclusion *is proved.* Let him, therefore, enjoy the fame which it will bring to him; and let, henceforth, the large hind head be the sign of great moral and intellectual power, *according to Dr. Skae.*

Edinburgh, Dec. 1846. GEORGE COMBE.

From a correspondence between Mr. Daniel Smith, surgeon, of Minchinhampton, and Dr. Southwood Smith, it appears that the rector of the parish has been ingeniously engaged in producing fever by the following process:—A thousand cart-loads of churchyard earth were removed from the grave-yard and strewed over the grass lands and gardens in the vicinity. By a kind of poetical justice, typhus fever invaded the rector's house, and destroyed his wife, daughter, and gardener. Other casualties occurred, but the evil still remains uncorrected. It is almost incredible the public health should be thus violated without remedy, but such is the fact.

ON THE

# CAUSES, CONSEQUENCES, AND TREATMENT, OF INDURATED CHANCRE.

BY WILLIAM ACTON, ESQ.,

SURGEON TO THE ISLINGTON DISPENSARY, AND FORMERLY EXTERNE TO THE VENEREAL HOSPITALS OF PARIS.

(*Continued from last vol. p. 610.*)

## DIAGNOSIS OF INDURATION.

*Difference between induration the result of a specific cause, and that produced by corrosive sublimate, after Frick and Ricord.—Cases by author which present difficulties in private practice; means of diagnosis; silence of writers on syphilis on these questions, and their importance, considered.*—PROGNOSIS: *Importance and value of induration, according to the views of author.—Mr. Aston Key's opinions on this subject.—Mr. Carmichael's remarks on induration.—Necessity of informing a patient who suffers from indurated chancre, of its consequences and necessary treatment.*

AFTER the description previously given of induration, it may seem almost unnecessary to dwell on diagnosis. Experience, however, shows that the tyro in venereal diseases cannot at once decide on the nature of induration. Frick, of Hamburgh, placed some corrosive sublimate between the glans and prepuce, and asserted that induration, similar to that following true chancre, will result. M. Ricord admits the fact of induration being thus produced, and states it to depend upon plastic infiltration.* Now I presume—for I have not seen the trials—that such induration will disappear as soon as the irritating cause has been removed, and hence the diagnosis will be easy. The cases of difficulty that have presented themselves to my notice are similar to the following, which I transcribe from my note book:—

In the course of the last year I saw a case, with M. Peregrine, of discharge and sores between the glans and prepuce. During the recovery of our patient, general thickening of the prepuce came on to such an extent, that it was with difficulty the prepuce could be retracted. On account of this general induration, mercury was not given; and when I saw this case, some months later, the induration was gradually disappearing. We came to the conclusion, with some hesitation, that this was not true induration. I learn that the patient is now quite well, and has has not suffered from secondary symptoms.

The induration at the orifice of the urethra often presents a great difficulty of diagnosis, as the following case may prove:—

*Acute gonorrhœa, with hardness in the canal behind the glans penis.—Indurated chancre or abscess?*

Dec. 26th, 1845.—A patient had been taking a mixture of cubebs and copaiba without effect. A few days after repeated promiscuous connexion, now ten days ago, he observed discharge; has lived freely, and finds the mixture of no use.

*Present condition.*—Discharge thick, brown, and not very profuse; orifice red, and glans swollen; behind and below it, a distinct indurated mass is felt in the urethra, as large as a horse-bean, which is painful, and on pressure, an oozing of thick tenacious secretion may be seen. Ordered, to leave off mixture, take a warm bath, and foment freely. To take acetate of ammonia mixture, with Epsom salts; will not employ leeches or tartar emetic.

28th.—Redness and swelling somewhat diminished; less hardness and discharge; no scalding; an abscess points just behind the frænum on left side. The abscess was opened, and a little thick matter escaped. To continue the mixture.

29th.—The swelling, hardness, and discharge, diminished, the latter milky; no scalding. To employ injection of nitrate of silver and capsules. No urine passes by the little abscess.

Jan. 1st, 1846.—Has used the injection regularly; no discharge from urethra, but still it does not look quite healthy; the little abscess secretes. To continue the injection and capsules, and foment with cold water; the point of abscess touched with caustic twice.

2nd. Discharge slightly tinged with blood. To leave off injection; to continue capsules.

3rd. Shirt stained with blood, which appeared yesterday; no discharge yesterday evening or this morning; none at present. To employ zinc and tannin injection, of each two grains to two ounces of water; to continue capsules for a fortnight. Left for the country; abscess nearly healed.

* Provincial Journal, vol. vi. p. 459.

Patience alone can clear up the diagnosis in cases similar to the above, and a few days will usually suffice for the surgeon to be enabled to form a correct opinion on their nature. It, however, happens in practice, that cases exactly the reverse of the last may occur to obscure diagnosis, one of which I will relate:—

A nobleman's butler, sent to me by Mr. Toller, of Conduit-street, complained of slight discharge from the meatus, which had existed four days: the case was in my opinion so clearly one of simple gonorrhœa, that I took no notes of the complaint, and treated the patient with nitrate of silver injections, and copaiba. On the fifth day, the yellow discharge had ceased, but my patient complained of slight pain at the end of the penis; and on looking at it, there was considerable thickening around the meatus, which felt hard under the finger, and putting on all the characters of induration. I entertained a hope that this thickening was not of a specific character, but it was so very like it that time alone could clear up the diagnosis. I lost sight of my patient, as his discharge was cured, and not having seen him since, I trust my suspicions were not correct.

Since the above case occurred, I have seen induration of the meatus, in two cases, where it was impossible to decide if I had to treat an indurated chancre or an inflammatory condition of tissue.

These obscure points in diagnosis are not even hinted at by the most practical writers on syphilis; and my readers must pardon me if, at the risk of fatiguing the patience of some, I dwell on points which in private practice I have found very difficult, and the treatment of which, even now, it is almost impossible to lay down rules for, as another instance may show. A gentleman consulted me, on account of several sores on the prepuce; in the belief that they were simple excoriations, he had taken some cooling medicine, and applied a weak solution of superacetate of lead, yet still these ulcers got neither better nor worse for the space of a fortnight: it was at this period I was consulted as to what was their nature. I observed four ulcers, as large as split peas; two were hard, the others without any attendant induration, the surface red and healthy. I hesitated to give any decided opinion, but recommended several local applications, with little avail; at the end of a fortnight they got well, all induration went away, and although some time has elapsed, yet secondary symptoms have not followed. The practical results flowing from the observation of these cases seems to be, that the surgeon, although he may be convinced that true induration is followed invariably by secondary symptoms, and requires mercury for the cure of the local as well as general contamination, should yet pause before submitting his patient to a course of mercury, or he will subject a number of cases unnecessarily to the mineral, when a little patience would clear up the diagnosis; for true induration has no tendency to disappear thus readily; it will remain for long, if not indefinite periods, to warn the surgeon, as well as the patient, of its importance.

PROGNOSIS.

The appearance of induration around or beneath a sore is always to be regretted, as the consequences can never be foreseen. In the first place, as I have above shown, the sore will not be likely to heal, but tend to remain in *statu quo*, or the ulceration or induration be likely to increase, and the duration of one or both may be almost indefinite. I have seen induration last more than a twelvemonth. If it heals, the cicatrix is liable to take on ulceration on the slightest cause, and a very intractable sore results; if these are among the local effects of indurated sores, the general ones are no less to be dreaded: a few weeks only will elapse before secondary symptoms may show themselves, attacking the skin or mucous membrane, and if cured, will probably be followed by relapses in the manner alluded to at page 69 of vol. i. of THE LANCET for 1846. It is very true, that unless the case is mismanaged, neither rupia nor phagedænic affections of the throat will generally follow these indurated sores, but the patient will again and again (perhaps for years) have chronic affection of the skin.* It would be satisfactory, could I bring forward the opinions of various writers who pursue different treatment, to show that these relapses depend upon bad management; but, as I have shown in the paper above alluded to, we must come to the conclusion that this is the inevitable course of the disease, not the result of treatment, and that by judicious management we can only hope to cure the majority, but must despair of immediately relieving all from the consequences of indurated chancre.

The writer who takes the most sanguine view of indurated chancre is Mr. Key, in the *Guy's Hospital Reports*. At p. 426 he says, "When combined with the other evidences of poison, induration is of some value in determining the nature of the sore; but alone, it is indecisive of the poisonous character of an ulcer, especially when seated in the cellular membrane deep beneath the cutis. . . . . The deep chronic chancre of the corona glandis, mild in its character, and usually harmless in its effects, will last for months, and acquire a degree of induration that gladdens the heart of a *soi-disant* disciple of Hunter, grieved to find the good old chancre fast disappearing from the land." Almost all other authors that I have consulted agree in the importance of induration; but I have introduced Mr. Key's words, that my readers may hear both sides of the question; however, let them, before coming to a conclusion, remember the doubtful cases alluded to under the head of diagnosis, when that gentleman's views will pretty nearly coincide with those of other practical writers.

The surgeon must then, I think, view induration as a very serious inconvenience; for my own part, when a patient consults me, and induration has already appeared, I tell him at once my opinion of his case. I point out its existence, and inform him of the consequences; and in this way induration is of value; for long ere secondary symptoms appear, their occurrence may be foretold, and the patient is not unaware of the probability of their appearance. Induration is of value likewise as the touchstone for the surgeon to know when mercury should be given: it likewise tells us for how long a period it should be given; it is our hydrargyrometer, as Ricord calls it, and a very valuable one it will be found, as I shall explain in dwelling on treatment.

Queen Anne-street, Cavendish-square, Dec. 1846.

* And here I must agree with Mr. Carmichael in his belief that indurated sores will be followed generally with a peculiar form of secondary symptoms. These are usually found to be scaly, and attended with sequelæ, which seem to have a strict relation to induration; and I believe to that gentleman we must give the credit of having called public attention to the subject, and which subsequent experience has confirmed. (See Carmichael's Clinical Lectures, p. 151.)

## Reviews.

*The Seventh Annual Report of the Registrar-General of Births, Deaths, and Marriages, in England. (Abstract of the Two Years, 1843, 1844.)* London, 1846: Clowes. 8vo, pp. 348.

THIS is not nearly so bulky a work as some of its predecessors, it being, for the most part, confined to reports and tables relative to the United Kingdom; whereas that of the previous year, especially, contained copious references to the population, mortality, &c., of foreign countries. Great endeavours have recently been made by the Registrar-General to induce the medical profession at large to aid his endeavours toward the attainment of still greater accuracy in the returns successively put forth respecting the increase of the population, the comparative prevalence of mortal diseases, the localities in which these respectively prevail, the age, sex, and condition of life which each principally affects, &c. Circular letters have been issued to the authorized medical practitioners throughout the country, with books of blank certificates, to be filled up so as to afford information as to the duration of disease previous to death, and other particulars calculated to afford much more valuable materials for correct conclusions on vital statistics than have hitherto existed. We do earnestly hope that our medical brethren will universally and zealously second these efforts, by reason of their real importance in both scientific and philanthropic points of view. We say universally, for it appears, from the following passage, that some to whom circulars have been sent have declined to coöperate in this national undertaking.

"An inconsiderable number—perhaps fifty persons—of the medical profession have refused to return the causes of death, for very various reasons; one gentleman, *because a Factory Inspector had displeased him*, another *because he had not been elected a medical officer under the new Poor Law*, another *because the remuneration under that law is insufficient*, another *because he is not specially paid for signing the written certificate*. That it is the duty of the State to require from the medical attendants, and to register the cause of every individual's death which takes place in the country, appears to me incontestable; and, as I have stated, I have found that *the profession as a body*

comprising more than ten thousand qualified medical practitioners, and all the most eminent men in all branches of the profession—physicians, surgeons, and general practitioners—have expressed their readiness to return the causes of death in the best way the present state of medical science and their means of procuring information will admit. I have given explicit instructions that *no certificate shall be received from persons known to be unqualified*, or to have no diploma from either the halls, colleges, or recognised Universities; and I have determined not to attempt at present to compel the few medical practitioners who have refused to sign certificates, to return the causes of their patients' deaths; as, although they may have diplomas, *it is probable that the information they would be induced to furnish would be of little comparative value*, and might mingle errors among the facts spontaneously supplied by enlightened, accurate observers."—pp. 2, 3.

The italics are our own, and the passages in them both reveal some curious motives, and a severe, though probably correct, opinion; and, on the other hand, some circumstances calculated to inspire a rational satisfaction. First of all, we are pleased to see a distinction broadly laid down between qualified practitioners and unqualified pretenders; and we seem to have some kind of earnest that the Government will not be tardy in drawing the line of demarcation still more stringently when we observe the enunciation of sound principles on the subject from an office in immediate connexion with the State. It is also gratifying to find that the "profession as a body" so warmly concur in the laudable objects impressed on their notice; and it speaks well for the enlargement of their views—trumpet-tongued, in fact, of the advancement of the general practitioner. But the objections above specified to the making returns are ludicrously irrelevant, absurd, and wholly unworthy of their authors. It is a matter of just regret that they should have emanated from the cultivators of a liberal science. Reform them altogether, gentlemen!

We fully concur in the following remarks of the registrar-general:—

"To secure a complete statistical account of the 'movements' of the population, the census lists should be revised annually, and registers should be kept of those who leave or enter the country, as well as of births and deaths. In the absence of the information which such a system would furnish, it is impossible to determine the precise extent of the deficiency in the registration of births."

We really know of no good reason why the census should not be taken annually instead of decennially, as at present; the utility of such a measure would be soon apparent in all of the thousand branches of political, commercial, and medical economy.

The remaining extracts we shall make are those of the most general interest to be found in the report:—

"The population (female) increased 1.335 per cent. annually from 1831 to 1841; it increased very regularly at rather a faster rate from 1801 to 1831; and from the known circumstances of the country in the present decennium, the inference is probable that the mean rate of increase has hitherto been as high as that which prevailed from 1831 to 1841. The population of England estimated at that rate of increase was 16,684,600 on January 1st, 1845; and will be 17,000,000 before Midsummer, 1846. About 222,000 souls are added to the population of this part of the United Kingdom annually."—pp. 4, 5.

"The increase of the population of the United Kingdom in 10 years is 10.79 per cent., which is at the rate of .01030, or of 1.030 per cent. annually.

"Speaking in round numbers, the population increased 11 per cent. in the 10 years 1831-41, which is very nearly at the rate of 1 per cent. annually: at this rate the population will double in 68 years. The increase of males was 1.033, of females 1.028 per cent. annually, a difference exceedingly slight.

"The population, at the same rate of increase, will be 30,000,000 in January 1852. The increase was 2,639,817 in the 10 years, June, 1831-41, or on an average 263,932 annually."—p. 9.

The following fact is somewhat startling and humiliating for a country which professes to be in the van of civilization.

"Persons, when they are married, are required to sign the marriage register; if they cannot write their names, they sign with a mark. The result has hitherto been, that nearly one man in three, and one woman in two, married, sign with marks."—pp. 14, 15.

It shows that there is need for the schoolmaster "at home" as well as "abroad."

Statistics present themselves to most minds as a dry and repulsive study; they form not the chain in which Psyche can be bound, although, perchance, that in which Proteus may be fettered. Nevertheless, to the unerring test they are capable of affording, we must eventually turn for a guide to the solution of numerous problems in theoretical and practical medicine, which are at present the subjects of wide differences of opinion. Numbers form a most important element of modern reasoning, and their utility, when carefully and accurately elicited, is exactly proportionate to the danger attending their use when erroneous. Making allowance for the incompleteness which still attends some portion of the data whence they are drawn, but which is continually in process of rectification, the correctness of the Tables which issue from the Registrar-General's office, and of the deductions therefrom, is, we believe, unimpeached; and we have no doubt that a progressive approximation to truth is made in each additional year's report.

## Foreign Department.

### MEDICAL ORGANIZATION IN SPAIN.

Agreeably to a government decree, dated Sept. 5th, 1846, five faculties of medicine are established in Spain—viz., at Madrid, Cadiz, Valencia, Barcelona, and Santiago. The medical college of Madrid is judiciously seated in a noble edifice close to the general hospital, and has on the ground floor, four spacious theatres, two dissecting-rooms, &c.; and above stairs, the museum and library. At present, the duration of medical study in Spain is fixed at nine years, in order to obtain the degree of doctor, or only seven years for that of licentiate, in medicine; but the latter degree confers the privilege to practise in any part of Spain with the title of *medico-cirurjans*, or physician-surgeon, (the "one faculty" being thus fully recognised even in the designation of the practitioner.) Only those who possess the doctorate, however, are eligible to professorships and as *agrégés*, and to practise at watering-places; and the same degree will probably be hereafter required to enable its possessor to hold the appointment of hospital physician. At the end of the fifth year of study, the student acquires the title of bachelor of medicine, but this confers no right to practise. The following is the course of study as pursued at Madrid.

First year.—Medicine and medicinal chemistry, three times weekly, Prof. Usera; general chemistry, three times weekly, Prof. Masarnan; colloquial examinations on osteology and dissections, from eleven till two daily; descriptive and general anatomy, daily, Prof. Castello, jun.

Second year.—Natural history, daily, Prof. Obrador; physiology, theoretic and experimental,* five times weekly, Prof. Ysorn; hygiene, twice a week, Prof. Perez; dissections, from noon till two P.M.; general and descriptive anatomy.

Third year.—General pathology, four times weekly for four months; clinical medicine and hospital practice, for four other months; morbid anatomy, twice a week, for eight months, Prof. Lopez; therapeutics, materia medica, and prescriptions, five times weekly, Prof. Capdevila; dissections as during the second year.

Fourth year.—Pathology and clinical medicine, morbid anatomy, bandaging, surgical anatomy, operations, Prof. Toca; surgical pathology, daily, Prof. Fran; practical exercise of the foregoing.

Fifth year.—Surgical hospital practice, Profs. Argumosa and Solis; visceral pathology, Prof. Drumen; midwifery and diseases of women and children, Prof. Saura, all daily; practical exercises, as in the fourth year.

Sixth year.—Surgical and medical practice, daily—professors of the latter, Senor Gutierrez, Dean of the Faculty, and

* Under this head we are told—by the help of a "hundred vivisections" on dogs and sheep, the professor illustrates the functions of the nervous system, and of respiration, circulation, digestion, vomiting, &c.

Callejo; practical midwifery, medical jurisprudence, daily, Prof. Mata.

Seventh year.—Midwifery, daily, Prof. Corral; medical practice and jurisprudence, both daily; hygiene, twice weekly, Prof. Perez.

Eighth year.—Chemical analysis, three times weekly, Prof. Pou; hygiene, twice a week.

Ninth year.—Chemical analysis; medical history and literature, Prof. Asnero; both three times a week.

(*L'Observateur Français.*)

## British & American Medical Journals.

At a meeting of the Dublin Pathological Society, Dr. Corrigan exhibited what he considered to be a specimen of

### ENDOCARDITIS IN PROGRESS OF CURE.

"The subject of it, a man aged 41, was admitted into the Whitworth Hospital. Eight weeks previously, after having been at work, he was seized with pain in the region of the heart, with dyspnœa and orthopnœa, and in the preceding week his feet and legs became œdematous; on admission, his respiration was very difficult, and he required to be supported in the erect position; he had pain in the epigastrium and præcordial region, his pulse feeble, his respirations about forty in the minute, and over the region of the heart there was bruit de soufflet. He was treated by stimulants, together with mercurials and opium; he was relieved as soon as he became mercurialized. On the 24th of February the heart symptoms were completely relieved; there was no bruit, and there was also no dyspnœa, but the gums were ulcerated from the use of the mercurials; the interior of the mouth gradually passed into a sloughing state, which could not be checked; the teeth fell out; mercurial erethism affected the system, and the patient died from the effects of the mercury in nine days.

"*Post Mortem.*—The pericardium and external surface of the heart and its tissue were sound. The state of the valves was very interesting. They felt and looked like two layers of thin, pulpy, opaque parchment laid upon one another; and the mitral valves were in a similar state, arising apparently from an effusion of lymph between their folds. Dr. Corrigan observed, that he thought there could be no doubt this was a case of endocarditis in progress towards recovery, from the action of mercury; that it confirmed Bouilland's opinion of effusion of lymph being the first stage of valvular disease; and that the case showed how long the lymph deposited on the valves may remain in a state capable of absorption, and should encourage us to persevere in our efforts to obtain its removal for a period of time much longer than might at first seem to permit us to entertain a hope of success."—*Dublin Journal.*

Dr. Corrigan should have added to this encouragement a word of caution on the administration of the remedy.

### HYDROPATHY PRACTISED FATALLY AMONGST THE NORTH AMERICAN INDIANS.

Thus writes one of the Editors of the *St. Louis Medical and Surgical Journal*:—

"The mortality from measles among several tribes—the Oglalas, Titons, Chayennes, Arapahoes, and Sioux—was very great. They were encamped near fort John, on the Platte, near the junction of Laramie river, when the disease appeared among them, in last September. It continued until the latter part of December. Mr. P. estimates the number of deaths from this epidemic to have been at least *fifteen hundred.* Suspecting that the cause of this enormous mortality, from a disease comparatively mild among us, was more in the treatment than in the disease itself, we made some inquiries. The reply of Mr. P. satisfied us that our suspicions were correct. These poor Indians, as soon as they were taken sick, took a steam-bath, according to their fashion—viz., by shutting up themselves in a small lodge, perfectly closed, and dropping water on a red-hot stone. Circulation was thus, at once, brought to the surface—a copious perspiration covered the skin. In that state, they started hastily and threw themselves into the cold waters of the Platte. It would be an act of humanity from those who have intercourse with these unfortunate beings, to impress upon their minds the folly of their practice. Tell them not to do anything for curing themselves, to keep in their lodges, to avoid exposure to atmospheric vicissitudes—and, our word for it, their squaws will have to lament over the corpses of fewer warriors."

So much for the novelty and success of Hydropathy.

### OBSERVATIONS ON EUROPEAN LUNATIC ASYLUMS.

Under this head appears, in the *American Journal of Insanity*, a lengthened and able commentary, from the pen of Dr. Ray. He has visited all the principal asylums of this country, and France and Germany, and he narrates his experience for the benefit of his fellow countrymen. We shall extract a few of his remarks:—

"*The Management of Asylums.*—In some establishments the visiting justices even participate in the executive management, upon the idea that none can be trusted but themselves. At Hanwell, they furnish themselves with keys and enter the wards, changing attendants and patients from one gallery to another, and dispensing their orders with the utmost freedom. It is not strange, that under such management this institution should have been filled with confusion and disorder; nor can we wonder at the remedy such persons adopted, to counteract the effects of their own mischievous interference. Conceiving that a little military discipline would meet the exigency of the case, they installed into the office of superintendent a half-pay military officer. Of course, this arrangement could not last long, but I could not learn that any wisdom was learned from such experience.

"*Officers.*—No officer in the British asylums corresponds in all respects to our superintendent, who is the chief of the establishment, and vested with paramount power. There the officers are entrusted with less power, and that is more equally divided between them. Thus responsibility is frittered away, and that unity of plan and of purpose so necessary in maintaining the ordinary routine of service, not to speak of any higher end, is entirely wanting. In one of the largest establishments in the country, I found that the officers themselves were not quite clear as to the exact limits of each other's responsibility. If the resident physician prescribed medicine, his prescription was liable to be countermanded by the visiting physician; if he moved a patient or attendant from one gallery to another, the matron might move them back again; and if the matron shut up a patient in her room, the visiting justices might, and probably would, order her to be enlarged. Thus each one was constantly interfering with somebody else, and preparing for some fresh jealousy, or heart-burning, disorder, or dissatisfaction. * * * * * * The officer in the immediate charge of the patients had the least power to minister to their moral necessities, even if capable of perceiving and appreciating them, while the one who had the power could see nothing in his hasty and infrequent visits to call for its exercise. Even after the gross abuses that resulted from this management were unfolded, it was attempted to remedy them, not by cutting off the source of the evil, by putting the establishment into the charge of men possessing moral and scientific qualifications of a high order, and invested with the necessary power for carrying their views into effect, but by making stricter rules and a more searching espionage. In short, they expected to produce fidelity to trust, by operating on the sentiment of fear, rather than by appealing to that zeal and devotion to duty which spring only from high moral aims and a laudable desire for scientific distinction. Latterly there has been a disposition to perceive and correct this mistake, by magnifying the office and character of the superintendent, and rendering them more honourable. But with the attachment of the English to established usages, and especially to the patronage power, it will probably be long before they adopt the simple and efficient system of executive government which prevails in the American and German asylums.

"*General appearance of Asylums within.*—On entering a foreign asylum, an American is immediately struck with the greater amplitude of all its parts; by the width of the halls and corridors, the height of the ceilings, by the spaciousness of the day rooms, and by a peculiarly light and cheerful aspect, seldom witnessed in ours. The rooms are placed upon one side only of the gallery. The mode of having them on both sides, which prevails almost exclusively with us, is there an occasional exception, chiefly confined to projections and later additions, where they do not interfere with the general style, although universally regarded, I believe, even under such circumstances, as a sacrifice to the spirit of economy. The former method is certainly to be preferred, for its free admission of air and light, for its avoiding that multiplicity of windows which so seriously disfigures all our hospitals, and for taking away that cramped and crowded appearance which our asylums present. If, however, it is determined to use the other mode, the objection on the score of deficient light may be obviated in part, by leaving, in two or three places, a space equal to a couple of rooms, through which a light may be admitted to the gallery."

# THE LANCET.

LONDON, SATURDAY, JANUARY 2, 1847.


A COPY of the MEDICAL BILL of 1847 will be found at page 17 of this week's LANCET. The framer of the measure submits it with confidence, but not without feelings of anxiety, to the judgment of the whole body of his professional brethren.

As the consideration of the Medical Registration Bill cannot be begun too soon, we commence the volume and the year with some remarks upon the proposed measure; and we conscientiously believe that we could wish medicine and surgery no happier year, than for its chief provisions to become the law of the land during the coming twelve months.

Let us see how some of the sections of the medical body most interested in the matter will be affected by the proposed registration. No one can doubt the importance of such a law as the one to be contended for during the present year. There are certain circumstances connected with any legislation for the medical profession of a peculiar nature. In ordinary legislation, no great changes can be proposed, however beneficial, without interfering with the previously legitimate interests and rights of certain classes of the community. But though this is an impediment, it is no positive bar to the enactment of new laws. The parties who dread injury are called upon, however large their numbers and great their station, to give way to whatever may, upon full discussion, seem required for the general weal. But at the present time, the laws relating to the medical profession are in such an amorphous and chaotic state, that, *de facto*, there is no law at all, and consequently, no actual, living legal rights, to be interfered with. It is the fact, that the laws and privileges which should exist for the profession have been, for a long series of years, suffered to remain in almost perfect abeyance, and there is no hope of their resuscitation, even if the desire for it existed.

Looking to England, in the first instance, let us take the case of the London College of Physicians. It does, indeed, examine for the licence to practise as physician; and it elects its fellows and its officers; and it circulates upon a very small scale prospectuses claiming to be the one great fount of medical honour in this country. All this, however, occurs within its own walls. No demonstration towards those who ride roughshod over its antiquated rights is ever made or attempted. Its charters lie in the dust of centuries unregarded, and probably unknown even to those whose office it should be to enforce and obey them. The persons without any proper education who call themselves physicians, and practise as such, without any interruption on the part of the College, are very numerous; while the educated men who possess medical qualification of even higher character than the medical licence of the College, or the merely *medical* degrees of Oxford or Cambridge, amount to many hundreds, probably to thousands. These gentlemen, though occasionally taunted with being engaged in practice illegally, are never really interfered with by the College. The present medical generation has not seen the College of Physicians lift a finger aggressively against illegal practice, or defensively in favour of its fellows and licentiates. We are bound to take things as they really are. In such a case, custom is strong as law or charter, and it is quite useless to talk of the College of Physicians as having in its charters greater powers and immunities than any other public body in the empire, while administratively it is the very weakest—so weak, that not a vestige of its power has been seen for a long series of years. It has no force or ability to defend the public against unqualified practice, save that of the mere *vis inertia* belonging to the name of the College, its fellowship, and its licence. As well talk of the strength of a man in a state of coma, or the activity of a dormouse in its wintry sleep, as of the power of the College under present circumstances.

A Registration of the medical body, then, whether in one list or in sections, can do no injury to the London College of Physicians; they themselves do not prevent any unqualified man from calling himself physician, and acting as such, if he be dishonest enough to do so, without a degree in medicine. Now the Medical Registration proposed, would give to every man, besides a certificate of qualification, a description of the nature of his qualification, so that no undue assumption would then be allowed. But, we repeat, the Royal College of Physicians of London do not even defend the public or their fellows and licentiates against unqualified quacks, who take the title of Doctor, cheat the public, and bring disgrace upon the profession in the most open manner. This the Medical Registration Bill would do; it would effect the separation between qualified and unqualified persons, simply and stringently, and in so far, therefore, it would be a boon even to the members of the College of Physicians, while in no conceivable way could it be derogatory to them, or take away any right or privilege which the College would dare in the present day to assert on their behalf.

There are other considerations, too, which might be urged, to prove that a system of general registration would be favourable to an internal discipline of the College, such as would raise its influence and power most materially. With the present jarring elements of the profession, an internal discipline would be an impossible task to the most ambitious President. No. External discipline must be the first step. The foundations of the profession must be looked to before internal decorations can be thought of. We repeat our assertion, then, that the Medical Registration Bill claims no real concessions from any member of the College of Physicians; on the contrary, it would tend rather to give stability and dignity to this institution; and the tendency of other recent events and proposed changes have certainly been in an opposite direction.

And as regards the College of Surgeons of England, the same line of argument may be justly pursued. The College has never done anything really in the way of defending its members or its own honour. Any one knavish enough to do so, may take the title its diploma confers, without let or hindrance on the part of the College authorities. The only discipline the College has ever attempted, has been, to omit from its annual list the names of one or two offensive members—a point of which very few, even of the members of the College, are aware, and which is no punishment whatever to the evil doers, as they have never hesitated to pursue their avocations and use their professional titles as before. The annual lists of the College are themselves acknowledgments

of the utility of registration, at the same time that they afford arguments in favour of a registration that should be correct, compulsory, and universal. Of these lists, as every M.R.C.S.E. well knows, one-half is composed of the names and addresses of members and fellows, the other is simply a list of some thousands of names arranged alphabetically, without any addresses or means of identification whatever; many of them being the names of parties who have died, emigrated, or relinquished the profession. The existence of such a list offers a direct temptation to dishonest persons to assume the names of surgeons. All they have to do is to select some name in the non-address list, and with common cunning they may adopt it and act accordingly, with only a very remote fear of detection, and none of exposure or punishment.

But impostors do not take the trouble even to do this; they appropriate the name of surgeon to names not in the College lists at all, or they even have the barefaced impudence to assume the names of eminent surgeons, and the College, bearded in this way, neither defends itself, its members, nor the public. As far as we are aware, the only places at which a real qualification as surgeon is examined into are in poor-law and hospital appointments. The College is, in fact, utterly defenceless against the misconduct of its own members, or the assumptions of unqualified quacks. The world has even been treated with the spectacle of the College authorities proclaiming publicly that improper and disreputable persons are members of the College; and they can make no other attempt but this vain complaint to purify themselves. The College of Surgeons, then, has no internal or external discipline; and we maintain that a system of registration, while it would defend all surgeons in the possession of their titles, and protect them against quacks and impostors, would be a proper basis on which to found a system of discipline for the members of the College, which should conduce to the welfare and honour of the members and fellows, and of the College itself.

What shall we say of the Society of Apothecaries? They have, for the long lease of thirty-one years, held a power of defending themselves and their licentiates against unqualified interlopers. And what have they done? What is the condition of the apothecaries and surgeon-apothecaries at the present time? They are overrun by unqualified persons and druggist practitioners, and they look for help to the Society in vain. The Society, by public advertisement, gave up the penal clause in the Act of 1815, and since that time they have nevertheless instituted one successful prosecution against a person calling himself an American physician—a proceeding just sufficient to stultify themselves, but of no power to defend their licentiates. Subsequently, as our readers will see from the present LANCET, they have obtained from the law officers of the Crown an opinion that offenders may be indicted, not upon the penal clause, but more summarily, for violating the Act of parliament. And what do they now propose to do? Why, instead of taking the initiative, and testing the opinion by a series of indictments, they send advertisements to the newspapers, which are inserted in one page, warning all unqualified persons to desist from general practice at their peril; and they send communications also to the newspapers, which appear in another page, in which they ludicrously cry for help from societies and private individuals, confessing their own inability, from want of funds, to act effectively; and thus they plainly proclaim that, as far as they are concerned, the "peril" of illegal practice is next to *nil*. They will not even allow the profession to have the benefit of the legal opinion, and their cautionary advertisements, without a display of their own counteracting imbecility. They are the legitimate guardians of the profession, and they label themselves up as dumb watch-dogs.

Their own system of registration, the list of apothecaries which appears at intervals of several years, is even more ineffective than the lists of the College of Surgeons. When a man passes the Hall, his residence is required of him, and this is the only clue to his whereabouts the Society obtain. Of course, few men have any special address at the time of passing the examination, and least of all are they certain of their future location in practice. So they just give their lodging in town, the residence of their parents, or of the gentleman with whom they passed their apprenticeship, or they guess at their future residence, and this formally passes into print in the official list. The Society have no adequate means of pruning the lists of the names of those who die or leave the profession, so that, besides the incorrect addresses, the last list published is encumbered with the dead of thirty-one years. What bulk it would reach to, and what amount of mortality it would contain, if the same system were pursued for thirty-one years longer, we leave our readers to imagine. We are confident that, maugre the shadow of protection they may fancy they possess, there is no class of the English faculty which would be more benefited by a just registration of the profession than the licentiates of the Society of Apothecaries.

We claim, then, the assistance of the physicians, surgeons, and apothecaries of England, in obtaining an efficient Medical Registration Bill—one which would clearly separate all qualified practitioners from uneducated and unqualified pretenders, and which aims to do this, not by sacrificing the interests of one branch of the profession to the interests, real or fancied, of another, but prepared with a view to a single object, the good of the whole, and as a basis of internal improvement, and a defence against quacks and surreptitious practitioners of every kind. We shall hereafter refer to the position of the institutions of Scotland and Ireland with respect to registration.

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IN another page we insert an important communication, kindly forwarded to us by Dr. BOOTT, of Gower-street, describing the important discovery of an apparently harmless means of producing insensibility during the performance of surgical operations. The means of performing operations without pain has, in all ages, occupied the attention of the profession. The realization of such an object, by a means so simple as the inhalation of the vapour of sulphuric ether, cannot but redound to the great merit and reputation of the discoverer, Dr. MORTON, of Boston, America, and to the honour of the profession to which he belongs. It is almost impossible to discredit the statements contained in the communication referred to, from which it will be seen that a great number of operations, from the extraction of teeth to the gravest operations of surgery, have been painlessly performed. The discovery seems to have a remarkable perfection about it, even in its first promulgation. We shall watch its development in the various branches of medicine and surgery which may admit of its application, and carefully record them. We suppose we shall now hear no more of mesmerism

and its absurdities as preparatives for surgical operations. The destruction of one limb of the mesmeric quackery will be one not inconsiderable merit of this most valuable discovery. The operations of Mr. Liston, at University College Hospital, were performed after the inhalation of ether, by means of an apparatus contrived by Mr. Squires, of Oxford-street. It appears, from a communication in another column, that the discovery has been patented for Great Britain and the Colonies.

THE

# MEDICAL REGISTRATION BILL Of 1847.

## A BILL

FOR THE REGISTRATION OF

QUALIFIED MEDICAL PRACTITIONERS,

AND FOR

AMENDING THE LAW RELATING TO THE PRACTICE OF MEDICINE

IN

GREAT BRITAIN AND IRELAND.

*Preamble.*—Whereas the laws relating to the Practice of Medicine in Great Britain and Ireland are numerous, complicated, and contradictory, and the public possesses no certain means of distinguishing between legally qualified physicians, surgeons, and apothecaries, and the mere pretenders to a knowledge of medicine and surgery, and it is desirable that the names and qualifications of the regularly educated practitioners in medicine should be duly registered by competent authority:

1. *Registrars to be appointed.*—Be it enacted, by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, That one of Her Majesty's Principal Secretaries of State shall, within one month after the passing of this Act, nominate and appoint three fit and proper persons, being at the time of such appointment qualified to be registered under the provisions of this Act, to be the registrars for carrying this Act into execution, one such registrar to be called the "Medical Registrar for England," another, the "Medical Registrar for Ireland," and the third, the "Medical Registrar for Scotland," and that he shall also from time to time appoint such clerks and other officers as he, the said Secretary of State, shall deem necessary for the assistance of the said registrars in carrying into execution the provisions of this Act; and that the said Secretary of State may at his discretion remove any registrar or other person so appointed as aforesaid; and that upon the death or resignation of any such registrar or other clerk or officer as aforesaid, or other vacancy in either of the offices so filled, the said Secretary of State shall appoint other proper persons to be such registrars, clerks, and officers respectively; and there shall be paid to the said registrars, clerks, and messengers, out of any monies to be received by the said registrars by virtue of this Act, such salaries as shall be from time to time fixed and allowed by the Lord High Treasurer or the Commissioners of Her Majesty's Treasury, who may also allow such reasonable travelling expenses as may be incurred by any registrar, clerk, or messenger in the performance of his duties under this Act, and such other reasonable expenses for putting and carrying this Act into execution, as the said Lord High Treasurer or the Commissioners of Her Majesty's Treasury shall think fit.

2. *Monies to be paid to Medical Registration Fund of Great Britain.*—And be it enacted, that all monies received by the registrars aforesaid, in carrying this Act into execution, shall be paid by them into the Bank of England, at such times and in such a manner as the Secretary of State aforesaid shall direct, to the credit of the Lord High Treasurer, or the Commissioners of Her Majesty's Treasury, and in the name of the "Medical Registration Fund of Great Britain and Ireland."

3. *Registration of Names &c. of qualified Medical Practitioners.*—And be it enacted, that the several registrars shall, within thirty days after their appointment, and from time to time afterwards, register, according to the form in schedule (A) to this Act annexed, in books to be kept for that purpose, and without any fee whatsoever, the name and place of residence, together with a description of the legal qualification or qualifications, with the date or dates thereof, of every physician, surgeon, and apothecary who shall apply to be registered, and who, prior to the passing of this Act, shall have taken a degree in medicine in any English, Irish, or Scotch University, or who shall apply to be registered, and shall produce his diploma, certificate, or licence, or other proof of his having obtained a diploma, certificate, or licence to practise as a physician, surgeon, or apothecary, dated prior to the passing of this Act, and granted by any English, Irish, or Scotch University, College, or Society, or any corporation, sole or aggregate, in England, Ireland, or Scotland, legally entitled to grant the same; and also of every person who shall apply for the same, who was actually practising as an apothecary in England and Wales prior to the first day of August, one thousand eight hundred and fifteen, and who shall sign a declaration according to the form in schedule (B) to this Act annexed, and also of every surgeon and assistant-surgeon of the army and navy, and in the service of the Honourable the East India Company, who shall apply for the same, and of every physician, surgeon, and apothecary, upon the payment of *Two pounds*, who, *after* the passing of this Act, shall take a degree in medicine as aforesaid, or produce a certificate, licence, or diploma as aforesaid, dated subsequently to the passing of this Act.

4. *Registrars to issue Annual Certificates to Registered Practitioners.*—And be it enacted, that the several registrars aforesaid shall issue a certificate, according to the form in schedule (C) to this Act annexed, to every person who shall have been registered as aforesaid, and who shall apply for the same; and be it further enacted, that the said registrars shall issue such certificates for those parts of Great Britain and Ireland only for which they shall severally be appointed to act.

5. *Payment of Five Shillings for Certificate.*—And be it enacted, that every person shall, upon his application for such certificate, pay to the registrar a sum not exceeding *five shillings*, and such certificate shall bear date on the day on which the same shall be issued, and shall thence continue in force until the thirty-first day of December, one thousand eight hundred and forty———, and no longer; and the said registrars, on

or before the fifteenth day of December in every subsequent year, upon the application of any person who shall be then registered, shall issue such certificate to such person in like manner in all respects as aforesaid, subject to the payment of a sum not exceeding *five shillings* as aforesaid, which said certificate shall take effect on the first day of January then next ensuing, and shall continue in force during one year, and no longer.

6. *Registrar to keep a Record of Certificates.*—And be it enacted, that each of the said registrars shall duly record in a book an account of every certificate which he shall issue as aforesaid, and in the month of January in every year shall cause to be printed a correct register, arranged alphabetically, of the names of all persons to whom he shall have so issued certificates during the year then last past, according to the provisions of this Act, together with their places of abode, and a description of their legal qualification or qualifications, with the date or dates thereof, and such registers shall be respectively called, "The Medical Register for England," "The Medical Register for Ireland," and "The Medical Register for Scotland;" and a printed copy of the register for the time being, so published as aforesaid, shall be evidence in all courts, and before all justices of the peace and others, that the persons therein specified have obtained a certificate according to the provisions of this Act; and the absence of the name of any person from such printed copy shall be evidence, until the contrary be made to appear, that such person has not obtained a certificate according to this Act; and copies of such Medical Registers shall be furnished by the respective registrars to every person who shall apply for the same, upon the payment of a sum not exceeding *one shilling* for each copy.

7. *Persons accidentally omitted from Register may obtain Certificate on paying Twenty Shillings.*—And be it enacted, that if any person entitled by this Act to obtain a certificate as aforesaid, whose name and place of residence, and a correct description of whose qualification or qualifications, with the date or dates thereof, do not appear in such Medical Register as aforesaid, shall at any time apply for a certificate to any of the registrars aforesaid, and shall prove, to the satisfaction of such registrar, either that he is a person whose name, through neglect, accident, or mistake, has been omitted from the Medical Register then current, or that he purposes commencing or resuming practice, or changing his residence, before the first day of January in the ensuing year, every such applicant shall be entitled to obtain, from the registrar appointed for that part of the United Kingdom in which he resides, upon payment of twenty shillings, and sending his name and then place of residence, together with a description of his qualification or qualifications, with the date or dates thereof, a certificate as aforesaid, to continue in force until the thirty-first day of December then next ensuing.

8. *Repeal of Restrictions on Practice excepting such as are in this Act.*—And whereas it is just and expedient that all registered persons possessing certificates, in force as aforesaid, should be entitled to practise medicine in that part of the United Kingdom for which their certificates are issued; Be it therefore enacted, that so much of any Act or Charter granted before the passing of this Act as prohibits any person from practising medicine, physic, or surgery, in any place without such licence as is mentioned in any such Act or Charter respectively, or that imposes any restriction or penalty on the practice of medicine, physic, or surgery, further than is contained in this Act, shall be and the same is hereby repealed and annulled.

9. *Registered persons entitled to Practise where Certificates are issued.*—And be it further enacted, that every person who shall be registered, and shall possess a certificate in form, according to the provisions of this Act, shall be entitled, without other licence than such registry and certificate, to practise medicine throughout that part of the United Kingdom in which his certificate was issued, and such person shall be deemed qualified to be appointed therein to any medical office in any public or other institution.

10. *Registered Practitioners entitled to Charge for Visits and Attendance.*—And be it enacted, that all persons who shall be registered and possess certificates according to the provisions of this Act, shall be entitled to demand and recover, in any court of law, with full costs of suit, reasonable charges for medical or surgical advice, visits, and attendance, rendered by them to their patients in any part of Great Britain and Ireland, without any other licence than such registry and certificates.

11. *None but Registered persons or those in Practice before the passing of this Act to recover Charges.*—And be it enacted, that after the passing of this Act no person shall be entitled to recover any charge in any court of law for any medical or surgical advice, attendance, or operation, or for any medicine prescribed or administered by him, unless he shall prove upon the trial, either that he is registered under this Act, or that he was legally practising in the capacity in which he claims such charge before the passing of this Act.

12. *Repeal of enactment requiring Five years' Apprenticeship to an Apothecary. (Fifty-fifth George III., cap. 194, s. 15.)*—And whereas, by an Act passed in the fifty-fifth year of the reign of King George the Third, entitled, "An Act for better regulating the Practice of Apothecaries throughout England and Wales," it was enacted "that no person shall be admitted to any examination for a certificate to practise as an apothecary unless he shall have served an apprenticeship of not less than five years to an apothecary;" and whereas the said enactment having been found to obstruct the efficient education of students in medicine, it is expedient that the same should be repealed; Be it therefore enacted, that so much of the said recited statute as requires the serving of such an apprenticeship as aforesaid shall be and the same is hereby repealed.

13. *Summary Penalty against Unregistered Practitioners. (Fifth Geo. III., c. 194, s. 20.)*—And be it further enacted, that if any person shall, after the ——— day of ——— 18—, act or practise as a physician, surgeon, or apothecary, in any part of Great Britain and Ireland, without being duly registered according to the provisions of this Act, and without having a certificate as aforesaid in force at the time of his so practising or acting as a physician, surgeon, or apothecary, he shall, on conviction before any magistrate having jurisdiction in the county, city, or place where the offence was committed, forfeit and pay a sum not exceeding *five pounds*, nor less than *forty shillings*, for every such offence, to be recoverable within three months next after the commission of the said offence, under a warrant signed by the said magistrate, by distress and sale of the offender's goods and chattels.

14. *Penalty on Unregistered Persons for acting as Medical Officers.*—And be it enacted, that every person appointed after the passing of this Act to any medical or surgical office for which he is not qualified according to the provisions of this Act, and who shall act or practise in such office, shall for every such offence forfeit a sum not exceeding *five pounds*, nor less than *forty shillings*, to be recovered as is hereinafter described.

15. *Persons not possessing Certificates incapable of acting as Medical Officers in Public and other situations.*—And be it enacted, that from and after the first day of January one thousand eight hundred and forty —, no person who does not possess a certificate in force according to the provisions of this Act, shall be capable of holding any appointment in any part of Great Britain or Ireland in the capacity of a physician, surgeon, apothecary, or other medical officer in any hospital, infirmary, dispensary, lunatic or other asylum, lying-in hospital, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish union or other public establishment, body, or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age; and the certificate or evidence of any person not possessing a certificate as aforesaid, given after the passing of this Act, shall not be received as the certificate or evidence of a physician, surgeon, or apothecary, or medical or surgical practitioner, in any court of law or equity, or in any matter or thing in which by law or custom the certificate or evidence of a physician, surgeon, apothecary, or medical or surgical practitioner, is or shall be required.

16. *Penalty for wilful falsification of the Record of Certificates by any Registrar.*—And be it enacted, that if any registrar under this Act shall wilfully make or cause to be made any falsification in any matters relating to any register, certificate, or record aforesaid, every such offender shall be deemed guilty of a misdemeanor; and shall, on conviction thereof, be sentenced to be imprisoned for any term not exceeding *six months*.

17. *Penalty for obtaining Certificate by False Representations.*—And be it enacted, that if any person shall wilfully procure or attempt to procure a certificate from any registrar, by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing, or shall by any false or fraudulent means whatsoever possess, obtain, use, or attempt to possess, obtain, or use, any certificate as aforesaid, every such person so offending, and every person aiding and assisting him therein, shall, upon being convicted thereof, be adjudged guilty of a misdemeanor in England and Ireland, and in Scotland of a crime and offence; and thereupon it shall be lawful for the court before whom such offender shall be tried and convicted, to sentence such offender to be imprisoned, with or without hard labour, for any period of time not exceeding three calendar months.

18. *Penalty for False Pretences of Qualification.*—And be it enacted, that every unregistered person who shall wilfully and falsely pretend to be, or take or use the name or title of a physician, doctor, bachelor of medicine, surgeon, or apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or apothecary, or a practitioner in medicine or surgery, shall, on being convicted of every such offence before any magistrate having jurisdiction therein, pay a sum not exceeding *five pounds*, nor less than forty shillings, to be recoverable as is hereinafter described.

19. *How Penalties are to be recovered: if not paid, the offender may be committed.*—And be it enacted, that any justice of the peace acting in and for the county in which the offence has been committed, or any magistrate appointed by virtue of an Act passed in the second and third years of the reign of her Majesty Queen Victoria, intituled, "An Act for regulating the Police Courts of the Metropolis," or one of the justices of peace courts in Scotland, may hear and determine any complaint charging any person with practising medicine without a certificate as aforesaid, on the oath of one or more witnesses, or by his own confession, and shall award the penalty or punishment herein provided for such offence. And be it enacted, that in every case of the adjudication of a pecuniary penalty under this Act, and of non-payment or non-recovery thereof by distress, it shall be lawful for the magistrate to commit the offender to any gaol or house of correction within his jurisdiction, for a term not exceeding *one* calendar month when the sum does not exceed *forty shillings*, and for a term not exceeding *three* calendar months when the sum does not exceed *five pounds*.

20. *Application of Penalties.*—And be it further enacted, that any sum or sums of money arising from conviction and recovery of penalties for offences committed against the authority and provisions of this Act, shall be paid to the account of the Medical Registration Fund aforesaid, towards defraying the expenses of this Act.

21. *Uniformity of education, qualification, and fees, throughout the kingdom.*—And be it enacted, that the several colleges and other examining bodies shall, from time to time, prepare and lay before the said Secretary of State a scheme or schemes of the course of study, and particulars of the examination, to be passed by all persons applying to such colleges and other bodies respectively for letters testimonial as a physician, or surgeon, or apothecary, and also an account of the fees proposed to be taken by the said colleges and bodies respectively for such letters testimonial. And whereas it is expedient and desirable that the qualifications and fees for the said testimonials should be uniform, according to the nature thereof, throughout Great Britain and Ireland; such scheme or schemes shall therefore be of no force or effect until they shall have been submitted to her Majesty in council, and shall have received her Majesty's sanction and approval.

22. *Inspection and Supervision of Examinations.*—And be it enacted, that the said Secretary of State may, from time to time, require returns to be made in such form, and including such particulars as he shall think fit, respecting the examinations to be conducted for medical degrees, diplomas, and licences, and it shall be lawful for any person deputed by the said Secretary of State, being a physician, surgeon, or apothecary, registered under this Act, to be present at any of the said examinations, and to report to the said Secretary of State, and if he shall be of opinion that the regulations approved by her Majesty in council for the examination and grant of letters testimonial as physician, surgeon, or apothecary, have been infringed, evaded, or neglected by any of the examining bodies, it shall be lawful for the said Secretary of State to admonish the said offending body; and if such ad-

monition be neglected, then to direct the registrars as aforesaid to refuse to register upon the testimonials of the body so in default, until the conduct of such body shall be altered to the satisfaction of the said Secretary of State.

23. *Examiners may take Candidates to Hospitals &c. for practical Examinations.*—And be it further enacted, that the duly appointed examiners of candidates for degrees, diplomas, and licences in medicine, shall be empowered, under such regulations and restrictions, and at such times, as shall be approved by the Secretary of State as aforesaid, to attend with the candidates for examination at the public hospitals, or other public medical institutions, and also at any workhouse, for the purpose of ascertaining the practical knowledge of such candidates, from an inspection of sick and diseased persons.

24. *Act not to affect examinations of Students of Two Years' standing.*—And be it enacted, that students in medicine who at the time of the passing of this Act shall have been engaged two years and upwards in attending lectures in any medical school, or the practice of a public hospital, or other institution, in conformity with the regulations of any college having power to confer degrees or diplomas in medicine or surgery, shall not be affected, while completing their studies, or in passing their examinations, by anything in this Act contained; but such students shall be entitled to complete their education, and undergo their examinations, as though this Act had not been passed.

25. *Act not to extend to Dentists or Cuppers in business before 1st September*, 1846.—And be it enacted, that not anything in this Act contained, shall extend, or be construed to extend, to the profession or business of any dentist or cupper, who was engaged in such profession or business on or before the first day of September, eighteen hundred and forty-six; but every such dentist or cupper shall conduct such profession or business in as free and ample a manner as though this Act had not been passed.

26. *Act not to affect the trade or business of Chemists and Druggists.* (*Fifty-fifth Geo. III.*, c. 194, s. 28.)—Provided always, and be it further enacted, that nothing in this Act contained shall extend, or be construed to extend, to prejudice, or in any way to affect, the trade or business of a chemist and druggist, in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale or retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act.

27. *Registered medical practitioners exempted from serving on Juries, Inquests, &c.*—And be it enacted, that every person who shall be registered and possess a certificate in force under the provisions of this Act shall be exempt, if he shall so desire, from serving on all juries and inquests whatsoever, and from serving all corporate, parochial, ward, hundred, and township offices, and in the militia, and that the name of such person shall not be returned in any list of persons liable to serve in the militia, or in any such office as aforesaid: and no person shall be entitled to such exemption as aforesaid on the ground of being a physician, surgeon, or apothecary, who does not possess such certificate then in force as aforesaid, any Act to the contrary notwithstanding.

28. *Expulsion of Registered practitioners for disgraceful conduct.*—And be it further enacted, that if registered practitioners shall at any time complain to the council of any medical college or other governing medical body, that a person who had obtained his diploma or other qualification from such college or body has been conducting himself in a manner calculated to bring scandal and odium on the profession, by publishing indecent advertisements or pamphlets, or immoral or obscene prints or books, or has been guilty of any other disgraceful and unprofessional behaviour, the said council or governing body aforesaid are hereby empowered to cite the person accused before them, first giving him due notice and a full statement of the charges against him; whereupon the said council or other body, having heard the defendant, and being satisfied that the charges have been proved, or, in default of his appearance, having decided that the charges are proved, they are hereby authorized to erase the name of such person from the rolls of the said college or other institution, and shall transmit forthwith to the registrar of that part of the kingdom wherein such college or other institution is situated, an official report of their decision, authenticated by the seal of such college; and the said registrar shall thereupon strike out the name of the offending party from the register in his custody; and it shall ever afterwards be excluded from every register to be kept under the provisions of this Act, unless the council or other governing body by whom the name was first erased shall re-admit it into the rolls of their college or other institution.

29. *Names of Criminal practitioners to be Erased from the Register.*—And be it enacted, that if any registered physician, surgeon, or apothecary, shall be convicted, in England or Ireland, of any felony, or in Scotland, of any crime or offence inferring infamy, or the punishment of death or transportation, or if it shall be found, by the judgment of any competent court, that any such physician, surgeon, or apothecary, shall have procured a certificate under this Act by any fraud or false pretence, or that any such physician, surgeon, or apothecary, has wilfully and knowingly given any false statement, evidence, or certificate, in any case in which by law the evidence or certificate of a physician, surgeon, or apothecary is required, every registrar, on production before him of an office copy or extract of the conviction or judgment of the court, duly certified under the hand of the proper officer of the court, shall cause the name of such physician, surgeon, or apothecary, to be erased from the register; and every person whose name shall have been so erased after such conviction or judgment as aforesaid, shall thereby forfeit and lose all the privileges of a registered medical practitioner provided by this Act.

30. *Interpretation Clause.*—And be it enacted, that the words "medicine" and "medical," when used in this Act, shall also mean and include the words, "physic," "surgery," and "surgical."

31. *Public Act.*—And be it further enacted, that this Act shall be deemed and taken to be a public Act, and shall be judicially taken notice of as such by all judges, justices, and others, without being specially pleaded.

## SCHEDULES TO WHICH THIS ACT REFERS.

### SCHEDULE (A.)

THE MEDICAL REGISTER FOR ENGLAND,

*Consisting of the Names, Qualifications, with the Dates thereof, and Places of Residence, of all Persons legally authorized to practise Medicine in England and Wales in* 1848.

| NAMES. | QUALIFICATIONS, AND THEIR DATES. | PLACES OF RESIDENCE. |
|---|---|---|
| Addison, James Price | Degree of M.D. from the University of Edinburgh, dated August, 1830. | No. 16, Tudor-street, Manchester. |
| Adlard, Hugh ..... | Diploma as Fellow of the Royal College of Surgeons, Ireland, dated June, 1844. | No. 7, Milton-street, Hanover-square, London. |
| Admonds, Richard | Licence of the Society of Apothecaries, London, dated March, 1834. | No. 19, Millsom-street, Exeter. |
| Adney, Ralph ..... | Licence of the Royal College of Physicians, London, dated April, 1839. | No. 54, Holland-street, Liverpool. |
| Adpart, Erasmus .. | Diploma as Member of the Royal College of Surgeons of England, dated November, 1843. | No. 40, Tollville-street, Leeds. |
| Adwin, Gilbert .... | Declaration, as required by the Act, of having practised as an Apothecary before 1st August, 1815. | The Grove, Camberwell, Surrey. |

### SCHEDULE (B.)

DECLARATION required of a person who claims to be registered an APOTHECARY upon the ground that he was in practice as an Apothecary before the first day of August, 1815.

*To the Medical Registrar for England.*

I [Samuel Baker], residing at [6, Duke-street, Exeter,] in the county of [Devon], hereby declare that I was practising as an Apothecary at [16, George-street, Hastings,] in the county of [Sussex,] before the 1st day of August, 1815.

(Signed) [*Samuel Baker.*]

Dated this [6th] day of [October] 1847.

### SCHEDULE (C.)

THE MEDICAL REGISTER FOR ENGLAND.

*Registration Certificate for* 1848.

By virtue of the powers vested in me by an Act of Parliament passed in the eleventh year of the reign of her Majesty Queen Victoria, intituled, "An Act for the Registration of Qualified Medical Practitioners, and for amending the law relating to the Practice of Medicine in Great Britain and Ireland;" I hereby certify, that [JAMES HOWARD], residing at [15, Ormond-street, Manchester,] in the [county of Lancaster,] has been duly registered according to the provisions of the said Act, as a person who is qualified to practise medicine in any part of England and Wales, and that he is entitled to exercise all the powers and privileges conferred by the said Act.

This certificate to remain in force until the 31st day of December [1848,] and no longer.

(Signed) [*Henry Brown,*]

Medical Registrar for England.

Dated, London, 6 October, 1848.

## THE SOCIETY OF APOTHECARIES AND THEIR ACT OF 1815.

THE following extraordinary statement has just been published by the Society of Apothecaries. After having caused sundry prosecutions, and professed to carry the Act of 1815 into execution, the sapient wiseacres who govern the affairs of the Society have been obliged, at the end of thirty-two years, to apply to three barristers to ascertain what are really the provisions of that law under which they have been exercising their functions during the third part of a century. Such is the capacity of persons who have dared to institute prosecutions against others, not being unqualified quacks and impostors, but graduates of universities, and highly educated members of the medical profession, because their victims did not understand the provisions of the statute of 1815. On this extraordinary statement, particularly the last paragraph, we shall offer some comments in an early number of THE LANCET. The master and wardens of the Worshipful Society had to apply to the attorney-general to ascertain whether it was a misdemeanor to violate the penal provision of the fifty-fifth George III. Poor simpletons! But now, having learned that the offence really is a misdemeanor, are they prepared to punish the delinquents? In order to obtain an answer, look at the last paragraph. We really have no patience with such beings; they are even beneath contempt.

"The Society of Apothecaries entertaining an opinion, which they have publicly expressed upon several occasions, that a penal check upon the practice of medicine by unqualified persons is indispensably necessary for the protection of the public, and that the pecuniary penalty imposed by the Apothecaries' Act is but ill adapted for checking such practice, have long desired that a more summary mode of proceeding against illegal practitioners should be adopted; and they have advocated an alteration of the law in this respect, whenever a favourable opportunity for so doing has presented itself. A recent decision of the Court of Queen's Bench, in a criminal prosecution instituted against an attorney for practising without qualification, seemed to lead to the conclusion, that notwithstanding the specific pecuniary penalty imposed upon unqualified persons practising as apothecaries, such persons might be indicted criminally as for a misdemeanor. This decision appeared to the Society to suggest a mode of proceeding for checking the illegal practice of medicine, which might be attended with such important results, that they determined to lose no time in obtaining the highest legal opinions upon the subject. They therefore laid a case before the law officers of the crown, and it will be found, from the answers given to the questions submitted to the Attorney and Solicitor General, in consultation with Mr. F. Robinson, that it is the opinion of those learned gentlemen that an indictment will lie against a person who has practised as an apothecary without legal qualification. The Society subjoin the questions proposed to counsel, and their answers thereto.

QUESTIONS.

1. Whether an indictment will lie against a person who has practised as an apothecary without legal qualification, notwithstanding the particular penalty imposed upon persons so practising by the 20th section of the Act, and the disability imposed upon them by the 21st section? and if you should be of opinion that an indictment will lie?

2. In what courts, metropolitan or provincial, could such an indictment be preferred? and could it be preferred at the instance of a private prosecutor?

3. Would it be competent for the Society of Apothecaries to prefer such an indictment, notwithstanding the interest given to the Society in the pecuniary penalties imposed by the 20th section, and the particular remedy given to the Society for the recovery of such penalties?

4. What would be the extent of punishment which could be inflicted by law upon a person convicted of the offence of practising as an apothecary without legal qualification?

5. Can any more summary proceeding than an indictment be resorted to for the punishment of persons practising as apothecaries without legal qualification?

ANSWERS.

1. We think that an indictment will lie against a person who has practised as an apothecary without legal qualification, notwithstanding the particular penalty imposed by the 20th section of the Act, and the disability imposed by the 21st section.

2. The indictment may be preferred in any of the ordinary criminal courts having cognizance of misdemeanors committed in the county or place in which the party has so illegally practised, and it may be preferred at the instance of a private prosecutor.

3. We think it is competent for the Society of Apothecaries to prefer the indictment.

4. The punishment, as in case of other misdemeanors, would be fine or imprisonment, or both, at the discretion of the court.

5. We are not aware that any more summary proceeding than an indictment can be resorted to, for the punishment of persons practising as apothecaries without legal qualification.

JOHN JERVIS,
DAVID DUNDAS,
FREDERIC ROBINSON.

Temple, Nov. 23.

It is perhaps hardly necessary for the Society to point out the increased facilities which this mode of proceeding affords for putting the law in force against unqualified practitioners.

Instead of proceeding for the recovery of penalties by a civil action, which in the case of a country practitioner could only be tried at the spring and summer assizes, an indictment may be preferred at the quarter sessions and at the assizes also; and instead of the power of proceeding against unqualified practitioners being restricted, as in the case of the specific penalty imposed by the statute, to the Society of Apothecaries, it will be competent for any person to prefer an indictment who may be disposed to do so.

Another distinction between the two modes of proceeding, which is likely to operate still more powerfully as a check upon illegal practice, is this, that whereas an individual against whom a judgment for a penalty is obtained, under the present form of proceeding, can relieve himself from the consequences of his offence by obtaining his discharge under the bankrupt or insolvent Acts, an individual found guilty on indictment of having practised as an apothecary without legal qualification will be punishable by fine and imprisonment, and will have to undergo whatever measure of punishment the Criminal Court may in its discretion award.

The Society sincerely hope that a public intimation that the penalties of the law can now be enforced against illegal practitioners of medicine more summarily than heretofore, will deter all persons from practising as apothecaries who have not given such evidence of their competency to practise as the law demands. But if individuals, who have not possessed themselves of a legal qualification, will persist in practising in the absence of such qualification, they will do so at the risk of being criminally indicted for the offence at the instance of any individual prosecutor who may be induced to prefer an indictment against them.

The Society, on their part, will be ready, as they have ever been, to enforce the law to the extent of the means placed at their disposal, but those means are inadequate to the institution of frequent prosecutions. It may therefore be anticipated, that indictments will be preferred at the instance of other parties; and the Society take this opportunity of stating, that they will endeavour to render such experience as they may have acquired in administering the Act of 1815 available in furthering the ends of justice; and that they will be prepared, upon proper application, to furnish any information, in connexion with the subject of illegal practice, which they may have it in their power to afford.

Apothecaries' Hall, Dec. 10.

## Correspondence.

### THE HOUNSLOW FLOGGING CASE.

(LETTER FROM MR. ERASMUS WILSON.)

*To the Editor of* THE LANCET.

SIR,—In your journal of last week is published a letter from Mr. Day, of Isleworth, purporting to be a reply to a remark of mine contained in THE LANCET for Dec. 12th. The remark is as follows:—"I have now to allude to a disingenuous attempt on the part of Mr. Day to throw discredit on my testimony. Mr. Day observed in his written report—'The softening of the muscular fibre had extended into the intercostal muscles immediately subjacent, but had not penetrated the *internal intercostals*.' Your readers will perceive the ready answer which this attempt at the mystification of truth drew forth—namely, *that there was no internal intercostal muscle in the situation referred to*—that is, near the heads of the ribs." In his reply, Mr. Day admits himself to have been in error in respect of the anatomical question, but avails himself of the opportunity which his letter affords of making a series of trivial accusations against me. Under ordinary circumstances, I should not have thought it necessary to have taken any notice of Mr. Day's reproaches, but in reference to the part which duty to my Queen and mine own honour obliged me to take in the Hounslow inquiry, I am anxious for the strictest investigation.

It was not without careful deliberation that I applied the term "disingenuous" to Mr. Day's attempt to invalidate my testimony; and in attributing to him a "mystification of the truth," I was not induced by his anatomical mis-statement alone, but equally by the unusual and indecorous course which he pursued of criticizing the evidence of a fellow-witness. For example, he gratuitously informed the court that in my evidence I "*drew upon my imagination*." How far I may have been imaginative in my views, I may safely leave to the judgment of your readers. Again, he styles my explanation of the morbid condition of the muscles "*mere conjecture*." That these were proper epithets to be applied to evidence given honestly and truthfully before a jury for their guidance, I cannot be made to believe; and the course taken by Mr. Day was in my opinion, to say the least, disingenuous. The occasion of using the words "mere conjecture" is curiously in discord with the sentiments expressed in his present letter. It is as follows:—"The cause of the change of the muscles is a mere matter of conjecture." (THE LANCET, Aug. 15th.) Whereas, in his letter of Dec. 15th, Mr. Day remarks—"We *perfectly agreed* in the supposition that the morbid state had been produced, either by violent spasmodic action, causing laceration of the muscular fibres, or that some of the fasciculi had been torn," &c.

Mr. Day's first accusation against me is, that the *opinion* given to him by me on the day of examination of the spine of the deceased "was greatly at variance with the *evidence*" which I subsequently gave to the coroner. Permit me to explain:—

On Wednesday, July 22nd, being very much out of health, I went to Heston, to make, in conjunction with Mr. Day, the post-mortem examination in question. The operation lasted about four hours, and the duty, performed in a churchyard, under a hot July sun, with no awning, and the subject twelve days deceased, was one of no little trial and labour. On concluding the investigation I was much exhausted, and not at all in a condition to arrange my thoughts into the form of an *opinion* upon the mutual bearings of the morbid appearances. Moreover, being very much engaged about that time, in preparing a work for the press, I had not seen the newspapers, and knew nothing of the previous history of the case. I learnt, from Mr. Day, that there had been pleuritis and other inflammation of the thoracic viscera, but the exact morbid appearances presented by the interior of the body I did not know until I heard them at the adjourned inquest on the succeeding Monday. I therefore was not in a position to form an *opinion* on that day, nor did I attempt to do so until I had had the advantage of an evening's thought, and had refreshed my mind by a night's sleep. Whatever I may have imparted to Mr. Day in the way of medical conversation is altogether beside the question; I had not formed an *opinion* for myself and could therefore give none to him. But I did one thing, I wrote the *facts* of the examination on paper, and gave the document to Mr. Day, making a copy thereof for myself; and after Mr. Day had approved the statement therein made, we both signed them. In parting with Mr. Day, I promised that I would put the *facts* into a popular shape, so as to be more suitable for a non-medical jury, and send them to him previously to the inquest, for his further approval and signature. This promise I did not think it necessary to fulfil until the day of the inquest, because the facts were unchanged; I simply made them more precise, and amplified the details. I had another reason for preferring to show the statement to Mr. Day personally, which was, that I had added *opinions* to the Report. And as I conceive that no man can be held responsible for the opinions of another, I did not think it just to expect Mr. Day to affix his signature to opinions which, as he truly says, he saw then for the first time. In pursuing this course, I conceived that I was adopting one dictated by the highest sense of honour. Mr. Day seems to think that I excluded his signature from that report for the purpose of arrogating to myself the honour of what he terms, a "discovery." My true object was, to save him from the responsibility of opinions which *might* not have been, and as I believed *were not*, his own.

There is an impression, which pervades the whole of Mr. Day's letter, that there should have been a consultation and an agreement of opinion between us, against which I most strongly protest. We were independent witnesses, *united for a moment in an inquiry into facts*, but totally separate and distinct, and perfectly free agents as respects conscience and opinion. I look upon it that Mr. Day could have adduced no

more striking proof of my *independence* as a witness at the Hounslow inquiry, than the accusation which he now brings against me, of omitting to agree with him. He seems to regard the poor soldier in the churchyard as our patient, ourselves the consultants, and the coroner and jury as the relatives of the deceased, to whom we were to tell our agreed opinion. This may be very professional in one sense, but not at all consistent with my notion of the serious responsibility of a medical witness at an inquest, where the ultimate decision, the triumph or the defeat of truth, must rest upon his evidence, and be determined, in a great measure, by his judgment and skill.

I have addressed to THE LANCET two communications, which were published Nov. 14th and Dec. 12th. In the first of these, entitled the "Medical History of Frederick John White," I have shown cause for attributing his death to inflammation of the heart, directly induced by flogging. The second paper, entitled "Pathological Effects of Military Flogging on the Muscular System," explains my views relative to the cause and probable effects of the "pulpy softening" of the muscles of the back. In my statement, made at the inquest on July 27th, and written before I had heard the entire of the medical evidence, I considered the pulpy state of the muscles to have had a considerable share in the fatal result, (THE LANCET, August 15th.) The medical evidence pointed out a more obvious cause of death, namely, through the heart, and although I had spoken cautiously of the connexion between the pulpy softening and the inflammation of the pleura, observing simply, "that no surgeon would feel comfortable with regard to the state of his patient if he were aware of such dangerous proximity," I have since declared my deliberate conviction that the "morbid change in the muscles was the cause of the pleuritis of the left side of the chest." Mr. Day must take this as an answer to the remark which follows:—"We agreed that no connexion appeared to exist between the disorganized muscle and the interior of the thorax."

Mr. Day alleges, as an *omission* on my part, that I did not state, that on examining the pleura corresponding with the softened intercostal muscle, I could discover no communication between the pulpy mass and the cavity of the pleura. Mr. Day's words are, "We agreed that no connexion appeared to exist between the disorganized muscle and the interior of the thorax;" which I suppose to mean, not connexion of apposition,—a question I have already settled in my last letter,—but connexion of communication by aperture. This is quite true, and might have been used (had such been needed) as an argument against the "decomposition theory" of Dr. Hall. But Mr. Day settles that question brilliantly. "If I was really *mean* enough," he says, "to attempt a mystification of the truth for any purpose, why (did I) not at once raise the question whether the muscular change was or was not merely the result of natural decomposition—*a subject upon which I had been closely questioned.*" The italics in this sentence are made by me. Mr. Day styles the attempt to attribute the pulpy softening to decomposition, *meanness*. Dr. Hall will have reason to exclaim, when he reads this,—"Et tu O Brute." But I wonder what Mr. Day means by the concluding words? Does he really mean that he was tampered with?

"To the best of my recollection," says Mr. Day, "Mr. Wilson stated it to be his opinion, that had the man lived, the muscles would in time have been restored to their normal state." Mr. Day need not refer to his memory for that statement; he will find words nearly to that effect in the printed report of my evidence, (THE LANCET, Aug. 15th.) But with regard to the "pointing externally" of an abscess, Mr. Day must recollect that that would probably have occurred over the sacrum.

Mr. Day next observes, "I think I may fairly charge Mr. Wilson with having, on this point, made a 'disingenuous attempt' to secure to himself the sole merit of the important discovery he considered had been made." I am not aware that my paper on the pathology of muscle carried with it any assumption of discovery; indeed, I attempted to prove that rupture and consequent softening of muscle had been already observed and described.

Then comes the grand charge of all, which I will leave as it stands, to the blushes of himself and of his friends:—

"I will not be so illiberal as to charge him with 'a mystification of truth;' but must confess, even after the evidence he had given, I was perfectly astonished to hear him give a positive opinion that the man would have been then alive if he had not been flogged,—a statement which was received with loud plaudits by the jury and a portion of the spectators. I have no intention to insinuate that Mr. Wilson did not firmly believe this to be the fact; but cannot help thinking that he had suffered his better judgment to be brought to this conclusion from an ardent desire to make the case in question the means of abolishing the punishment of the lash."

Mr. Day intends this as a specimen of liberality; and were it not that I have TRUTH and a *mens conscia recti* on my side, I might be offended at so abominable an imputation; as it is, I will content myself by relating to him a case instead.

About two months since, an elderly gentleman, whilst crossing the road near St. Paul's churchyard, was struck down by the shaft of a cab. He received little injury, beyond a cut of small extent on the forehead. Immediately after the accident he was attended by an eminent physician and a surgeon, both of whom took their leave of him on the fourth day, saying, that, as he was convalescent, there was no longer any necessity for the continuance of their attendance. At the end of a fortnight, erysipelas took place in the wound of the forehead, and the gentleman died in forty-eight hours.

Can any rational being question that, but for the unhappy fall, that gentleman would have still been alive? This is my answer to Mr. Day's perfect astonishment at hearing me speak what I declare to have been, and to be, the whole truth, and nothing but the truth. And, in conclusion, let me beg of him to cultivate more practically his expressed maxim of having "no intention to insinuate."

Permit me, Sir, to apologize for occupying so much of your space with so unimportant and uninteresting a matter, and at the same time to subscribe myself,

Your obedient servant,

Dec. 1846. ERASMUS WILSON.

## THE FORBES' HERESY.

*To the Editor of* THE LANCET.

SIR,—The spirit of speculation, the haste, and restlessness, which have characterized the popular mind in this railway age, appear to have been transfused into the writings and researches of modern philosophers. The articles of the "leading medical quarterly" indicate this spirit in an extraordinary degree.

There are wanting the calm and patient research, and the cautious inductions, of the older philosophers. Because medicines have been abused, and here and there cases have succeeded well by the unaided efforts of the "vis medicatrix Naturæ," the conclusion is at once rapidly arrived at, that the labours and inductions of several centuries, and that the experience of thousands of honest men, were mere delusions. Sydenham, Harvey, Heberden, Hunter, Jenner, Gregory, Abernethy, and Armstrong, were mere dreamers, and their writings merely so many testimonies of men who were deceivers from being self-deceived; and the true philosophy of healing was unknown, until John Forbes was pleased to draw a deduction from the labours and writings of Mesmer, Hahnemann, and Priessnitz!!!

Those who are faithless regarding the efficacy of medicines may have grounds for their infidelity in their own incapacity to prescribe correctly; but if they should ever have an opportunity of witnessing a case of iritis left to the care of the vis medicatrix Naturæ, and another submitted to the treatment now ordinarily pursued by the practitioners of "legitimate medicine," they will, in the one case, see the dull and discoloured iris become more and more disfigured and misshapen, its edges become bound down by adhesions, its mobility gradually impaired, adhesive lymph diffused, and the function of this member, and of the eye itself, for ever destroyed; while in the other, they will see the vascular and fiery zone which surrounds the organ become more and more pale, the dull iris regain its brilliancy, the anterior chamber occupied by adhesive lymph become more and more clear, the pupil more even and patulous, and sight regained, as the system becomes influenced by the medicines administered. I have selected this structure, because in it we can clearly see the advances of disease, and are enabled to watch the effects of remedies, yet, so long as ague yields to quinine with appropriate adjuncts, convulsions induced by alimentary irritants to proper purgatives,—so long as uterine efforts are induced by ergot of rye, vomiting by ipecacuanha, purgation by aloes, cessation of the heart's action by digitalis, sleep by opium, glandular secretion by calomel,—so long, in short, as we can influence the quality and quantity of the human fluids, and affect the movement and secretions of organs by hygienic and medicinal agents, so long will it be wise to adhere to the orthodox "methodus medendi," uninfluenced by the theories of the speculative, the writings of Pelham, the reveries of Martineau, or the heresy of Forbes.—I am, Sir, your constant reader, J. H.

St. Stephen's Day.

## PARACENTESIS THORACIS IN EMPYEMA.

*To the Editor of* THE LANCET.

SIR,—In reply to a communication contained in your journal of the 5th of this month, respecting certain operations said to have been performed for empyema, under the direction of the late Dr. Thomas Davies, I beg leave to solicit the insertion of the following remarks:—Before coming to the point, I cannot help expressing my surprise at no notice having been taken when the same objection was first put forth, about four years ago, in a medical periodical, with regard to the sixteen operations for empyema mentioned in the "lectures" of the above physician, though a copy of the medical journal in which this objection appeared was sent to the hospital surgeon who is represented as the operator in five of these cases. Some years after the appearance of these cases, a gentleman interested in medical science, and anxious to ascertain the truth of the extraordinary statement regarding such a number of cases of empyema exhibited as having occurred in so short a time,—a number, in fact, unparalleled in the annals of this or any other country, generously came forward, and made an offer of two donations of twenty guineas each to the Infirmary for Asthma, Consumption, and other Diseases of the Lungs, provided the truth of the above statement was satisfactorily proved. Those who felt, or professed to feel, an interest in the welfare of the charity, set about bringing forward some of the cases which had been held out as having been operated on with such triumphant success, and for this purpose every *convenient* effort was made with respect to five of these sixteen cases appropriated to the hospital surgeon, four of which were continuously successful, and only one fatal. An individual officially connected with the Infirmary took on himself to bring forward authentic proofs, as well of the fact of the operations having been performed, as of their truly beneficial effects; but after some period, he stated, as you will see in the extract of his letter to the physician, through whom the donations were offered, that he felt delicate in asking Mr. —— for a reference to his cured cases.

The first two cases of this hospital surgeon were, however, luckily seen by a very respectable practitioner. In one, the trochar did not penetrate the chest, nor, of course, did any matter escape; in fact, the operator became nervous, and would not persist, though encouraged by Dr. Davies to persevere. The second of these two cases terminated fatally. The third case was that of a seafaring man, residing in Heath-street, Commercial-road. In this instance there are strong grounds for believing that there was no empyema. Phthisis was the original disease, which was succeeded by emphysema. He had, indeed, the mark of an instrument having been introduced, but there was no satisfactory account that any matter had been discharged. There was no difference between either side, and he had that indentation above the sternum characteristic of asthma. He never rallied from the day of the operation.

Another case operated on, but one subsequent to those contained in the "Tabular View," has since been discovered; it was that of a man, aged thirty-five. He survived the paracentesis thoracis about a fortnight. He was originally a patient of a surgeon in Brick-lane.

I shall now state four cases, represented as having been operated on at the Lung Infirmary by a different surgeon. The one was a little girl, residing at Bankside, and claimed as one of these fortunate cases of empyema; but which case I have good reason to know, and have authority for saying, was not one of that disease, but of a "tumour upon the liver." An extract from a letter, in corroboration of this assertion, will be annexed. Another of these vaunted cases was that of Timothy Fox. No traces of him, however, could be detected. He was without a habitation; all that can be said of him is, *stat nominis umbra*. Frederick Tilley is the next case given as having perfectly recovered after the operation. He could not be found, having died four years after from alleged peritonæal inflammation. His friends are said to have removed from the neighbourhood of Tabernacle-square, and could not be traced. The fourth case was that of a young man of the name of Beaumond, who, after paracentesis, was removed from the Infirmary in a dying state.

*Extracts from the letters above alluded to, in reference to the operations for empyema.*—One of the two operators to be mentioned says, in a letter, that . . . . "in his endeavours to trace the subjects of the operation for empyema . . . . . under the care of the late Dr. Davies (he) has succeeded in obtaining the address of one, the daughter of N——, Bankside. Timothy Fox, who resided in Mansell-street, was afterwards admitted a patient in the London Hospital, and discharged cured, and cannot now be traced; believes he returned to Ireland. Frederick Tilley resided near Tabernacle-square; perfectly recovered from the operation, but died about four years after, from peritonæal inflammation . . . . his friends removed from the neighbourhood. I have requested Mr. N—— to allow his daughter to call on you, and have given your address for that purpose. Any further information . . . . . I shall be most happy to supply, in hope that the Infirmary may benefit by the munificent offer of your friend."

Now, Sir, here we have the child at Bankside, claimed by the operator as one of those affected with empyema, and cured; whilst in Mr. Henry Wood's letter, presently to be subjoined, it would appear that there was the grossest tissue of prevarication in all this matter, as the child is there stated to have had, not empyema, but a tumour upon the liver!! Another specimen of the trickery practised in this case was, that when the medical man, through whom the offer of the donation was made, strove to find out the mark of the trochar left after the operation, no such mark could be found; the individual connected with the pretended operation referred to a pustular depression seen on the body of the girl as the mark left by the instrument; but when confounded by a similar mark situated within a few inches of the former being pointed out to him, he had to say, for the purpose of evading the difficulty, that he had performed the operation a second time!—to such straits was he driven, when detected in his false claim to operative success. At length, when he failed even here, he relinquished the side of the body on which he at first said he had operated, and afterwards stated that it was on the opposite side!!

*Extract from Mr. Henry Wood's letter.*—". . . I succeeded in finding out the place you mentioned to me, at Bankside. I saw the mother of the girl, who stated to me that her daughter was about two years old when she . . . . was affected with brain fever and inflammation of the lungs; that, after consulting many of the faculty, she was persuaded to go to the Infirmary, and was informed by Dr. Davies, that a tumour had formed upon the liver, which she gave her consent to have opened . . . . that the discharge, which was of the colour of green paint, was nearly eight ounces. H. W."

Here is a direct, overwhelming proof of the prevarication in the case of the girl N——. The operator claims, as a case of empyema, that which here turns out to be—what? a tumour on the liver! He is blind to everything else but his dear favourite, empyema: any money for an empyema case.

On the old principle, *ab uno disce omnes*, I feel confident that I have gone far enough to satisfy any unprejudiced person how little reliance can be placed on the veraciousness of those who still defend the claim of twelve successful cases of empyema out of sixteen.

*Extract of Mr. E——'s letter in reference to the verification of the successful cases of empyema by the operation.*—" . . . . Respecting the cases of empyema, although I have seen Mr. —— several times, I have been unwilling to moot the question, as I feel it would imply a doubt of the truth of his statement."

This carries with it a something suspicious;—a handsome donation is offered to the Infirmary, on the condition that these claimed cases of operation for empyema be satisfactorily proved. What could have been easier than for the operator to afford the proofs; it would even give him an opportunity of showing off his own surgical dexterity. Whatever could have prevented him or any other surgeon from availing himself of such an opportunity; certain I am it was not modesty.

I have now, Sir, detailed some of the cases on which it has been attempted to support the claim for such extraordinary success in the operation for empyema. I have shown, by reference to the written testimony of others, and by the contradictions involved in the whole affair, how little support can be derived to this claim from these cases; and I am confident that every impartial person who will peruse the documents here presented, will consider that the writer of the notes on Laennec had ample grounds for the scepticism expressed by him regarding the accuracy of the brilliant results set forth in Dr. Davies' "Tabular View." As for "the degree of credibility to be attached to these notes to Laennec," the gentleman who signs himself Herbert Davies may rest perfectly easy on that score, as the writer of them is extremely well satisfied, nay, in a manner delighted, with the reception which they have met from the medical profession, at home and abroad.

One word more on the abstract question of the probability of so many cases of empyema uncombined with phthisis, occurring in such unbroken succession, and within so short a space of time. Laennec's authority is decidedly against it. (See

page 444 of the new translation of Laennec.) Had Dr. T. Davies' life been prolonged by twenty years beyond what it was, he could not have met so many cases of empyema uncombined with phthisis; and had he said he did, no experienced pathologist would have credited the statement.

I am, Sir, your obedient servant,

Regent-street, Dec. 22, 1846. T. HERBERT, M.D.

## NOTE FROM DR. JOHN BOND.

*To the Editor of* THE LANCET.

SIR,—Permit me, through the medium of your valuable periodical, to state, that I have not nor ever had in the slightest degree any connexion, directly or indirectly, or in any shape whatever, with a fellow usurping and advertising in the name of "Dr. Bond, 62, Newman-street," (and formerly as "Dr. John Bond,") for the sale of foreign diplomas. As having omitted, long ago, to forewarn the professional and other public of such daring effrontery, I now do so, as thinking it prudent no longer to neglect the old adage—"Better late than never," so that every well-principled and conscientious man may be put upon his guard against coming in contact with such an arrant impostor. Should, however, such party still continue to repeat such advertisement in the same name, his own, coupled with circumstances which I have somewhat recently ascertained, shall then at once appear; and I have the honour to be, Sir, your very obedient servant.

JOHN BOND, M.D., M.R.C.S.L. & E., L.A.C., &c.

George-street, Portman-square, Dec. 1846.

## THE APOTHECARIES' COMPANY, *VERSUS* IRISH AND SCOTCH QUALIFIED PRACTITIONERS, AND THE REGISTRATION BILL.

*To the Editor of* THE LANCET.

SIR,—As a constant reader of THE LANCET, I feel grateful to you for the great amount of valuable information obtained from every number; at the same time I generally fully concur in the views taken by its editor on public matters, and never more cordially on any subject than in regard to the necessity of a REGISTRATION BILL for the whole of the profession, and your caustic exposure of the miserable objects of the Apothecaries' Company in opposing such a measure.

A prosecution, by that company of tradesmen, of a fully qualified Irish or Scotch practitioner, would, I feel convinced, greatly forward the Registration Bill, and I propose to furnish the Apothecaries with full evidence of one of these gentlemen being engaged in general practice. I think I can find an M.D., at the same time a member of the College of Surgeons, who would offer himself as the victim, on the understanding that a subscription would be raised to pay expenses. If these views are taken up, my ten pounds are ready to begin with.—Yours, &c. R. O.

December, 1846.

## PLACENTA PRÆVIA.

*To the Editor of* THE LANCET.

SIR,—I beg to submit to your disposal the following case, which I consider both interesting and important, as it tends in some degree to elucidate the correct treatment of placenta prævia, which has lately been the subject of much controversy among obstetricians. On Monday, Dec. 7th, I was requested to see Mrs. T——, aged twenty-nine, the mother of three children, and who stated that she was at the full period of utero-gestation. I found that she complained of slight pains in the back, accompanied by rather profuse discharges of blood, which she attributed to some unusual bodily exertion, to which she had been subjected on the previous day. I therefore enjoined rest in the recumbent position, and prescribed small doses of the tincture of opium with diluted sulphuric acid. On the following day, I ascertained that there had been but slight returns of the hæmorrhage and very little pain. She continued in this state for four days subsequently to my first visit, when I was hastily summoned on the accession of the more active pains of parturition. I found her in rather an exhausted state; there was profuse hæmorrhage, the blood trickling from the bedstead, and the bleeding increased considerably during each succeeding pain. A vaginal examination demonstrated a complete presentation of the placenta, with the os uteri dilated to about the size of a crown piece, and thin and yielding. As the powers of life were evidently on the decline, from the hæmorrhage which had occurred, it was evident that no further time was to be lost. I accordingly administered half a drachm of finely powdered ergot in some brandy-and-water, and proceeded to the extraction of the placenta before the child. After removing the placenta from the vagina, the hæmorrhage almost entirely ceased, and the parturient pains became energetic, the child was expelled, under head presentation, entirely by the natural efforts. The infant was apparently still-born, but was, after a time, resuscitated by the usual expedients. The patient (six days after delivery) is recovering without any unfavourable symptom, with the exception of debility, the natural consequence of the unusual loss of blood. I have sent you the above case as another example in favour of the "new mode" of treating placenta prævia, for which I hope no apology is necessary from—Sir, your obedient servant,

Cannon-street-road, Dec. 1846. WILLIAM G. CORY.

## KING'S COLLEGE.

*To the Editor of* THE LANCET.

SIR,—Do you consider a lecturer justified in compelling students to purchase his works by such means as the following? On the day or two preceding examinations, Dr. Todd, the Professor of Physiology at King's College, posts up a notice, that he will examine on such a chapter in his own book, (Todd and Bowman's Physiology.) Of course, in order thoroughly to prepare for the examination, it is necessary to procure this publication; and what makes the matter far worse is, that there appears little probability of this book being completed during the period of attendance of Dr. Todd's present pupils upon lectures. Two years ago, Dr. Todd stated to his class, that the book in question would probably be published in a month or two. Up to the present time, only the first half is completed; so that those students who have, by this misrepresentation, been led to buy Part I., are, when the course of lectures is half over, compelled (if they wish to make themselves acquainted with this important subject) to purchase some other work on physiology.—Your obedient servant,

King's College, London, Dec. 1846. ONE OF DR. TODD'S PUPILS.

The student complaining has enclosed his name in confidence.

# Medical News.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted Members on Tuesday, December 29th, 1846:—E. Archer; W. L. Dudley; R. B. Roscow; J. White; W. Morgan; F. W. Richardson.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, December 24th, 1846:—Joshua Lever, Bolton-le-Moors; Henry Turner Lane Rooke, Barnstaple; Richard Budd Painter, Broadway, Westminster; Robert Allen, Cartmel, Lancashire; Francis Sibery, Long Clawson; James Edmund Clutterbuck, Newark Park, Gloucestershire.

QUACKERY CON AMORE.—When asked by the judge of the Consistorial Court, "Where is your licence for practising, as all physicians and chirurgeons ought to have from the ordinary of the diocese?" "My answer," he says, "was, that I knew no reason why I had to take a licence, since I took no reward from any man." And in another part of his memoirs he says, "Thus I appeal to the world whether I have *taken rewards*, deluded or deceived any man."—*Life of Greatrex.*

HONOURABLE TESTIMONIAL.—At a recent meeting of the trustees of the Bristol Infirmary, Mr. Hore was elected house-surgeon in place of Mr. C. Greig, resigned. A vote of thanks, embodying the high opinion entertained of the humane and able services of Mr. Greig, expressing the warmest admiration of his character, and the most sincere desire for his success in private practice, was carried by acclamation, and a deputation, consisting of the mayor of Bristol and the vice-presidents, were appointed to convey the same to Mr. Greig.

OBITUARY.—Died, Dec. 8th, aged seventy-one, W. Allman, M.D., late professor of botany in the University of Dublin.

WEST HERTS INFIRMARY.—At a special meeting of the governors, held on Thursday, Dec. 10, the Hon. G. D. Ryder, M.P., president, in the chair, a handsome service of plate for tea and coffee, paid for by private subscription, was presented to Dr. Pidcock, M.D., who has recently resigned the office of honorary physician, as a testimonial of esteem and gratitude for his invaluable services to the institution during eighteen years.

SANATORY REFORM.—Though the ample possession of air and water is the fundamental requisite of a sound sanatory system, there is one prevalent practice to which we must allude, of a most reprehensible character, beyond the control of Government interference; it is the practice of administering opiates to children by their mothers. Among the poisons the most popular and pernicious are "Godfrey's Cordial," and "Dalby's Carminative," which frequently prove fatal to young infants in a few hours. A respectable druggist in Manchester assured Dr. Playfair, that he sold, in retail alone, above five gallons per week of "Quietness," and a half gallon of "Godfrey;" the former preparation being so strong as to contain 100 drops of laudanum in an ounce: a single teaspoonful is the prescribed dose; so that, allowing one ounce weekly to each family, that one druggist supplies 700 families every week. The evidence under this head is truly frightful, nor do we hesitate to state, that quacks make fortunes by infanticide, and the slow murder of adults. To the disgrace of the Government, a revenue is collected from the stamps on patent medicines. Now that the evils of these vile potions are demonstrated, those stamps should be withheld, as they give a sanction which imposes on ignorance and credulity; and we would go further, and prohibit the advertisements of these fell destroyers of our race appearing in any newspaper or periodical. This would be no invasion of liberty, but a protection against secret, but certain assassination. No system of sanatory reform can be complete, unless the whole herd of charlatans are exterminated.—*The Topic.*

CONTROLMENT OF SYPHILIS.—I have to report that the Infirmary has met all legitimate demands during the past year—no proper case having been refused admission, except those persons whose maladies have resulted from their own irregularities and dissipation. This Institution has long experienced undue pressure from such cases, in consequence of the habit at some other County Infirmaries, to refuse altogether to receive them: the consequence has been, that wretched females, in the most miserable condition, travel considerable distances and locate themselves for some time in this neighbourhood, for the purpose of obtaining admission into the Infirmary; delay in receiving them causes an extension of disease, while the unfortunate beings continue to present an example of squalid destitution, utterly disgraceful to permit in any country professing a claim to the character of civilization. If they cannot be soon received, they commit some petty offence against the law, are sent to prison, and there obtain medical relief. On a former occasion, I directed attention to these circumstances: I now do so again; for I find that while over seventy persons of both sexes, suffering from such diseases as those to which I allude, were admitted during the year, very many were excluded to prevent an undue interference with the relief to which more moral characters appear to have a better claim.—*Dr. Jacob. Report of the Maryborough Infirmary.*

MEDICAL CARD.—F. Bratenahl, M.D., surgeon, 86, Bedford-street, Toxteth-park.—*Liverpool Paper.*

HOSPITAL ELECTION.—Mr. Benjamin Philips has been elected surgeon, and Mr. Barnard Holt, assistant-surgeon to the Westminster Hospital.

MORTALITY OF THE METROPOLIS.—The deaths within the bills of mortality registered during the week ending Dec. 19th amounted to 1262, or 262 above the weekly average of the five past autumns. The increase over the average was very considerable in deaths from diseases of the thoracic viscera and nervous system, also from old age, and violence, or privation; but those from epidemic diseases were below the average. 137 deaths were recorded as from consumption, 147 from bronchitis, 144 from pneumonia, 52 from heart-disease, 19 from scarlatina, 59 from hooping-cough, 34 from typhus, 34 from atrophy and debility, 32 from apoplexy, and 76 from natural decay. Mean height of barometer for the week, 29.6 inches; of the thermometer, at lowest, 32.6. Electricity positive, and of weak or moderate tension, on every day except the first. Births during the week, 1311—viz., 691 males, and 620 females.

## CORRESPONDENTS.

*A Pupil of St. George's Hospital*, in reply to Dr. Wilson, must not do so anonymously. Any letter from him on the subject must be signed with his real name and address.

Will *C. C.* send a copy of the newspaper, or a report of the case, to which he refers.

The *Fifeshire Journal* of Dec. 17th, 1846, has been received.

*Juvenis* should pursue his subject; his explanation is very probable.

*J. Jones.*—"Braithwaite's Retrospect" will be published in January.

*A Chemist and Druggist* will find the term sufficiently well described in the Apothecaries' Act of 1815, (the 55th George III., cap. 194,) a copy of which he should procure through his bookseller. The difference between the apothecary and the physician consists in the prescribing, dispensing, and selling, by the former; the latter only prescribes.

*An Old Soldier.*—We should answer yes to the first question, and no to the second.

*A New Subscriber*, (Glasgow.)—We are obliged for the suggestions, and have no doubt our correspondent will find sufficient to interest him, though we may not attend to the letter of his advice.

*A Student*, (Boston.)—Mr. Churchill's "Manual of Chemistry," and Dr. Lindley's "Botany."

*A Scotch M.D.*—We have no doubt such an indenture would be held valid. We should consider it probable that, all other certificates being forthcoming, the Hall would waive the apprenticeship in such a case.

*Anti-quack* writes to say that the quack passing under the name of Lamb was imprisoned several days at Reading, on a charge of manslaughter. Of course, he instantly decamped from the town, taking with him the sums he had extracted from gulls who paid him for their cures "in advance."

*Anti-quackery* writes to complain that an individual at Bangor, North Wales, is in the habit "of signing his name, Thomas Humphreys, M.B., London, he being neither an M.B. of the University of London, nor a graduate of any other university." Anti-quackery inquires "whether the University of London, upon receiving a statement of these facts, would take the necessary steps to acquaint the public and the medical profession that the person named is not an M.B. of their university." Our correspondent justly puts this and similar cases as arguments in favour of medical registration.

*Detector's* second letter shall appear shortly. He will find a note addressed to him at Mr. Churchill's, Princes-street.

*T. B.*—We can only state generally, that the French schools offer great facilities for the studies mentioned, and at a small expense; but we should think our correspondent's objects might be attained in London.

*Mr. W. Smith* (of Belper) is in a state of intense excitement at our insertion of a handbill issued by him respecting his change of residence. Either such proceedings are right or wrong in a professional man. If right in the streets of Belper, why, then it cannot be wrong in the pages of THE LANCET. And whence this furious outcry? Mr. Smith gives as his explanation, that his former landlord had refused to direct patients to his present residence, and attempted otherwise to injure him. This may be a mitigation; but the practice is bad, and we shall endeavour to prevent it by the insertion of productions of the kind, whether they bear the names of friends or foes.

*A Constant Reader.*—An M.R.C.S. cannot supply or charge for medicine in any way without rendering himself liable. For the probability of any active interference of the Society of Apothecaries with persons infringing their Act, whether qualified or unqualified, he may refer to an article in another page. Of one thing we are sure, a few more prosecutions of qualified men would finish the Society both for good and evil.

*Amator Justiciæ.*—We will inquire about the first paper; the second shall be inserted in an early number.

*Dr. Cory* will see that his paper has not been mislaid or rejected.

*M.R.C.S. and Subscriber.*—We had already determined that the advertisement of Dr. Dawson's book or pamphlet should not be again admitted among the advertisements of THE LANCET.

As *Mr. Lodge* has put the case, there can be no doubt of the extreme illiberality of the practitioner mentioned. Mr. Lodge should have confronted him at once, or have called on him for an explanation. There is, of course, no remedy but publicity.

*Dr. Carson.*—We shall be happy to insert the paper which has been forwarded.

*Dr. Robert Barnes.*—The suggestion shall be adopted. Could Dr. Barnes supply the sketch referred to?

*Medicus*, (Liverpool.)—There was nothing in the letter in THE LANCET of Dec. 19, signed "Anti-netta-phone," which could fairly be construed into a sneer at the religious act of returning thanks in a place of worship for recovery from sickness. It was maintained to be in bad taste that the name of the particular hospital should be publicly paraded; almost as much so as to parade the name of a particular medical man. We suppose, with our correspondent, that it was the act of the governors and not of the medical officers.

*Anti-Humbug* omitted to send the paragraph referred to in his letter. We shall be glad of it, as we believe we shall have some communication to make in our next respecting the quack in question.

*A Friend to even-handed justice* is right, but we have not coupled the obscene quacks with any religious sect from motives of bigotry. We ask our correspondent's attention to our future articles upon the subject.

*Dr. Skae* shall receive a private note.

The note of *Mr. Robinson* has been received.

Communications have been received from Mr. Smith, (Belper;) Dr. Wilmot, (Tunbridge Wells;) A New Subscriber; A Scotch M.D.; An Old Soldier; Detector; T. B.; A Constant Reader; Amator Justiciæ; Dr. W. Cory; Mr. Frederick Britain; Dr. Jacob; Mr. Philpott Brookes; Mr. Lodge, (Peckham;) Dr. Carson; Mr. F. C. Cooper; Medicus, (Liverpool;) Anti-Humbug, (Cheltenham;) A Lover of even-handed justice; Mr. Lichfield; Mr. Hunt, (Herne Bay;) Mr. Davies, (Haytesbury;) Mr. J. Jones; Dr. Skae, &c.

TO GENERAL PRACTITIONERS.

TO BE DISPOSED OF, in a most desirable part of the Country, a long-established and lucrative PRACTICE, to which ample introduction will be given, in the shape of nominal partnership, if preferred. There is an excellent Residence, with large Garden and most convenient Premises, held at low rental. No one need apply who cannot command £800. For further particulars, inquire, personally or by letter, of L. V., care of Mr. Orridge, Chemist and Medical Transfer Agent, 30, Bucklersbury.

TO GENERAL PRACTITIONERS.

TO BE DISPOSED OF, under particularly favourable circumstances, an excellent TOWN PRACTICE of high respectability, centrally situate, west of Temple Bar. The receipts exceed £600 per annum. The residence is very convenient, in complete repair, and held on lease at a low rental. An efficient introduction will be afforded by nominal partnership or otherwise. Apply personally, or by letter, to W. A. W., care of Mr. Orridge, Chemist and Medical Transfer Agent, 30, Bucklersbury.

PRACTICE WITH RETAIL.

A PARTICULARLY favourable opportunity now offers for forming PRACTICE THROUGH RETAIL, in one of the leading thoroughfares near Hyde Park. An excellent compact residence, in thorough repair, is held on lease, at a low rental, in an admirable situation for commanding a Medical Retail. Coming in about £300. For particulars, apply to Mr. Orridge, Chemist, Medical Agent, and Licensed Valuer, 30, Bucklersbury, between eleven and four.

A GENTLEMAN, aged Twenty-seven, M.R.C.S., wishes to engage himself with a Medical Practitioner or Chemist. Would prefer boarding out of the house.—Address A.B., Clarendon Library, Seymour Street, Euston Square.

TO SURGEONS, &c.

TO BE DISPOSED OF, a very respectable PRACTICE and RETAIL, situate near Russell Square. A satisfactory investigation will be granted. Sum required about £450. The shop and premises in complete repair, held on lease at a moderate rent.—Apply to Mr. N. Jacobson, 22, Queen Street, Cheapside, from twelve to four o'clock.

FOR IMMEDIATE DISPOSAL, a respectable MEDICAL PRACTICE, in a large Midland Town, established twenty years. As the practice is a bonâ fide affair, the present possessor retiring from want of health, no one need apply who cannot command at least £1000.—For particulars, address, if by letter, A.B., No. 5, Messrs. Langton, Brothers, and Scott, Upper Thames Street, London.

TO SURGEONS AND APOTHECARIES.

TO BE DISPOSED OF immediately, in the Country, a PRACTICE of about £300 per annum.—Application to be made by letter, post-paid, directed N.B., Corbyn and Co., 300, Holborn.

MEDICAL PRACTICE.

TO BE DISPOSED OF, an ESTABLISHED GENERAL PRACTICE, in a midland, manufacturing, and mining district, presenting unusual advantages. To prevent trouble, no one need apply who cannot immediately command from £400 to £500.—Particulars may be obtained by enclosing a line to Dr. William Cooke, 39, Trinity-square, Tower.

PARTNERSHIP.

A GENTLEMAN, holding a diploma from the Royal College of Surgeons, and a Graduate of the University at Edinburgh, who has practised on his own account for the last thirteen years, and can produce the most satisfactory testimonials, will be happy to treat with any elderly extensive practitioner in a large town, who, from increase of business or infirmity, may be anxious to assume a PARTNER, and ultimately retire in his favour. No one need apply whose character will not stand the strictest scrutiny.—Address, post-paid, to the care of H. 18, Peter's-hill, City.

TO PHYSICIANS AND SURGEONS.

A CHEMIST in the West-end wishes to enter into an arrangement with a physician to DISPENSE HIS PRESCRIPTIONS, on advantageous terms.—Address by letter, pre-paid, (under cover to J.B.,) are of Mr. Owen, 314, Oxford-street.

MEDICAL AND SURGICAL PRACTICE

FOR IMMEDIATE DISPOSAL. The above, established nearly sixty years, situated in a small market town in Bucks, and possessing perspective advantages unusually promising, is to be parted with on favourable terms to any one who could take immediate possession.—For particulars, apply (prepaid) to Messrs. B. Yates and Co., Budge-row, London, or J. S. Gent, Esq., Stoney Stratford, Bucks.

FOR DISPOSAL, a highly genteel PRIVATE PRACTICE, well established, near Portman-square and the Regent's Park. This is particularly suitable for a Gentleman of small independence, who may be desirous of practising in a first-rate locality. Every facility of introduction will be given, and the terms moderate.—Apply to Mr. Underwood, who has also for sale a PRACTICE, with appointments, in Sussex; and another in a delightful part of the Isle of Wight.—Office, 1, James-street, Adelphi. Several Vacancies for Assistants.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

NOTICE IS HEREBY GIVEN, that in consequence of the bankruptcy of Mr. Donaldson, the Council of the National Institute have been obliged to quit possession of the premises lately occupied by them in Regent-street, and that the business of the Institute will be carried on at the Hanover Square Rooms, until further notice.

By Order of the Council,
GEORGE ROSS, Secretary.

Hanover Square Rooms,
4, Hanover Square, Dec. 29th, 1846.

THE INHALER, FOR SULPHURIC ETHER VAPOUR, most perfectly constructed, in accordance with the experience of Dr. Boott and Mr. Robinson, will be ready for sale at the beginning of next week, by Mr. HOOPER, Operative Chemist.

7, Pall-mall East, (opposite the College of Physicians,)
December 31st, 1846.

PROFESSIONAL ASSURANCE COMPANY.—The general principles upon which Life Assurances have been hitherto founded are too well known to need any exemplification. They secure to the survivors of the assured certain benefits on account of premiums paid; but whatever may be the necessities of the assured themselves, no relief is afforded to them. This object it is the peculiar design of the Professional Assurance Company to effect, and to do so without diminishing in the slightest degree the value of the policy as regards the survivors. Thus, if a profesional man, whilst straining every nerve to secure a provision for his family after his own death, should from misfortune, disease, or any other cause, find himself in straitened or distressed circumstances, unable, perhaps, to command the common comforts of life, he would be in a situation to appeal to the fund of this Society, (set apart for this express purpose,) and to receive from it relief, knowing at the same time that whenever he should die, he would have made no inroad upon the provision for those whom he had left behind.

From a consideration of the above deficiency in all ordinary life assurance companies, it has been determined to establish the Professional Assurance Company, connecting the Clerical, Legal, Military, Naval, and Medical Professions, to the members of which, (being assured in this Company,) as well as to their widows and orphans, such peculiar benefits are offered.

The capital of this Company will be one quarter of a million, divided into shares of £50 each, upon which a deposit of £1 only will be payable, and beyond which, by reason of the strictest economy of management, and the large anticipated profits, it is confidently expected no further call will be necessary.

A prospectus, with full details, will shortly be issued, and in the meantime applications for shares, not already appropriated, may be made to Edward M. Elderton, Esq., 3, Lothbury, the Solicitor of the Company, and to William Heseltine, Esq., Shorter's-court, Throgmorton-street.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Professional Assurance Company.

Gentlemen,—I request that you will allot me shares of £50 each in the above Company, and in consideration of your so doing, I hereby undertake to accept the same, or any smaller number that may be allotted to me, and to pay the deposit of £1 per share thereon upon complete registration of the Company, and to execute the deed of Settlement when required.

Name ——
Profession or Calling ——
Address ——
Date ——
Reference ——

In 8vo, cloth, price 6s.,

A PRACTICAL TREATISE ON INFLAMMATION, ULCERATION, AND INDURATION OF THE NECK OF THE UTERUS; with Remarks on Leucorrhœa and Prolapsus Uteri as symptoms of this form of Disease. By HENRY BENNET, M.D., Physician-Accoucheur to the Western Dispensary, formerly House Physician to the Hospitals Saint Louis, La Pitié, and La Salpétrière, Paris, &c.

"Dr. Henry Bennet's work has, we think, very ably supplied a deficiency in this part of medicine."—MEDICO-CHIRURGICAL REVIEW.

London: John Churchill, Princes-street, Soho.

This day is published, price 2s. 6d.,

THE PHRENOLOGICAL JOURNAL. No. XC. Forming the commencement of Vol. XX.

CONTENTS.—The Right and Duty of Government to Educate the People considered. By George Combe—Dr. Marshall Hall's Mental Philosophy—Additional Contributions to the Mathematics of Phrenology. By James Straton—Dr. Brigham on Mental Exercise as a Cure of Insanity—Mr. Hytche on Musical Perception.

Notices of Books:—Histories of Philosophy, by Lewes and Morell; Dr. Skae's Article on Phrenology in the *British Quarterly Review*; The *German Phrenological Journal*, No. IX.—Intelligence.

Maclachlan, Stewart, & Co., Edinburgh; Simpkin, Marshall, & Co., London.

On the 1st of January, 1847, was published, price 4s., No. XIX. of

THE BRITISH JOURNAL OF HOMŒOPATHY. Edited by Drs. DRYSDALE, RUSSELL, and DUDGEON.

CONTENTS.—Retrospect of the Homœopathic Controversy in England in 1846, with Reply to Dr. Balfour's Report on the Homœopathic Hospital of Vienna. By the Editors—Homœopathy *via* "Young Physic." By Dr. Russell—Homœopathic Cure and Prevention of an Epizootic of Malignant Pustule—Cases by Dr. Guinness—On Inflammation of the Cæcum and Apoplexy. By Dr. Black—On Apoplexy. By Dr. Ozanne—On Spinal Curvature. By Mr. Engall, &c. &c.

London: J. Leath, St. Paul's Churchyard.

ROBINSON ON THE TEETH.

Second Edition, now ready, containing 139 Engravings, price 10s.,

THE SURGICAL, MECHANICAL, and MEDICAL TREATMENT of the TEETH, including a *complete* Treatise on Dental Mechanism. By JAMES ROBINSON, Surgeon-Dentist to the Metropolitan Hospital, &c. &c.

Webster, 60, Piccadilly.

"Besides being a complete manual of dental surgery, it contains much valuable information upon several points which the medical student, and even the practitioner, is often too superficially informed upon."—DUBLIN MEDICAL PRESS.

MR. POWER, and Dr. J. A. POWER, will RE-COMMENCE their COURSES of LECTURES and EXAMINATIONS, adapted to Gentlemen preparing for the Colleges of Physicians and Surgeons, Apothecaries' Hall, London University, and other Medical Boards, on MONDAY, January 11th, 1847. Inquire at the Lecture Room, Exeter Hall, Strand, or at 40, Nelson's-square, Blackfriars, or 3, Highgate Rise.

## HOOPER'S PREPARATIONS.

EXTRACT (Inspissated Juice) OF TARAXACUM, Dose 1 to 2 drachms.

LIQUOR, or FLUID EXTRACT OF DITTO, prepared without head, and not impaired by climate.

LIQUOR, or FLUID EXT. OF SARSP, dose, a dessert spoonful.

INSPISSATED OX-GALL.

PURE COD-LIVER OIL.

SULPHATE OF MANGANESE.

OXIDE OF SILVER.

PURE TANNIN and GALLIC ACID.

MATICO, the preparations of.

CITRATE (Ammonio Citrate) of IRON.

CITRATE OF QUININE AND IRON.

SYRUP OF DITTO, dose, a teaspoonful.

IODIDE OF IRON.

SYRUP OF DITTO, dose, a teaspoonful.

ALKALOIDS.

**HOOPER, Operative Chemist,**

7, PALL MALL EAST, (Opposite the College of Physicians,)

IMPORTER of GERMAN and other MINERAL WATERS.

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RESIDENT APOTHECARY TO THE NORWICH DISPENSARY.—This office being now vacant, Gentlemen, Licentiates of the Apothecaries' Company in London, desirous of becoming Candidates, are required to send their testimonials to Henry Browne, Esq., Treasurer, Norwich. Salary, £100 per annum, with apartments at the Dispensary House. Candidates must not be less than thirty nor more than forty-five years of age.

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INSTITUTE OF MEDICINE AND ARTS.—This Institution is founded to prepare Candidates for Diplomas in Medicine and Arts, by Practical Demonstrations of the Subjects required by the Court of Examiners.

MEDICINE.—JOHN C. COOKE, M.D., F.L.S., assisted in Surgery and Surgical Anatomy by a Fellow of the Royal College of Surgeons.

GENERAL SCIENCE AND ARTS.—RICHARD D. HOBLYN, A.M., Oxon, Author of "Dictionary of Medical Terms."

INTRODUCTORY LECTURE by Dr. COOKE at the Institute, 1, White Friars' street, Fleet-street, on January 4, 1847, at Seven P.M.

For Prospectuses, &c., apply at the Institute, or to Dr. Cooke, 4, Caroline-street, Bedford-square.

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THE SOCIETY OF APOTHECARIES invite the attention of the Medical Profession, and the Public, to the fact that the law admits of a more summary mode of proceeding against persons practising as Apothecaries without legal qualification than has been hitherto supposed, the Society having received the opinion of the Law Officers of the Crown that such persons may be indicted criminally for a misdemeanor, notwithstanding the pecuniary penalty imposed upon them by the Apothecaries' Act. And the Society desire, under these circumstances, to CAUTION all persons who may be now practising as Apothecaries, without having given such evidence of their qualification as the law has required, that by continuing such practice, they will expose themselves to the risk of a criminal prosecution, at the instance either of the Society of Apothecaries, or of any private individual who may be disposed to put the law in force.

By Order of the Master and Wardens,
ROBERT B. UPTON, Clerk.

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# CLINICAL LECTURE ON DYSENTERY,

DELIVERED AT

## THE LIVERPOOL NORTHERN HOSPITAL,

NOVEMBER, 1846.

BY JAMES TURNBULL, M.D.

THE unusually high temperature of the late summer and autumn rendered affections of the mucous membrane of the intestinal canal very prevalent in Liverpool. The Registrar-general's report for the quarter ending September 30th shows, also, that cholera, diarrhœa, and dysentery, have been epidemic in most other parts of the kingdom, and have increased the mortality more than 15,000, an excess of deaths over the corresponding period of last year which has fallen chiefly upon the large towns, and is considered in the report to have arisen from "the concentration of unhealthy emanations from narrow streets, without fresh air, water, or sewers."

In this hospital, we have frequent opportunities of seeing cases of chronic dysentery, as many sailors who have just come from warm climates are admitted here. During the six months ending November 1st, eighty-four cases of cholera, diarrhœa, and dysentery, have been admitted. The cases, however, of the last disease have been of a different description from those which we usually meet with; some of them have been very acute, and in a few instances we have had occasion to examine the pathology of the disease.

During the summer, and till towards the middle of August, bowel complaint assumed generally the form of diarrhœa, and was easily subdued by ordinary means, though in many cases it showed a great tendency to relapse. Several who had been admitted with other diseases were repeatedly attacked, and in the early part of August many of the surgical as well as medical patients were affected with diarrhœa. In the majority of cases, there was some febrile disturbance, the tongue was often much furred, and there was thirst, with some heat of skin —symptoms, which seemed to arise from irritation, caused by accumulation of the biliary and intestinal secretions. In general, aperients were frequently required, and I was in the habit of giving half an ounce of castor oil, with ten or fifteen minims of the tincture of opium. When, however, the motions were frequent, with much griping pain, and when the bowels seemed to have been well emptied previously, I gave immediately one pill, containing three or four grains of calomel, with one of opium; or, at intervals of four hours, two or three pills, each containing two grains of the former, with half a grain or a grain of the latter. Given in this way, calomel and opium never failed to relieve the pain and check the diarrhœa; after which, castor oil and laudanum were taken to evacuate the biliary secretion excited by the calomel, and to unload the intestinal canal of any acrid secretions that might still be retained. In slighter cases, four or five grains of mercury with chalk, and the same of Dover's powder, were used instead of the calomel and opium, and the same combination answered well in some cases where the disease continued after the more violent symptoms had been subdued by calomel with opium, and aperients. Chalk mixture with laudanum, aromatic confection, and tincture of kino, or catechu, were found useful in a few of the more protracted cases, and when relapses occurred. Towards the beginning of August, and even before this, patients occasionally presented themselves with the stools mixed with blood; and during September and October, we had many severe cases of dysentery. In a few instances, we have seen the disease prove fatal, but only in cases where the patients were brought to the hospital in a very advanced stage of the disease.

I shall now direct your attention to five cases of dysentery which you have lately seen in the hospital. One is a woman of the name of Clifford, who was discharged on the 29th of October, having completely recovered from a very severe attack of the disease. Another woman, named Stones, has been dismissed convalescent. The third is a chronic case of dysentery in a sailor of the name of Jones, who was attacked with it at Calcutta, and leaves the hospital to-day, having perfectly recovered. The other two, Connor and Brown, were brought to the hospital in a very exhausted condition, and the disease proved fatal, from extensive ulceration, and disorganization of the large intestine.

E. Clifford, a middle-aged, healthy-looking woman, was admitted on the 21st of September, having had bowel complaint for more than a fortnight. She had continued, however, to go about till the previous day, when she became much worse. On admission, there was much prostration of strength, the pulse was 100, small and weak, and there was febrile disturbance, hot skin, thirst, and white tongue, with some redness at the edges; the stools were fæculent, and mixed with blood. On the 22nd, she had four grains of calomel, with one of opium, followed by half an ounce of castor oil. She had also an enema with starch, and half a drachm of laudanum, which was ordered to be continued twice a day. The following day she did not seem to have improved, and the skin was very dry; ten grains of Dover's powder were given her night and morning, and six grains of acetate of lead were added to the starch-and-laudanum enemata, with the view, not so much of restraining secretion, as of increasing the anodyne power of the opium. On the 26th, the stools continued very frequent, with much straining and griping pain in the bowels, and slight tenderness on pressure. She had vomited and been very sick after the Dover's powder, and a pill was substituted, containing one grain of opium, with two grains of calomel, to be taken three times a day. On the 27th, the tongue was still dry, with some redness at the edges; she felt better, however, and the gums were beginning to be affected. The enemata were continued, and the calomel and opium stopped after she had taken one pill more. On the 28th she was improving, the gums were sore; the motions were abundant, fæculent, of a greenish olive colour, rather slimy, and mixed with a little blood. The following mixture was prescribed:—Chalk mixture, one ounce; aromatic confection, one scruple; tincture of opium, ten minims; powder of ipecacuanha, one grain, to be taken three times daily. The enemata were now omitted, and warm turpentine fomentations applied to the abdomen. She was much relieved by the fomentations and mixture, and the skin became cool and more moist. On the 3rd of October she did not feel quite so well again; she complained of much debility, and the pulse was very small; the tongue was still rather red at the tip; the motions were, however, less frequent, of a lighter colour, fæculent, and without blood; a blister was applied to the abdomen. On the 5th, the patient was much better, and had experienced great relief from the blister; the tongue was cleaner, and not so red at the point, and the purging had stopped; pulse 86. The previous night, the house surgeon had given eight grains of Dover's powder, which again caused sickness. From this time she slowly recovered, but her stay in the hospital was protracted by a catarrhal affection, and by two slight returns of diarrhœa, for which she had some mercury with chalk and Dover's powder, and a repetition of the mixture prescribed on the 28th. She took also for a few days, before being dismissed, the following tonic mixture:—Infusion of cusparia, eight ounces; aromatic confection, two drachms; tincture of opium, one drachm and a half. One ounce to be taken three times daily. On the 29th of October she was discharged perfectly well, her appetite and strength having rapidly improved with this mixture.

*Remarks.*—This was a very severe case, being attended with much fever, pain, and prostration of strength. The very considerable amount of febrile disturbance, along with some general tenderness on pressure of the bowels, would seem to show that leeches might have been useful; but, on the other hand, I was prevented from applying them, by observing the length of time the disease had been present in a less urgent form, by the prostration of strength, the smallness of the pulse, and by having found the disease yield in other similar cases without depletion. The case shows the good effects of several of the means which I have lately found most useful. We observe that the patient was relieved by small doses of calomel with opium, that the gums were very soon affected, and that there was then a decided remission, the motions at the same time becoming more abundant, fæculent, and bilious. She was also benefited by the combination of chalk mixture with tincture of opium, ipecacuanha, and aromatic confection; one which I have found useful in several other cases. Great and permanent relief was likewise derived from the blister, which seemed to check the disease completely; and I may add, that in all the cases of dysentery in which I have used blisters lately I have found them of service: the patient did not seem to derive as much benefit from the acetate of lead and laudanum injections as we have seen in some other cases. We have frequently used starch injections with from six to twelve grains of acetate of lead, and from thirty to forty minims of laudanum, with excellent effect; and you will recollect, that in the boy of the name of Sullivan, in whom dropsy and a very anæmic state had supervened, they had the effect of stopping the hæmorrhage and relieving the prolapsus ani.

Another woman, of the name of H. Stones, twenty-two years of age, was admitted on the 5th of October, with dysentery of four days' standing, attended with some pain above the pubis, and difficulty in making water. On admission, the catamenia were present; the tongue was furred; there was much thirst; pulse 86, and skin hot. Turpentine fomentations were applied to the abdomen, and a pill with two grains of calomel and one of opium was given three times a day, but, as she was relieved it was not continued so as to affect the mouth. On the ninth, she had an enema, with starch and half a drachm of laudanum. On the 10th, she was better, but had still frequent calls to stool, and scanty motions. The enema was ordered to be used twice a day, with the addition of ten grains of borax. The following day the patient was better. She subsequently took, several times, half an ounce of castor oil, with ten minims of tincture of opium, and on the 19th was convalescent.

In this, and in every other case in which I have prescribed aperients, they have been given simply with the view of removing irritation, by unloading the bowels of any fæcal matter they might contain, and not with the view of acting upon the disease, through their purgative influence, as they seem to be given by some medical men.

The next case to which I shall draw your attention is one of chronic dysentery, in a sailor named D. Jones. He was admitted on the 21st of October, and is twenty-seven years of age, of sallow complexion, but pretty stout, and otherwise healthy looking. He stated, that about a year and a half ago, he had an attack of dysentery at Quebec, of which he got well on his return to Liverpool. He then went out to Calcutta, where he had another very severe dysenteric attack, six months since. He was treated in the hospital there, and recovered, but as soon as he went to sea the complaint returned. When he entered this hospital he had been ten days on shore without having improved. He had often as many as a dozen stools during the night, but fewer during the day. He had pain only before going to stool, and at the epigastrium, on taking a full inspiration. The motions were very slimy, but contained little blood. The tongue was moist, and covered with a slimy white fur. He took, three times a day, a powder containing four grains of mercury with chalk, and six of Dover's powder. On the 24th, he felt better; the powders were omitted, and he was directed to take chalk mixture, with ipecacuanha, tincture of opium, and aromatic confection. On the 27th, the bowels had been opened only five times during the night; on the 28th, seven times: the motions were of a light clay colour, and contained much mucus, with some streaks of blood. The chalk mixture was continued, and he was directed to take, at night, one of the powders first prescribed, and in the morning, the following draught:—Castor oil, half an ounce; tincture of opium, ten minims; mixture of acacia, half an ounce; cinnamon water, one ounce. This treatment was continued until the 4th of November, the powder and aperient draught having been taken four times. The tongue had then become clean, and the purging had stopped. To-day the patient has left the hospital, having quite recovered.

The principal indication kept in view in the treatment of this case was the removal of the derangement in the secreting function of the liver, the existence of which was proved both by the yellow complexion and by the clay colour of the stools. This was effected by the mercury with chalk and Dover's powder, while the secretions were evacuated by the castor oil draughts. The mixture taken at the same time had the effect of restraining the abundant mucous secretion from the large intestine. In cases such as this, I have frequently found useful the combination of nitric acid and laudanum with infusion of cusparia, recommended by Dr. Abercrombie. We are seldom without cases similar to this, as so many British and foreign seamen come to this hospital. Of late, however, the number has been greater than usual, and it would seem, that those who have brought from warm climates a predisposition to dysentery have been frequently attacked with our epidemic.

Joseph Connor, aged nineteen, was admitted on the 24th of September, in a very exhausted condition, and suffering severely from dysentery, which he had laboured under for three weeks, without any kind of treatment. He had an anxious, sunk expression of countenance, a quick, small pulse, the surface at first warm, but afterwards rather cold. There was much thirst, and the tongue was loaded with a thick, yellowish-white fur. There were almost incessant calls to stool, and the motions consisted of small quantities of coagulated blood and red serum, without fæculent matter. A pill was given him, containing one grain of opium and four of calomel, and was followed by castor oil. He was relieved by the pill, but passed only bloody mucus after the oil. Ten grains of Dover's powder were then given him thrice a day; but as there was no improvement on the 26th, a pill, with two grains of calomel and half a grain of opium, was substituted every fourth hour. Starch injections, with half a drachm of laudanum and six grains of acetate of lead, were also administered thrice in the day, and turpentine fomentations were applied to the abdomen. The calomel with opium was continued till the 30th, when there seemed to be slight redness of the gums. The motions were then fæculent, with scarcely any blood; the appearance of the tongue had not, however, improved. The calomel with opium was now omitted, and chalk mixture, with aromatic confection, tincture of opium, and ipecacuanha, given along with some brandy. The following day the gums did not seem to have been affected, the pulse was 128, and the tongue dry and furred. He gradually sunk, and died on the 3rd of October.

*Post mortem.*—In the peritonæal cavity, some thick, reddish fluid was found, which seemed as if it had escaped from a perforation of the intestine. None, however, could be discovered, and no well-marked appearances of inflammation were visible, but the cellular tissue connecting the ascending layer of the transverse meso-colon was very vascular, and many of the mesenteric glands were enlarged. The cellular tissue connecting the rectum and bladder was also very vascular. (During life the patient had complained of some difficulty in making water.) The small intestines were almost empty, and presented no marks of disease. The mucous membrane of the whole of the large intestines, from the cæcum to the rectum, was extremely vascular, in some parts of a greyish colour, but chiefly of a red colour, approaching in some portions to a dark-brown. There were many small dark spots, especially in the arch of the colon, and also small holes in the mucous membrane, varying from the size of a pin's head to the marks from small-pox. The cæcum and rectum were the parts most affected by the disease, some portions of mucous membrane free from vascularity being still visible in the arch of the colon. There were several small ulcers in the cæcum nearly healed. In the sigmoid flexure of the colon, there was one large ulcerated surface and a few small ulcers. In the rectum, an ulcer about an inch in length, and scarcely a quarter in breadth, like a deep fissure, exposed the muscular fibres. The liver was healthy, and the gall-bladder was moderately distended with bile.

Thomas B——, an omnibus driver, above fifty years of age, was admitted on the 23rd of October, having been ill with bowel complaint for two months. He had not, however, been attacked with purging of blood until three weeks before he entered the hospital; and during the previous fortnight, no blood had appeared in the stools. He was very weak, much emaciated, and like one in an advanced stage of consumption. Four grains of Dover's powder, and the same quantity of mercury with chalk, were given him in the evening; and when I saw him the following day, he had been purged fourteen times during the night. The skin was cold, and the pulse small and weak. The tongue had a corrugated appearance, and seemed as if the fur had been scraped off it. The motions were scanty, and like dark-coloured mud. Two grains of calomel, with one of opium, were given him thrice a day, and he had also starch and laudanum enemata. The calomel was not given to affect the mouth, but merely with the view of modifying the action of the opium, and to promote the secretion of bile. On the 25th, the motions were watery, and reddish. On the 26th, he seemed easier, and the motions were less frequent. Calomel and opium were now laid aside, and he took chalk mixture with aromatic confection, laudanum, and ipecacuanha; but as he complained on the following day of its causing pain at the epigastrium, it was not continued. A blister was applied to the abdomen on the 27th, and again on the 28th, but without producing any effect. The enemata were continued along with warm turpentine fomentations, which appeared to give more relief than anything else. On the 30th, he had hiccup, the tongue was brown and dry; and on the 1st November he died.

*Post mortem.*—The peritonæum was healthy, and without fluid in its cavity. The small intestines contained much mucus, tinged yellow with bile. In the ileum, there was some greenish fæculent matter; and towards the lower part, two portions, each about four inches in length, were inflamed and vascular. The large intestine was so much disorganized, that the arch of the colon was ruptured in removing it, and the rectum was broken across. The contents consisted of a muddy-looking fluid, mixed with shreds of lymph. With the exception of a portion of the arch of the colon, the whole of the

large intestine was excessively thickened. There were some transverse vascular stripes of mucous membrane visible in the cæcum and arch of the colon. Numerous ulcerations were visible throughout the whole extent of the intestine, except where there was a coating of lymph. The smaller ulcers were rounded or oval, and not less in size than a split pea. The larger ulcerations were elevated, and fungous, or wart-like. A coating of lymph which could not be scraped off replaced the mucous membrane of a portion of the cæcum, the ascending colon, and sigmoid flexure. In the rectum, it formed a complete continuous coat, which even covered a long stripe of ulceration, which had laid bare the muscular coat, the fibres of which were seen through the lymph. The liver was rather coarse in structure, and the gall-bladder was nearly full.

*Remarks.*—The appearances in these two cases were entirely different, and would seem to show that they had been produced by two distinct forms of the disease. The first was characterized by great vascularity, and the formation chiefly of very small ulcers, which seem to have arisen from the follicles having been affected, the mesenteric glands also being enlarged. The second was characterized by the abundant effusion of lymph, and by larger ulcers, having an elevated granular appearance.

There is, perhaps, no disease, in regard to the treatment of the severer forms of which more difference of opinion has prevailed, than that of dysentery. This variety of opinion, as regards some of the means which are usually adopted, may be in part accounted for, from the more or less acute forms which the disease assumes in different epidemics, and probably, too, if we may judge by the pathological appearances, from varieties in the disease, which may not be distinguishable during life. In the acute dysentery of tropical climates, general bloodletting is often indispensable; and Annesley tells us that the first twelve or twenty hours are of the first consequence, in order to make an impression upon the constitution, and to bring the disease under control, before serious structural derangement has supervened. In temperate climates, the disease is seldom of so severe a character; but in the epidemic which occurred in Dublin in 1818, Dr. Cheyne employed venesection, with great benefit, in many of the severer cases, attended with pyrexia and tenderness. Again, in the epidemic which occurred in Glasgow, in the autumn of 1827, venesection seemed rather injurious; but Dr. Macfarlane and Mr. Brown found local depletion, by leeches, useful. The epidemics which we have had appears to have resembled the one which occurred in Glasgow; general depletion has scarcely if ever been necessary, and I have seen no instance in which it was required. In a few cases, I have seen much relief and permanent benefit from leeches, and I believe that they have been not unfrequently employed by several medical men, though others have entirely refrained from local depletion.

We may thus, from variety in the character of different epidemics, and in the constitutions of those attacked, account satisfactorily for the more or less free employment of depletion; but we cannot, in the same way, explain how some medical men should object to the use of mercury in every form and stage of the disease, while others prescribe it with benefit to their patients, and some, as Dr. James Johnson, have placed in it an almost exclusive trust. In tropical climates, calomel has been given in much larger doses than are suitable in this country. Thus Annesley has recommended scruple doses to be given at night, and followed by a purgative draught in the morning; but not with the view of inducing the specific action. In very severe cases, Dr. Cheyne adopted the method of some tropical practitioners, and bled the patient, and gave a scruple of calomel, with two grains of opium, and the warm bath. After the large dose, calomel, in doses of five grains, with half a grain of opium, was given every third or fourth hour, till it produced ptyalism. As soon as the mercurial influence was apparent from the state of the mouth, the mercurial was laid aside, and a mixture, with balsam of copaiba, was given every fourth or sixth hour, from which the greatest relief was often obtained. "It results," he says, "from a consideration of the cases in my possession, that venesection, calomel, and opium, followed by copaiba mixture and farinaceous diet, proved more successful than any other method in the severest cases; yet it often lamentably failed, of which sufficient evidence will be found in the table of unsuccessful cases."

Dr. Macfarlane gave from fifteen to twenty grains of calomel with one of opium, thinking that it caused less irritation than smaller doses. He followed this by two grains of calomel, with one of opium, and half a grain of ipecacuanha, every four or six hours, to excite mercurial action in the system, which he always found checked the disease. Mr. Brown, on the other hand, thought that it rendered the disease more protracted. Dr. Abercrombie regarded dysentery as primarily an inflammation of the mucous membrane, and was, upon the whole, unfavourable to mercurial treatment. He has stated, however, that in the earlier stages, benefit is frequently obtained from doses of Dover's powder, of from five to ten grains, combined with one of calomel, repeated at first every four or five hours, and afterwards at longer intervals; and he has quoted Dr. Ferguson's recommendation, that in warmer climates a grain and a half of calomel, with one of ipecacuanha, should be taken every hour, till the mouth is affected, when, he says, the dysenteric symptoms always cease.

In the early period of the epidemic, mercury with chalk and calomel were given with opium and compound ipecacuanha powder, in the manner I have already pointed out, with the view merely of altering the state of the biliary and other secretions, the disease appearing then to be one of disordered secretion only; when, however, it became more severe, and assumed the character of dysentery, it was necessary, in many instances, to resume calomel with opium, after it had been laid aside, and to continue it longer. Thus, in some cases, the mouth became affected, and from what I have seen, I am disposed to agree with those who regard its action in this way as beneficial, though I think it seldom necessary in this country. There are some diseases over which the power of mercury cannot be questioned. In iritis, we can see its influence in causing absorption of the effused lymph. You have lately, in a case of rheumatic inflammation of the eye, still in the hospital, where the patient had lost the sight of the other eye by a previous attack, seen the immediate effect of mercurial action in removing the inflammation, after leeches and blisters had failed. Many medical men, who do not doubt the efficacy of mercurial action in causing absorption of lymph, and the resolution of inflammation of fibrous and serous tissues, are disposed to call in question its power over inflammation of mucous membranes. There is, however, one form of inflammation of a mucous membrane—viz., croup, a disease attended with exudation of lymph—in which even the purgative influence of calomel is most powerful in causing resolution. In the severer forms of dysentery, especially as the disease occurs in warm climates, pathological anatomy shows us that there is also, not unfrequently, an exudation of lymph. You should observe, too, that these are precisely the cases in which the free use of calomel, so as to affect the system, has been found, by experience, to be most beneficial. The abundant exudation of lymph, in the case of Brown, would seem to show, that even in the more severe cases which occur in this climate, the free use of calomel may be required. Where the disease has passed into the chronic stage, as in this case, I have generally avoided affecting the mouth, fearing that it might increase the exhaustion; many, however, of those writers on tropical dysentery, who, like Ballingall, are opposed to the free use of mercury in the acute form, recommend slight mercurial action in the chronic; and had the disease existed in a less advanced stage, it would seem that this would have been the remedy most likely to promote absorption of the disorganizing lymph.

## Hospital Reports.

### ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

#### HEADACH; SUPPURATION ABOUT THE LEFT EAR; DISEASE OF THE TEMPORAL BONE; ABSCESS IN THE BRAIN; REMARKS.

Case 30.—John B——, aged twenty-eight; admitted, Feb. 1846, Mark back ward, under Dr. Hue. A carpenter, of a slight frame of body, temperate, always delicate, but not so as to call himself ill, till within the last three months, was admitted into the hospital a week before his death. His illness commenced with headach; then an abscess formed and burst behind his left ear; matter used also to be discharged from the meatus auditorius externus, with temporary relief to his deafness. The pain in his head was very severe, generally occurring in paroxysms; but it could not be distinctly made out that these paroxysms had any relation in point of time

with the suppression of the discharge from the ear. He was so deaf that communication with him was almost limited to signs. He had cough, with abundant expectoration of a white froth, mixed with strings of puriform mucus, tenacious, and with the sickly smell so often noticed in the expectoration of phthisical patients, and orthopnœa; but his appetite, with all his sufferings, was good, almost to voracity, to the last.

*Body examined, eighteen hours after death.*—Limbs nearly all relaxed; blood generally coagulated. The skull was remarkably thin, the capacity of the right half greater than that of the left. The pericranium was extensively separated from the left temporal bone. The dura mater was generally thin and transparent, marked with a black spot in a point corresponding to the semicircular canals on the left side, where also a red granular growth had sprouted up and become attached to the brain and its membranes. Beneath, the bone was blackened, and a communication was discovered with the cavity of the internal ear, which contained a thick whitish pus. The coats of the left lateral sinus were thickened, and had a coagulum adherent to the lining membrane, and much thick pus lay beneath the dura mater, in the part where the sinus curves forwards on the petrous bone, the membrane being here separated from the bone for a considerable space. The under surface of the left middle lobe was of a sooty colour, and fluctuating to the feel. On section, about an ounce of green stringy fœtid pus was discharged from a cavity, apparently not at all implicating the corpus striatum or optic thalamus, surrounded by dark gelatinous walls. No pus exuded from the point of the brain above noticed as having adhered to the dura mater when the brain was removed from the skull. The rest of the brain was healthy, excepting that the convolutions of the vertex on the left side were flattened.

On examining the petrous bone the meatus internus appeared quite healthy, but the parts about the semicircular canals formed a cavity, divided into cells filled with pus, and covered with a dark gelatinous matter, which was, indeed, all that separated this cavity from the dura mater at the blackened point above alluded to. The cavity communicated by one opening with the external meatus, outside the tympanum, this membrane being entire and having the malleus adherent to it in a sound state; another led to the cellular tissue behind the external ear; and a third communicated freely with the collection of pus beneath the dura mater on the inside of the skull.

The heart was small, with an old tuft of fibrin at the apex, but chiefly remarkable for the entire absence of fat from the organ. There was an old pleural adhesion about the base of the right lung; in the left interlobular fissure lay a gelatinous looking mass, and behind, quite at the base, was about fifteen ounces of green fœtid pus lying in the angle of junction of the ribs and diaphragm, inclosed in a flattened cyst of about 3.5 inches in breadth behind, but gradually tapering off towards the front. The walls internally were coated with thick pus and fibrin, and there was every appearance of the collection having existed there for a long period. Within, the lungs were emphysematous, the bronchi injected and loaded with pus and mucus, and the lower lobes more or less consolidated by pneumonia, the appearances being in some degree modified by the presence of tough cellular bands in the right base, and gelatinous-looking infiltration in the left.

The coats of the stomach and small intestines appeared remarkably thin; the lining membrane of the former was rather thickly coated with mucus. The mesenteric glands were generally large, hard, and yellow; the mesentery and omentum containing no fat.

Other organs presented nothing particularly worthy of notice.

The first point that requires to be noticed in this case, is to regret that only so much of the lateral sinus as adhered to the portion of bone removed from the skull was examined; a further examination of this sinus, judging from what was seen, would have probably shown more extended traces of inflammation.

Considering the disease of the bone as the cause of the abscess in the brain, it was curious to observe how completely the cyst shut off the pus from any communication with the diseased bone. The same result of disease of the bone and dura mater, in producing abscess, entirely inclosed in the substance of the brain, is more strikingly shown, as in a more acute case, in Dr. Abercrombie's third case of this nature, ("Diseases of the Brain," p. 35;) but yet more remarkably in Mr. Ormerod's "Clinical Collections," (p. 72,) where abscess of the brain followed upon mechanical injury of the bones of the head. The adhesion of the vascular growth from the dura mater to the brain is, perhaps, to be looked upon as the first step towards a spontaneous evacuation of the contents of the abscess, interrupted by death.

Leaving now the appearances distinctly referrible, or analogous, to the results of inflammation, there seems a fit occasion for subjoining the two following illustrations of other forms of its effects; the first presenting, in its anatomy, and the second, in its symptoms, peculiarities worthy of consideration.

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SUPERFICIAL SOFTENING, WITH SLIGHT EXTRAVASATION OF BLOOD IN THE BRAIN; PULMONARY PHTHISIS; REMARKS.

Case 31.—Hugh G——, aged fifty-two, admitted Feb. 15th, 1845, John back ward, under Dr. Burrows. Pale vacant face; body emaciated; tongue moist, with a thin, rough fur; pulse 88, small, occasionally irregular, and rather hard; bowels generally confined; has impaired power of the left arm, and, to a less degree, of the right; impaired sight and hearing, with convergent strabismus and hesitating speech.

*History.*—A watch-maker; very intemperate; has had good health, but never been very strong. Five weeks ago, having for a short time before suffered headach, with loss of appetite, and noticed a bad taste in his mouth, while at his work, as usual, he found suddenly that he could not use his left arm. Then his head became giddy, and he had to leave his work; he fell, and remained insensible for a few minutes. From that time he has been laid up at home, and under the use of mercury has made some slight progress.

He continued in the hospital a month; but the note of each week hardly differs from that of the previous one, till about March 18th, when his cough and bronchial obstruction, at first hardly noticeable, became gradually more urgent, and, in his exhausted state, soon terminated his life.

*Body examined, thirty-two hours after death.*—The dura mater was healthy; the pia mater, about the vertex, much thickened, forming a mass in which there were deep permanent sulci for the veins. The substance of the brain was for the most part healthy, but on the right side, on the under surface, at the junction of the middle and posterior lobes, for about the space of 1.5 inches on the surface, and one inch in depth, the brain was almost diffluent. This softened mass was separated from the rest of the brain by no defined line; on section, there appeared externally a layer of brownish yellow masses, each about the size of a pea, containing within them a central bloody spot; they were quite soft. The arteries at the base were healthy. The aorta was ossified in distinct patches, but the lining membrane appeared still entire. The left lung was universally adherent, the right only at the apex. Both lungs were very emphysematous, the right most so. There was abundant deposit of tubercle, both scattered, and in compact masses, throughout this lung, and the apex was riddled with small cavities lined with false membrane, from only a few of which pus issued on pressure. The bronchi at the second and third divisions were vividly red. There was an equally abundant deposit of tubercle in the left lung, which had in the apex a cavity of two or three ounces capacity; the lower lobe was very rotten, and dripped with a dirty red fluid. Beneath this lung, between it and the diaphragm, was a layer of reticular lymph, in the meshes of which was much clear serum, spirting out forcibly on section, inclosing in one part a collection of concrete pus, while in another part a mass of the same nature extended a little way into the substance of the lung. In the same manner, the cellular adhesions which connected the apex of this lung to the costal pleura were infiltrated, forming a semi-transparent layer of 0.25 inch in thickness. The spleen was soft, the other organs were healthy.

The cause of this man's death was apparently phthisis, for the disease of the brain, judging from his symptoms, remained much the same during his stay in the hospital. The notes represent fairly enough the state of the case, for it was only during the last two or three days that he had any cough to attract notice, and the appearance of the lungs well agreed with this want of symptoms: cavities lined by false membrane, and scanty secretion of pus, all indicative of a quiet state of the tuberculous deposit, which would seem, however, just about to have assumed a more active condition, the very preparatives for which, in his weakened state, destroyed life. The state of this man's faculties, and the habitual neglect of all his feelings, in which it would appear that he had lived, do not allow us to say whether there had been really an alternation of action between the cerebral and the pulmonary disease, such as is familiarly known between tuberculous disease of the lungs and that of the bowels.

The suddenness of the attack, together with the slight traces of extravasation found in the softened part nine weeks after

the first occurrence of the symptoms, are strongly in favour of the lesion having been occasioned in the first place by extravasation of blood, which had lacerated the substance of the brain; but it is to prevent any such conclusion being drawn from the suddenness of the attack that the following case is detailed.

SOFTENING OF THE BRAIN; CAPILLARY PHLEBITIS OF THE KIDNEYS.

Case 32.—William M——, aged sixty, admitted Sept. 30th, 1846, Luke back ward, under Dr. Roupell; a stoutly-made man, who had had palpitation and dyspnœa on exertion for years, and latterly vertigo and headach. Four days before admission, he fell down suddenly, with loss of power and sensation on the left side, and impaired speech: he had never had any previous attack of the same nature. No change took place in his condition during his stay in the hospital, and he died on Oct. 18th of bronchitis, a slight blush of erysipelas appearing over his face just at the last. The only other point in his symptoms beyond this simple statement, which the examination of his body after death renders of particular interest, relates to the heart, which was examined several times during his illness; its action was very irregular, the sounds thought to be a little rough, but no distinct murmur was detected. He had never had rheumatic fever.

*Body examined, fifteen hours after death.*—The limbs were all rigid; the blood partially coagulated and separated. There was a good deal of venous congestion of the membranes of the brain, but there was no flattening of the convolutions, and no particular effusion of fluid in the cavity of the arachnoid; the substance of the brain was marked by numerous bloody points, and the vessels drew out like hairs on section; a few cysts and a small yellow nodule existed in each plexus choroides, a little opaque yellow fluid in the right lateral ventricle; the greater part of the right corpus striatum and part of the optic thalamus was softened; the mass which occupied this part of the hemisphere being made up of a flock, so to say, of cerebral matter, hanging loose all round, only connected by a narrow pedicle below and behind: the turbid fluid in which this mass hung was like that which had been seen in the ventricle, but no communication was discovered between this cavity and that of the ventricle, though all that remained of the corpus striatum, on the side of the ventricle, was not equal to a line in thickness in some parts; there was not a trace of injection anywhere. There were a few old adhesions of the left pleura, the right was free; both lungs were very emphysematous in front, behind they were congested; the smaller ramifications of the bronchi were full of pus, the larger very dusky, as if from congestion. The heart was large; the pericardium universally very firmly adherent; the right side was dilated, but not to so great a degree as the left, which was also hypertrophied; the mitral valve was thick and white, as were also the chordæ tendinæ, the orifice contracted, so as not to be more than 2.25 inches in circumference, the edges rough and hard, with bony points, and on the auricular aspect, to the left and behind, was a scabious patch of earthy deposit, of an irregularly circular form, about half an inch in diameter. The aortic corpora aurantii were considerably enlarged, but the valves appeared efficient; across the top of one of their sinuses, and adhering to the coats of the aorta, was a row of little beads of earthy matter. The spleen was large, hard, and beset with numerous white spots and lines, evidently parts of divided vessels. The kidneys were of natural size; the left had hanging to its lower end a cyst of about one drachm and a half capacity, containing a sepia-coloured fluid, besides smaller cysts on its surface. On the outer surface of the same kidney were two bright-yellow spots, of an irregularly circular form, about 0.33 inch across, surrounded by a well-defined line of an orange-red colour. On section, the same appearances were found to extend a short way into the substance of the organ. The right presented no such changes; but on the surface were two or three puckered depressions, lined with a thick, opaque membrane.

As an illustration of the difficulty of diagnosis of apoplectic effusion from softening, the case speaks for itself. That such cases are not very uncommon may be seen by reference to Andral, ("Clinique Medicale," tome v. p. 448,) where several such cases are detailed.

There remains to be noticed, in connexion with the disease of the heart, the singular state of the left kidney. This condition, which, under the name of capillary phlebitis, has been exactly described by Rokitanski, (Bd. iii. s. 424,) is more commonly met with in the spleen, as noticed by Dr. Jackson, (*Med. Chir. Trans.*, vol. xxix. p. 277;) and in Case 11 of this series, in which, as in one of Dr. Jackson's, there was no disease of the heart. I am indebted to Mr. Paget for ascertaining, in the kidney of a man who died with similar deposits in the kidneys, spleen, and lungs, that the proper structure of the kidney remained distinguishable by the microscope in the midst of these yellow deposits.

In the practice of a large hospital, where so many come in to die, the present is not a solitary instance of extreme disease of the valves producing no morbid sound. The explanation lies in the small current of blood which, under such circumstances, passes through the organ; it is only a very young auscultator that needs to be reminded, that the loudness of the mitral regurgitant murmur has any constant ratio to the amount of the organic lesion.

The length to which this communication has already extended precludes any further inquiries, which the condition of the other kidney in the present case, and that of the pleura in the two previous cases, would naturally give rise to.

## Original Papers.

### ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

### THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from last vol. p.* 658.)

*Bread, (subject continued.)*—Vogel gives the following as the composition of wheaten bread, made without salt and with distilled water, carbonic acid and the chlorides of calcium and magnesium being left out of the analysis:—

| | |
|---|---|
| Gluten . . . . . | 20.75 |
| Starch . . . . . | 53.5 |
| Torrified ditto . . . . | 18. |
| Sugar . . . . . | 3.75 |

We also omitted to give, in our last, the proportions in the patent of Dr. Whiting, taken out in 1836, for bread made without yeast, and with soda and muriatic acid. It is as follows:—Wheaten flour, seven pounds; carbonate of soda, 350 to 500 grains; hydrochloric acid, from 420 to 560 grains; water, two pints and three-quarters.

*Beer.*—Though by mistake we have let the subject of beer fall out of its literal order, yet, happily, the error is one easy of correction. We proceed to submit a few observations on the dietetical and therapeutic properties of malt liquors.

Barley which has been made slightly to germinate, and has then been dried, so as to destroy its vital property, forms the substance called malt. The process now described gives rise to a principle named diastase. Three degrees of heat are applied to barley in the above preparation: first, a moderate degree, producing pale malt, which is capable of fermentation, and two greater degrees, producing brown and torrified malt, neither of which is fermentable, and the former of which is employed for flavouring, the latter for colouring. From the pale malt, ales, and from a mixture of pale and torrified malt, porters, are prepared. To both ale and porter an infusion of hops is added; and, in general, porter is more highly hopped than ale. New ale and porter which are free from acid are named mild; those which have been kept for some time, and in which acid is developed, are called hard. Some people prefer hard beer, and to suit this taste, the publicans are accustomed, when necessary, to convert mild into hard beer, by a summary and simple process, to wit, the addition of sulphuric acid. Again, others prefer mild beer, and the publicans, when their supply of this is low, and they have an abundance of old or hard beer, convert the latter into mild, by adding to it soda, potass, carbonate of lime, &c.

Various other adulterations are practised. The narcotic quality of hop is replaced by cocculus indicus; sweetness and colour, by liquorice, (an innocent fraud;) thickness, by lint-seed; a biting pungency, by carraway-seed and cayenne pepper. I have been informed, also, that nux vomica is sometimes used, to give at once the desired narcotic quality and bitter taste. Quassia is also said to be used with the latter view; treacle is likewise employed to give sweetness and consistence; while, to give beer a frothy surface, sulphate of iron and alum are had recourse to. Such is the wholesome beverage of which nine-tenths of the English people daily partake! Yet the frequent or constant occurrence of these adulterations is known, and a crime which a Turkish cadi would punish with summary decapitation, is almost wholly winked at by the

police of this country. While a loud outcry is made about many partial and circumscribed omissions or contraventions of sanatory conditions affecting the health of particular districts, this evil, deteriorating the health of thousands, and deliberately perpetrated, is overlooked.

Taken moderately, and by persons who do not eat inordinately of animal food, and who use sufficient exercise, ale and porter are harmless, and may even be allowed to be, in some cases, productive of advantage. The cases, however, in which either beverage is indispensable to those in health are rare indeed, if, in truth, there are any such cases. But the use of malt liquor, if not necessary, must be hurtful, since the body is thereby trained to rely on a stimulant of a very artificial kind; one that experience shows us is far more apt to be abused than the more natural and wholesome supports of the body, bread, vegetables, &c., are liable to be; one that almost always induces in those who systematically use it a habit of body in which disease more readily occurs, more rapidly progresses, and more tends to grave or fatal terminations, than in the cases of those not used to that stimulus. These we hold to be facts undeniable.

Cases of simple and direct debility, uncomplicated with any derangement of the digestive organs; cases of emaciation after fevers, inflammations, or other exhausting diseases; cases of extensive loss of blood from hæmorrhage; cases of profuse suppuration from abscesses or sores; cases of morbid discharges of an exhausting kind, as copious blennorrhœa, &c.,—these are the cases in which the use of malt liquors is positively indicated.

Indian pale ale, which is, I believe, doubly hopped, and in which care is taken to prevent the development of acid, is taken by many without the inconveniences attending the other species of beer. The strong and syrupy ales—as Leith, Alloa, Burton, and Kennet—are apt to be acescent on many stomachs, to cause flatus, and even febrile excitement, and in persons disposed to renal disease, to give rise to dysuria and various urinary deposits. These strong and rich ales are said to be fattening; and they certainly seem to increase the bulk of those largely employing them; but the increase is due to an augmented deposition of adipose matter, not of muscular fibre, and in some cases the enlargement seems partly œdematous.

Porter and ale seem best to suit meals in which little or no soup or vegetables are taken, but in which bread and meat are alone or chiefly used. Vegetables, more especially cabbages, or turnips, or vegetable soups, taken along with beer, are extremely apt to produce flatulence, and sometimes colic.

The composition of the milder sort of beer may, in round numbers, be stated to be—

| | |
|---|---|
| Water, carbonic and acetic acids | 90. |
| Alcohol | 3. |
| Extract | 4. |
| Albumen | 0.5 |
| Phosphate and sulphate of potash, chloride of potassium, phosphate of lime and magnesia and silica | 0.25 |

*Bromine.*— There can be no doubt, that in some cases of hepatic derangement iodine affords relief; and the action of bromine considerably resembles that of iodine. A congestion both of the biliary and of the bloodvessels of the liver occasionally occurs without any very obvious cause: the bile is scantily discharged; the volume of the liver is enlarged; and the whole abdomen, probably from a *remora* in the portal circulation, becomes tumid, as in incipient ascites. In these circumstances, an effect seemingly magical follows the use of iodine or bromine. The liver acts and subsides, and the belly rapidly resumes its ordinary size.

Magendie's formulæ for the use of bromine are still as good as any, only the doses may be considerably larger than ordered by him. Bromide of potassium, ten grains; orange or cinnamon water, four to six ounces: dose, a dessert-spoonful twice or thrice a day. Or, bromide of iron, thirty-six grains; confection of roses, *q. s.* for fifty pills: two to be taken night and morning.

In dyspeptics with strumous habits, the above formulæ, the latter of them more particularly, will be found very useful. There is a form of dyspepsia which may be said to be characteristic of strumous subjects; it also is found in persons constitutionally prone to bronchitic attacks: and in both these classes of persons, the mucous membrane of the stomach has the same inflammatory dispositions with that of the trachea and bronchiæ. It is remarkable, that so soon as abscesses form in the lungs, or purulent expectoration begins, the irritability of the stomach disappears, appetite becomes lively, and digestion vigorous.

*Cacao.*—The several dietetic preparations of the theobroma cacao are found by some dyspeptics to agree better with their stomachs and their comfort than tea or coffee. Tea is found by some to be stimulating; by others, relaxing; by others, astringent: coffee—stimulating, heating, and astringent. We believe all this; but we also think that part of the evils now named is due to the occasionally excessive temperature of the potations. We have frequently known tea and coffee swallowed at a temperature of 140° Fahrenheit. Both tea and coffee are frequently taken too strong in quality—that is, in too highly charged decoction or infusion, and in too large quantity—we mean, as regards mechanical bulk, and the consequent distention of the stomach. Perhaps nothing is more calculated to debilitate digestion than large and distending potations of fluid above blood heat. A daily, or rather bi-daily, habit of this sort cannot but fail, in the end, seriously to impair the special nervous sensibility of the stomach, and the vigour and amount of its secretions. We, therefore, have no hesitation in pronouncing tea and coffee, as usually taken, to be deleterious in their effects, and sure, though insidious and perhaps unperceived, inducents of diseases or predispositions to diseases.

Chocolate, and still more cocoa, are certainly less exceptionable drinks. The homœopathists, who are not inobservant of the effects of diet, allow cocoa, but nearly or wholly exclude coffee and tea; their chemists even prepare a particular cocoa for the use of the sect.

*Cæcum.*—In all cases of constipation or torpor of the bowels, attention to the cæcum is important. It is here that fæcal accumulations are, on several accounts, apt to take place. The circumstance of the large bowel here forming a cul de sac, out of which, moreover, the fæcal matter, during fourteen or sixteen of the twenty-four hours, can only escape by a course counter to gravity, disposes not a little to the collection there of excrement. And, indeed, in most cases of constipation, in cases of chlorosis, &c., we shall generally both see and feel a fulness at this part, sometimes of remarkable and even alarming extent and hardness. There is generally also considerable tenderness of the part; so that handling or pressure of it causes to the patient, not acute pain perhaps, but an unbearable uneasiness, which prevents you from making the examination freely. And I have no doubt that, in not a few cases, a state of chronic irritation of (sub-) inflammation and even of ulceration of the mucous membrane of the cæcum, is induced, from the prolonged contact of hardened fæces, which, moreover, has become preternaturally fœtid, and undergone certain irritating chemical decompositions. In such circumstances, either round or irregular masses of a fatty-looking substance may often be detected in the evacuations. This consists of inspissated mucus, secreted by a surface highly irritated or sub-inflamed. A slight prolongation or increase of such irritation will convert this inspissated mucous discharge into a purulent one.

The fact of accumulation in the cæcum being ascertained, a bolus of pills, containing ten or fifteen grains of blue pill, aloes, and hyoscyamus, in equal parts, are to be given at bed-time, on one, two, or three alternate nights. Next morning, a dose of castor oil is to be taken, and means afterwards are to be used, both dietetic and purgative, to keep the bowels patent, and prevent a recurrence of the impaction of the cæcum.

Injections are of much use in this complaint, though only, indeed, of temporary utility. They should be of an oleaginous quality, and be large in quantity, and either during, or subsequently to, their being administered to him, the patient should lie on his right side, so as to promote the passage of the injection to the ascending colon and the cæcum. The right groin should be gently, but effectually, kneaded, as it were, by the hand of the patient himself, or of an assistant. In this way, lumpy masses of fæces, which had obviously accumulated in the cæcum, may often be brought away, to the great relief of the patient. A tablespoonful or two of oil of turpentine added to the injection, adds much to its efficacy. This oil seems to exert a most salutary influence on the colon.

A German lately came to London, who professed to cure cases of constipation without the aid of medicine, and simply by friction. He rubbed and kneaded the abdomen, first over the small intestines; then, beginning from the right groin, he continued the process all along the course of the colon to the left groin. By this means, he, probably, actually forced along the fluid fæces, and, at the same time, stimulated the muscular coat of the intestines to contract. He devoted several hours, on successive days, to this manipulation, and, as I was informed, often succeeded on the second, third, or fourth day, even in some obstinate cases.

Bentinck-street, Manchester-square.

# ELECTRICITY

CONSIDERED AS TO ITS DISTRIBUTION THROUGHOUT OUR GLOBE, WITH A THEORY RESPECTING TEMPERAMENT AND THE PECULIAR INFLUENCE OF CLIMATE UPON OUR MENTAL FACULTIES.

By J. W. LAKE, Esq., Holbeach.

In a recent communication, I offered some fair grounds for the assumption that electricity was identical with the vital or nervous agent. Assuming this identity, then, it will be expected that the human body should exhibit the customary electrical phenomena. I have, however, observed, that man is not an isolated being, but that he is intimately, though mysteriously, connected with surrounding objects, and therefore, before we consider electricity in its relation to him, it should first be considered in its relation to the globe on which he treads. And here the question arises—What is electricity? Who can define the subtile agent? We are acquainted with its effects, but we are ignorant of the manner in which those effects are produced. We can reduce it to certain laws, but we cannot penetrate into the manner in which those laws are controlled. We view it as the great cause productive of every movement and operation of Nature, but we are wholly unable to trace the mysterious tie which connects it with the fiat of the Great Ruler of all. As a power, its existence has been known from the earliest ages; it is the fifth element of the Hindoos, by whose sacred Vedas it is thus described:—"There is a strong propensity which dances through every atom, and attracts the minutest particle to some particular object. Search this universe, from its base to its summit, from fire to air, from water to earth, from all below the moon to all above the celestial spheres, and thou wilt not find a corpuscle destitute of that natural attractability."* As the vital or generative principle of Nature, this power was worshipped as a God in the earliest ages of mankind, the Greeks deriving their Θεος from the word θεαμαι—I contemplate an unknown cause.† In the mythology of the Romans it was deified under the title of Jupiter Tonans. The two hands of Nature, whereby she chiefly worketh, heat and cold, of Lord Verulam; the plastic Nature of Cudworth; the spirit of Nature of Dr. Henry Moore; and the ether of Sir Isaac Newton, are all conceptions of that principle which modern science recognises by the term Electricity.

One of the most prevalent errors regarding this principle is that which would argue from a difference of effect a distinctness of agent, and call upon us to acknowledge the existence of two electricities, positive and negative. But if the different effects of positive and negative electricity be adduced as an argument of their being distinct agents, I answer, that this carries with it no proof of the fact; for be it recollected, that a certain degree of heat (32° Fahr.) turns fluid water into solid ice, while another degree of heat (212° Fahr.) converts this same water into ethereal steam, and yet, who would venture to assert that ice heat and steam heat were distinct agents, or that heat and cold were not comparative states of one and the same principle?

Now I conceive that electricity, like heat, has an infinite range of intensity, and as heat and cold are but comparative terms, so positive and negative electricity are but comparative states: for instance, a body positively electrified as regards the earth, is negatively electrified as regards another substance, on which a greater quantity of this agent has been induced; so water at 80° will be warm compared with ice and cold in comparison with boiling water. Again, I conceive that the range of electrical intensity within the limits of our experiments is very trifling in this respect, being again analogous to heat, and that, therefore, a negatively electrified body is merely a body containing a less amount of electricity than the surrounding medium, or the substance with which it is compared; and I consider that it would be as impossible to deprive a body of the whole amount of its electricity, as it would be to deprive a substance of the whole amount of its caloric. Frozen mercury still contains a large amount of the agent called heat; so a body in the greatest negatively electrical state which it was in our power to induce, would still contain a large amount of electricity.

One of the principal characteristics of this agent is the tendency which it has to assume a polarized position; it is in this condition we find it in the magnetic needle, the atmosphere, the terrestrial globe; and when we come to consider it as a pathological agent, we shall find that this is the condition it assumes in man.

If we place a bar of iron in the northern hemisphere, it is found that positive electricity takes the upper surface, and negative electricity the lower, and *vice versâ* in the southern hemisphere, where negative electricity takes the upper portion, and positive electricity the lower.* Kite-experiments, too, in the northern hemisphere, have all tended to prove that every elevation in the atmosphere is positive to all strata beneath it, and negative to all strata above it; and I have no doubt but that these experiments would, in the southern hemisphere, give the reverse results, and it is to be regretted that they are as yet wanting. However, this deficiency is in some measure remedied by the results obtained from observations on the dipping-needle. This instrument is merely the magnetic needle suspended so as to have free motion in a vertical instead of a horizontal plane; in the northern hemisphere, the attraction of the earth draws the positive electric, or north pole of the needle, in a downward direction, with an intensity varying with the latitude: for instance, at a certain point in the tropical regions, the needle assumes a horizontal position; and could it be carried around the globe in a line where this horizontal position would be maintained, the line thus drawn would be the magnetic equator.† As we approach the pole in the northern hemisphere, the positive extremity of the needle is attracted downwards, and at the pole itself assumes a perpendicular position (!‡); in intermediate places, this dip or declination varies with the latitude. In the southern hemisphere the same phenomenon is observed, with this exception, that here it is the opposite extremity, or negative pole of the needle, that is attracted.

These observations afford us an insight into the manner in which electricity is distributed throughout our globe—namely, that it is found collected within the tropics, from which it is polarized in a horizontal direction; there is also a vertical polarization of the terrestrial electricity, the vertical direction being from the surface of the earth upwards, while the horizontal direction extends from the equator to the poles. With these preliminaries, then, we will proceed to consider this agent, more especially in reference to the physiology and diseases of man. Regarding electricity as the vital agent, I propose to call that state of body characterized by energy of the vital power, as fever; the electric, in contradistinction to that state in which this power is torpid, as collapse, to which I apply the term magnetic. The temperament, then, may be divided into four classes—viz., the electric, the electro-magnetic, the magneto-electric, and the magnetic. The electric temperament is that in which electric action is in excess, and is characterized by a dark complexion; hair dark, and in large growth; warmth and energy of the various passions; and muscular and constitutional strength. The electro-magnetic temperament is that in which electricity slightly preponderates, and is known by the same characteristics less evidently marked. The magneto-electric temperament is an approximation to the magnetic, which latter is characterized by a fair and delicate complexion, timidity, and reserve, want of energy, and a degree of distance or coldness. The magnetic state is strikingly marked in the latter stages of phthisis, a disease to which this temperament is especially subject.

The temperament of climate, too, is especially deserving of attention. Contrast the warmth and energy of the inhabitants of the southerly portions of our hemisphere, where electricity is more abundantly diffused, with the coldness and reserve which characterize the inhabitants of more northerly latitudes. Certainly it is evident that a deficiency of electricity seems, in cold climates, attended with a deficiency of the fire and vigour which characterize the human passions. All the sciences of the passions, such as music, painting, &c., claim a southerly zone as their birthplace, whilst the calm and calculating coolness of philosophy finds a more genial home in the less exciting latitudes of our own country. The civilization of the southern portions of Europe brought sculpture, painting, and poetry, to perfection, yet produced but few mechanicians. In more modern times, these latitudes have been the cradle and nursery of music, while the genius of the mechanician and the logic of the metaphysician shine more conspicuously in the temperate regions of the north. These facts, I conceive, admit of the following explanation:—Electricity, or magnetism, in excess, acts alike as a sedative, (as frozen mercury produces the same effect on the living tissues as red-hot iron;)—witness

* Quoted and translated from the Hindoo poem of Shirin and Ferhad, by Sir William Jones. (See Asiatic Researches.)

† Mirabaud.

* Cunningham's Essays on Electricity and Magnetism.

† For the form of the magnetic equator, as determined by Morlet and Haustein, see Noad's Lectures on Electricity.

‡ We must here suggest that positive experiment is wholly wanting. The nearest approach of man to the north pole was made in 1827, by Parry, who did not attain further than lat. 82° 45′; and to the south pole, we believe by Weddell, in 1823, who reached only to lat. 74° 15′ S.—Ed. L.

apoplexy, or the stupor of drunkenness, as an example of the one, and the soporific influence of extreme cold, as an instance of the other; but in moderate quantities, both these agents (or, rather, both these states of the same agent) act as a stimulus. Witness the exhilarating influence of alcoholic liquors, and the bracing effects of a frost. Now I conceive that the functions of our bodies, both mental and corporeal, are dependent on the electricity contained in the brain and spinal marrow, and this electricity is affected by climate in two ways—viz., as to its quantity and as to its polarity—the first occasioned by the horizontal polarization of the terrestrial electricity; the second, by its vertical polarization. The horizontal polarization is by far the most important, and it is owing to this that electricity is in excess in the torrid, and so deficient in the frigid zones; and, as a consequence of this excess and deficiency, the inhabitants of these zones stand very low in the scale of civilization: a literary negro, or Esquimaux, would, indeed, be looked upon as a phenomenon. Approaching from the torrid zone towards the pole, we arrive at a latitude* in which a vertical polarity becomes evident, and here we find a degree of activity in the intellectual and physical faculties. The vertical polarity, however, being slight, the intellectual is almost on a par with the physical, and this tends to develop the passions rather than the judgment. Approaching further north, we find this activity increased, and the greater vertical polarity of these latitudes occasions a determination of electricity to the upper or intellectual portions of the brain; hence the rapid progress of civilization in these zones when once the intellect was cultivated, and mankind taught to rely rather on their mental than their physical powers. It is in these regions (and our own country is happily situated in this zone) that the intellectual man makes his nearest approach towards perfection; for the quantity of electricity, as regulated by the "horizontal polarization" is that best adapted for the exercise of the animal functions, whilst the "vertical polarization," by causing the cerebrum to be more active than the cerebellum and spinal marrow, renders the passions less energetic, and the intellect more acute. A striking proof in corroboration of these remarks may be found in the fact, that all our finest works of art are executed by southern artists, whilst the inhabitants of southern climes are compelled to have recourse to the superior skill and talent of the northern engineer. In the frigid zone, the great deficiency of electricity renders the corporeal frame short and stunted, and the passions dull and obtuse, and merges the intellect into a show of reason little better than instinct.

These peculiarities of climate are evinced in the variableness of our own country. We well know that when suffering from intense cold or oppresive heat, our intellect seems to have deserted us: in the one case we express our ideas as having frozen, in the other as being melted. I question whether an advocate could do justice to a cause if compelled to plead it in an atmosphere of either 20° below zero or 100° above it. These effects would be temporary, but they serve to illustrate the effects of climate upon the mental faculties.

A question now arises as to whether climate will produce its characteristic effect upon strangers—that is, whether on removal to another latitude the electricity present in the brain and spinal marrow will assume the same polarity as exists at that latitude. This I think may be answered in the affirmative, though an extent of time may be required for the purpose. The removal of a Newton to the warmer regions of the south would in all probability have deprived the world of his incomparable "Principia," while the depth of passion exhibited in the poetry of Byron may be traced to the very cause which would have ruined a Newton. Mr. Dalton, in his recent remarks on elephantiasis, (a disease decidedly peculiar to climate,) corroborates this opinion: he says—"Individuals coming to live in a country where this disease is prevalent do not become attacked with it at an early period of their residence; it seems to require a certain amount of *seasoning* to render the constitution liable to its influence." Causes which affect the body affect the mind also, the one being intimately connected with the other. The fact, then, of climate exerting its influence upon our physical condition is a convincing proof of its affecting the mental faculties also. The peculiar influence of climate upon the physical condition of man must form the subject of a future communication.

In the present instance I have laboured, and I hope not in vain, to prove my previous assertion of the connexion existing between man and the globe on which he treads, my object being to induce medical men, by investigating disease in its relation to the vital or nervous agent,—

> "Not merely to discern
> Things in their causes, but to trace the ways
> Of highest agents."

The path before us may be unfrequented, but it is not altogether untrodden. The suggestions here offered are but an extension of ideas that flitted in the speculative imaginations of our forefathers; and though each succeeding adventurer may progress a few steps in advance of his predecessors, still this is too trifling to be considered in comparison with the vast field which yet lies unexplored before us. As yet we are but groping at the foundation: let those, then, who seek honour and distinction in natural science gain it by erecting the superstructure; let them unfold to us the mysteries of that

> "Electric chain wherewith we are darkly bound,"

and by practical demonstration realize Pope's sublime idea, that

> "All are but parts of one stupendous whole,
> Whose body Nature is, and God the soul."

Holbeach, Nov. 1846.

* Italy, Greece, the South of France, and Turkey, may be included in this zone.

## CASE OF MIXED SIMPLE AND PHLEGMONOUS ERYSIPELAS.

By ALFRED FORD, Esq., M.R.C.S.

G. W——, aged fourteen, of bilious temperament, and a tailor by trade, was attacked, on the 17th of October last, with slight swelling of the ankle-joint, accompanied by a small amount of pain, and some fever, symptoms for which I was called to him on the 21st. On my arrival, I found the ankle and foot swollen, slightly painful to the touch, and excessively hot; but presenting scarcely any trace of redness or discolouration; there was much constitutional disturbance, the pulse being 120, hard, and wiry; the countenance anxious; tongue covered with a white fur; urine scanty and high-coloured; bowels confined; appetite bad, and great thirst; very little pain was complained of in the ankle-joint itself, but a considerable aching in the muscles of the calf, and the whole attention of the patient appeared to be directed to the limb generally. Viewing this case as one of incipient rheumatic fever, I ordered Dover's powder, with calomel, at bed-time, and a mixture of sulphate and carbonate of magnesia, with colchicum, to be taken every four hours, in the morning; the leg to be fomented with poppyhead decoction.

22nd.—Much the same. Bowels freely relieved by the medicine of a quantity of dark-coloured stools; swelling of ankle increased, and shining, but not reddened; constitutional disturbance equally great; tongue still furred. No sleep having been procured by the Dover's powder, I ordered, calomel, two grains; acetate of morphia, half a grain, at bed-time. Continue medicine.

23rd.—Sent for early in the morning. Swelling of ankle considerably increased, and extended into the calf, which appears much enlarged, tense, and shining, exceedingly hot to the feel, but with no visible redness; on the contrary, the skin is of a lighter character than usual. Considerable fever is present, and slight delirium. Having now determined that the case was one of inflammation attacking the deep-seated structures of the limb, I directed twenty leeches to be applied to the most tense part, sedative fomentations to be used, and two grains of calomel, with half a grain of opium, to be given every four hours; the bowels being kept open by saline aperients.

24th.—A dull throbbing pain is complained of in the limb, and an insupportable sense of heat in it; the tension is very much increased, and now a faint red line can be traced running up on the inner side of the spine of the tibia, the calf retaining its usual colour. The tension being very considerable, and the swelling extending towards the thigh, I made four incisions down to the muscles, each of two inches in length, two being placed on the anterior, and two on the posterior, part of the limb. A considerable quantity of dark blood followed, giving almost immediate relief. Continue calomel and opium, and use cold sedative lotion.

25th.—Tension of the leg somewhat diminished; fever less; red line seen yesterday, much increased in width, and the colour is considerably heightened at one point; the swelling has reached the inner side of the knee and popliteal space; very little pain is complained of, but the same excessive heat; the parts about the knee are deepened to a dark red. Apply twelve leeches, and continue medicine.

26th.—Better; lower part of the limb much less tense, excepting in the situation of the red line, which has become of a darker hue, and presents a circumscribed swelling on the upper part of it; the leeches have lessened the tension at the

knee, but the thigh is participating in the disease. An incision was made into the dark swelling, and a quantity of black blood allowed to escape; the strength failing. Bark and a little wine were ordered; the calomel to be continued night and morning.

From this period the thigh went through all the forms of simple and phlegmonous erysipelas, the skin being simply affected in some parts, and in others, the deeper structures with phlyctæna and death of portions of the cellular tissue. In the leg, some bullæ also appeared, and a large quantity of thin sanious pus was discharged by incision. The calomel was continued for some days longer, until all the symptoms diminished, when quinine and a generous diet were substituted. The boy is now sitting up; he is much emaciated from the quantity of matter which has escaped from his leg; but in other respects is free from disease.

No one, on reading the above particulars, can doubt that this was a case of compound simple and phlegmonous erysipelas; but the peculiarities which appear worthy of remark consist in the mode of its attack, and the manner in which the disease exhibited itself, there being the same amount of tension and hardness as in phlegmonous erysipelas generally, but without any of that deep discolouration which is usually attendant upon that disease; and the very small amount of pain that was experienced contrasted with the very great amount of constitutional excitement, the tension and excessive heat being the principal symptoms which, when the disease was confined to the leg, led to a correct diagnosis.

With respect to the treatment, the large amount of calomel taken, without producing ptyalism, was perhaps somewhat remarkable, and the rapid manner in which it was given might have had some influence in modifying the disease; the incisions were certainly useful, and I think, in proper cases, cannot be too early resorted to. One circumstance I have forgotten to notice, and it is an important one—viz., that during the whole of the treatment the boy lay on his back, with the limb everted, and resting on the mattress, and that the part of the limb which came in contact with the latter, and was consequently compressed by it, remained throughout free from the disease—a fact which suggested to my mind the possibility, that had a bandage been applied round the limb, in the earliest stage, and support thereby given to its vessels, much of the ulterior mischief might have been avoided.

Upper Ebury-street, Pimlico.

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ON

# INFANTILE REMITTENT FEVER.

By JOHN JOHNSTON KELSO, M.D., Lisburn.

(*Read before the Belfast Medical Society, October 5th*, 1846.)

(*Concluded from last vol. p. 559.*)

As to the etiology of remittent fever, are the notions that generally prevail regarding it (presuming upon perfect familiarity with them) such as to commend themselves alike to our unconditional approval? For example: do the facts strictly warrant a reference to the class of immediate causation, errors in diet, unwholesome food, or accumulations in the bowels of effete irritant matters, such as undigested alimentary substances, and mucous sordes? If either occurrence tended, otherwise than remotely and indirectly, by debilitating or deranging the digestive tube, to the induction of the disease, for every instance met with in practice there would, I feel persuaded, be found ten at least instead. With every respect, then, for the opinions of others, I cannot but regard the inference as a hasty one, which, to the exclusion of other conditions, seemingly more immediately essential, refers either one or both of these circumstances to the class of exciting causes of the affection. But it is, at all events, quite certain, that in connexion with a debilitated state of constitution, however induced, and peculiar irritability of frame, they powerfully predispose to the influence of agencies that may be regarded as more directly of an inducing or exciting character. The question then is, in what are these found for the most part to consist? Now it is an observation borne out by a considerable personal experience, that, speaking generally, this is not a disease of the children of the higher or more comfortable classes of society, but eminently one pertaining to those of the poorer orders in it. If this be so, the explanation must plainly be sought in the varied circumstances attendant upon their unfavourable condition in life. With many happy exceptions, the fact will generally be found to be, that the offspring of the lower classes in this country are not only poorly nourished upon the most innutritious kind of fare, but wretchedly circumstanced as to bodily apparel, and night accommodation and clothing. They are brought up in confined abodes, in the midst of filth and impure air, probably rendered more foul by some effluvium of animal or vegetable origin, without being protected from the effects of atmospheric vicissitudes, or the cold and damp of their comfortless residences, incapable, it may be, of excluding wind or rain, and rarely warmed by anything worthy the name of fire. Circumstanced thus, they are commonly found to grow up sickly in aspect, thin, and weakly in constitution, and hence, less capable of effectually withstanding the influence of the frequent chills to which, in all seasons, their condition exposes them, whether accompanied or not by humidity of atmosphere or moisture; a cause, in my opinion, of all the most common in directly inducing the disease. In any circumstances, indeed, I cannot but regard the effect of cold, sufficiently intense and long-continued, especially succeeding to, or accompanied by, exposure to wet, if not properly guarded against, as powerfully promotive of a similar result, the system, at the time, being in a state of depression, or in some way deranged or out of sorts. But Dr. Copland, in a remarkable passage, which I shall take the liberty of quoting to you, appears to break new ground, in reference to the question of causation. "But, having observed it most commonly in situations evidently productive of humid exhalations," he says, "in low, cold, and moist localities; and after exposure to cold after rain, particularly at night or in the morning, or during easterly winds; I am led to infer that it arises most frequently from the same causes as produce other periodic fevers—namely, terrestrial exhalations, or miasmata, and that less intense or concentrated states of these exhalations, than are required to produce agues or remittents in adults, will often occasion the latter in children."* This is certainly a much more enlarged, as well, as it appears to me, more just view of the matter at issue, than seems generally to be entertained. But besides originating thus sporadically in endemic causes, as it certainly more generally does, there is, I conceive, some reason to suppose it to be occasionally the effect of infectious emanations imparted by those labouring under the disease in its severer form. Of all authors, I believe Butter alone, of his own personal knowledge, ascribes the complaint to the influence of contagion or infection, not, however, as an ordinary occurrence, but in periods of epidemic visitations; and there is no practical writer since his day, as far as I am aware, who has advanced any evidence either in refutation or confirmation of the statement. His observation has been merely copied, without note or comment, by more recent authors, from which I am led to infer, that the disease is considered by the profession generally as destitute of any contagious or infectious quality, and that it never springs from this source. But in this view I am by no means prepared to coincide. It is doubtless extremely difficult satisfactorily to establish the contagious character of any disease, the facts in evidence being always hard of access, and even if accessible in the main, subject, some of them, to difference of interpretation. Yet if the presumption at all lays, as it evidently does, there is nothing here surely to damp for a moment the spirit of inquiry, obstacles serving only as an incentive to labour. And it is a question assuredly rife with importance, whether remittent fever, in any form or circumstance, possesses aught of the quality to which the term contagious or infectious conventionally attaches. It rarely occurs to me, on being called upon to visit a case of the disease, to have occasion to mention it to the interested parties accurately by name, not by its misnomer,† without its being followed by the anxious interrogatory, to adopt their own words, "Doctor, is it smittle?" Now, judging from what experience has disclosed to me, it were wrong to answer such a question by an unqualified negative. I never do so, at least, because it would not consort with the right discharge of my conscience. The length to which this communication has already extended, precludes the possibility of going into a detail of the facts on which this conviction, honestly entertained as it is, is grounded; but the following incident, from its more recent occurrence, may be briefly adverted to in this place:—

June, 1846.—Was requested to visit Mary T——, aged four, in consequence of illness, which proved to be a well-marked instance of remittent fever. Her father was a small, but respectable farmer, resident near Lisburn, with a family of three children, of which she was the youngest. Her illness dated back about four days from the time of my then seeing her, and on inquiring into her former state of health, and whether any evident cause could be assigned, it was stated to have

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* Loc. cit., p. 957.

† "Worm fever."

been excellent up to the period of invasion, and that whatever might be the nature of the complaint, it must have been derived from her elder sister, aged about nine years, who was in some measure convalescent from a precisely similar attack. This girl, who appeared to be of a rather delicate constitution, with the possession, previously to her present seizure, of but indifferent health, I had an opportunity at the time, also, of examining, and her condition then, emaciated and still feverish as it was, bore very sufficient testimony as to identity of ailment. The disease, in her case, was found to be of nearly four weeks' continuance, and was induced, it was believed, by incidental exposure to cold and wet. In a fortnight or so after, her brother, aged six years, was brought to me for advice. At the time of my visit, he appeared to be in good health and spirits; but in ten days after, he rather suddenly, without evident cause, exhibited symptoms of the disease. His case was one of some severity, equally with that of the younger child.* Now, in rationally accounting for the development of the affection in the two younger children of this family, it is difficult, I conceive, if not impossible, to exclude the idea of its infectious origin; and, dared I trespass upon your time, I could adduce several instances, equally confirmatory of the proposition for which I would contend—namely, the infectious character, in some degree, occasionally manifested by the disease. However, from its great practical moment, it is a question not undeserving attention, and I shall not myself neglect its further investigation.

From what has now been advanced, in regard both to the causes of remittent fever and its phenomena, varying, as they do, in intensity, duration, and general tendency to one or other of two distinct types,—the simple inflammatory, namely, and the synochoid or typhoid,—the observations to be tendered in this place respecting its nature, inferential in some measure as they are, may be speedily disposed of. Now the questions which this topic necessarily embraces, evidently refer themselves to a consideration, among other points, of the determining causes of the affection, immediate and remote, the character of the leading or distinguishing symptoms, their course and duration, common habitudes or tendencies, and termination, together with the influence of treatment. The reply to the more important of these questions will, in some measure, be found in the statements that have now been submitted to your notice; and if we regard them in the whole, what is the inference to which they point? Obviously, that remittent fever consists not necessarily or essentially in any local affection, be it irritation or inflammation, of the gastro-intestinal mucous surface, or of its glands or follicles, or in a vitiated state of the secretions, whether intestinal or biliary. The celebrated doctrine of gastro-enteritis, or the modification of it, termed dothen-enteritis, as applied to this disease, is merely an egregious fallacy, susceptible of the easiest and clearest confutation. And as to the modified or altered state of the secretions of the alimentary canal, manifested by the peculiar characters of the alvine evacuations, there is certainly nothing in this at all unusual: it is quite common, as you must be aware, in the entire absence of any of the distinctive evidences of the complaint; and it is, besides, a phenomenon equally common to many very different diseases. It is plain, then, almost to a demonstration, that in any explanation worthy our regard, other and more general conditions must be appealed to. Looking to the history of the affection, these seem naturally to refer themselves partly, and chiefly perhaps, to the nervous system of both animal and organic life, and, in part, to that of the circulation. Eschewing, by all means, the repulsive ground of hypothesis, there appears, on the face of the facts, sufficient evidence to prove, that, in dependence on the causes specified, in connexion with the requisite susceptibility of constitution, the ultimate branches of the nervous structure distributed in the skin and mucous surfaces become, after a mode, morbidly impressed, influencing presently, in some degree, the central organs of innervation, animal and organic alike. The extreme arteries, or capillaries, especially of the surface, speedily come to participate in the effect of the deranged condition of the nervous energy, in whatever this derangement may be presumed to consist, and the natural freeness of the circulation there suffers impediment. They become, most probably, spasmodically affected, to adopt, for the moment, the Cullenian doctrine. The certain evidence of this will be found to consist in the feeling of chilliness, with or without pallor, or other modification, in the appearance of the general integument, so invariably experienced in the outset of the disease. In no long time, an opposite condition of the circulation, in this part, is found to obtain. Reaction in the heart and larger vessels occur; the source of impediment to the circulation in the superficial blood-channels either gives way of itself, or is overcome in consequence; and, from the circumstance of the elevation of temperature, always sensible, but sometimes very marked, with some vascularity of the skin, we infer unusual freedom and velocity in the current of the circulation there. Similar phenomena doubtless occur in the digestive mucous surface. But the blood itself may not incorrectly be supposed, sooner or later, to undergo some change in quality, if not in constitution, as indicated by the altered condition of the different secretions and excretions, which always occurs, even in the earliest period of the progress of the disease; and besides being less adapted for fulfilling the purposes it is destined to discharge in the economy at large, it must thus be presumed to impress prejudicially the nervous system generally, which in turn influences unnaturally the arterial. In these morbid actions and reactions, and their recurrence or reinforcement at longer or shorter intervals, with their attendant effects, are, in my opinion, to be discovered the only key to a satisfactory explanation of the principal phenomena characteristic of the affection; and the law of the tendency to periodicity in the symptoms must be referred, as by common consent it is, to some inexplicable peculiarity in the infantile constitution. As to the functional derangement in the prima via and chylopoietic viscera, assuming its occurrence as a constant event, I have my doubts—authorship to the contrary, notwithstanding—of its being much, if at all, in excess, compared, for instance, with common continued fever; and I therefore dismiss it as unworthy particular observation. But whether you may feel disposed to adopt my individual view in this respect as the more natural one or not, the leading fact of the essentiality of this species of fever, for which I would contend, still remains quite unaffected. Its truth in the main receives, if I mistake not, a striking confirmation in the facts that have now passed before us in hurried review. There are very few, I am sure, who pay greater deference to the opinions of others than I do; when venturing for a moment to question any doctrine established by the suffrages of eminent authorities in the profession, it is to me, be assured, a source of very anxious consideration; yet convictions, deliberately formed and honestly entertained, can never be expected to give place to unmeaning formality or wretched subserviency; and, with every becoming respect for such men as Christison,* and others scarcely his inferior in genius or intellectual acquirements, I must for the present be permitted to dissent from the doctrine, as well as the views now animadverted upon, which has for its object the localization of this particular disease. It may, indeed, remain a question for the present as to which of the genera of the (so-called) primary or essential fevers it should more naturally appertain; but that it belongs not of right to those fevers denominated "irritative," I feel, for my part, perfectly satisfied.

A few words, before concluding, with respect to the treatment. The regulating the state of the bowels, if required, and the correcting or improving the condition of the secretions, will in all cases, of course, be a matter of primary consideration. Should constipation exist, I am in the habit of prescribing, with a very satisfactory result, a combination of calomel and hippo in the requisite dose, followed, in six hours or so, either by some castor oil, or infusion of senna containing a little Epsom or Rochelle salts. In a state of relaxation, on the contrary, chalk, with a moiety of rhubarb and some aromatic powder, will commonly be found sufficiently effectual, more powerful astringents being rarely needed. With a view to correcting the depraved state of the intestinal and biliary secretions, I feel a partiality in favour of a combination of grey powder, rhubarb, and calcined magnesia or carbonate of soda, in proportions suited to the age and constitution of the patient, night and morning; and, as a general medicine, the common saline diaphoretic mixture, with antimonial wine and spirits of nitre, in dryness of the skin. A solution of carbonate of soda in simple or aniseed water, with the addition of a little syrup and tincture of orange-peel, constitutes, too, a very excellent general medicine, and one which I frequently

* It should not be overlooked, that this species of proof must be accepted only for what it is worth. It bears on the question of contagion, I admit, only presumptively; but proof presumptive often trenches closely on the domain of more positive evidence. Still it must not be concealed that the fact of contagion is not placed beyond cavil, unless it be proved that the patient can carry the disease to a distance, and then communicate it to persons dwelling in a purer air; for, observes Dr. Fergusson, "in this transportability resides the very touchstone and answer to the question of contagion. To talk of contagion limited to one spot, is merely saying that the spot of ground, and not the person of the patient, must be the source of the disease." ("Notes and Recollections of a Professional Life," p. 167.) As regards the disease in question, I freely admit that this link in the evidence remains as yet to be supplied.

* Vide Lib. of Medicine, vol. i. p. 125.

prescribe. As an external remedy of almost universal application, the warm bath, from its efficacy in restoring the functions of the skin, as well as of carrying off the superabundant heat, cannot be too highly prized. Unfortunately, there exists among the lower orders in this part of the country some unfounded prejudice against its use, which requires always some explanation to qualify or remove; but, in conjunction with appropriate internal treatment, it is not too much to say, that its proper administration is quite invaluable. Most practical writers, I think, have failed in giving it that prominence among the several means of cure to which its claims so justly entitle it. Frequent local sponging, either with cold or tepid water, or vinegar-and-water, is possessed of a very agreeable soothing effect, and should never be neglected. It was my intention at first to have gone systematically and pretty fully into this department of our subject; but I have trespassed at such unusual length upon your indulgence, that I must abruptly draw these imperfect observations to a close. I feel, however, the less concern in this, as your own individual experience, in connexion with the information to be derived from books, will amply supply the defect, if such indeed it be.

## ON A NEW PREPARATION OF IODINE.

SYRUP OF IODIDE AND CHLORIDE OF IRON.

By SAMUEL BATTLEY, Esq., London.

As iodine is at present so extensively employed, and maintains so high a character as a remedial agent, it appears rather singular that some of its most efficient combinations are still so little used. Amongst these, the iodide of iron is one which has not yet attained that rank in professional estimation that its merits claim. This seems in part owing to the process by which the London Pharmacopœia directs it to be prepared, its great tendency to decomposition, and the difficulty of its preservation. The iron possesses a greater affinity for the oxygen of the atmosphere than for iodine, in consequence of which the latter is set free, and when the preparation is exhibited in such a state, the stomach is frequently incapable of bearing what might otherwise prove a valuable tonic. This tendency to oxidation in the iron, and liberation of free iodine, is indeed prevented by using the syrup, the sugar in which has the property of preventing protoxides, protiodides, and protochlorides, from absorbing oxygen, and passing into peroxide, in which state iron exerts but little action on the system.

Practical men, however, have remarked, that the iodide of iron, even when given in the best form, has sometimes failed to produce that speedy and decisive chalybeate influence on the system that other salts do, though in other respects an agreeable and elegant form. This observation is readily explained on reference to the constitution of the salt, in which the amount of iron is less than one-fourth of that of the iodine, the combining proportion of the former being twenty-eight, while that of the latter is 126. As iodine is incapable of entering into combination with a greater proportion of iron, in order to increase the quantity we may substitute another salt of iron, isomorphous in its crystal, and analogous in constitution in the protochloride. These two salts may be mixed in any proportion without decomposition, and thus present an elegant and powerful preparation of iron, while the iodine, by its action on the glandular system and secretory apparatus, tends to prevent that cerebral plethora which the salts of iron, when given *per se*, so frequently induce.

The syrup of the iodide and chloride of iron, which it is the object of the preceding remarks to introduce to the notice of the profession, is prepared by first forming a solution of iodide of iron. This is effected by diffusing iodine in three or four times its weight of cold distilled water, and agitating for ten minutes with half the quantity of iron filings, added cautiously and gradually, when the colour changes from dark purple to a deep green, as combination takes place. The protochloride of iron is next formed, by acting upon iron filings with hydrochloric acid, specific gravity, 1.160. A copious disengagement of hydrogen gas ensues, and continues for several hours, during which the chlorine combines with one equivalent of iron, the fluid becomes neutral to test paper, and we obtain a solution of a green colour, also with a shade of blue. The two solutions are now mixed together, and so much refined sugar added as will form a syrup.

The syrup ought to be of a pale green, representing the protosalts of iron. The proportions of the salts in solution are so adjusted, that each fluid drachm of the syrup contains three grains of combined iodine and nearly four grains of iron, united partly with the iodine and partly with the chlorine. The following formula may afford an eligible mode of exhibition:—Syrup of iodide and chloride of iron, two drachms; syrup of orange-peel, four drachms; infusion of cascarilla, four ounces. Mix for four draughts, one to be taken twice daily.

The syrup of iodide of iron, and syrup of chloride of iron, may be made and kept separately, when they can be mixed in any proportion, according to the amount of iron or iodine the practitioner may wish to administer.

Fore-street, Cripplegate, Jan. 1847.

ON THE

## ELECTRICITY EVOLVED IN RESPIRATION.

By — BOW, M.D., Portobello, near Edinburgh.

In attempts to explain the changes effected during respiration, physiologists take no account of the electricity of the air, notwithstanding it is as much a principle of the atmosphere as either nitrogen or oxygen; indeed, it has been surmised, and that on no slight grounds, that to electricity does oxygen owe its gaseous state. This notion was promulgated in an inaugural dissertation, entitled "De Effectibus Electricitalis Quibusdam, 1820. By Dr. Moran, formerly of the Staff Corps." I remember perusing this thesis at the time with great interest; but had lost sight of it, until it recurred to me whilst reading the article on electricity, in a late number of The Lancet, by Mr. Lake.

Dr. Moran quotes the experiments of others to prove that the oxygen of the air is combined with electricity, and that it affords electricity when its capacity for it is diminished, as in condensation or combination; and therefore, when the combination which is effected in the lungs takes place, electricity must be liberated. The result of experiments instituted by himself proves that recent venous blood, subjected to negative electricity, becomes red, whilst arterial blood, so treated by positive electricity, becomes black; that venous blood, subjected to galvanism, becomes, at the positive pole, blacker and thicker, but at the negative pole, redder, thinner, and spumous.

Seeing, then, that electricity must be liberated in the lungs, and that it does redden venous blood, and that as nearly all the oxygen which disappears is expired in combination with carbon, Dr. Moran concludes that the change of colour is owing to the entrance of electricity into the blood, and the removal from it of carbon. The electricity is carried along with the blood to all parts of the body, and is attracted by the nervous matter within the cranium, and by the ganglionic system, and there becomes nervous power. By entering the muscular fibre, it endows it with irritability; and from the union of the nervous power of the nerves of the capillaries with the electricity of the blood passing through these vessels, animal heat is produced.

The above is a short exposition of Dr. Moran's views; and I think it would be very difficult to disprove that oxygen owes its gaseous form to its junction with electricity, and that, until it can be disproved, electricity should be considered a principle of the atmosphere, and the part it plays during respiration inquired into.

Volta and Read observed, that in expired air the quantity of electricity was constantly diminished compared with that inspired. But listen to Sir Humphry Davy:—Oxygen, in its elastic state, has properties which are very characteristic; it gives out light by compression, which is not certainly known to be the case with any other elastic fluid, except those with which oxygen has entered without undergoing combustion; and from the fire it produces in certain processes, and from the manner in which it is separated by positive electricity, in the gaseous state, from its combinations, it is not easy to avoid the supposition that it contains, besides its ponderable element, some very subtile matter, which is capable of assuming the form of heat and light. My idea is, that the common air inspired enters into the venous blood entire, in a state of dissolution, carrying with it its subtile or ethereal part, which, in ordinary cases of chemical change, is given off; that it expels from the blood carbonic acid gas and azote; and that, in the course of the circulation, its ethereal part and its ponderable part undergo changes which belong to laws that cannot be considered as chemical,—the ethereal part, probably, producing animal heat and other effects, and the ponderable part contributing to form carbonic acid and other products. The arterial blood is necessary to all the functions of life, and it is no less connected with the irritability of the

muscles, and the sensibility of the nerves, than with the performance of all the secretions. I have not marked the above passage as a quotation from "Consolations in Travel; or, the Last Days of a Philosopher," because I find it on a slip of paper written some years ago, and not so marked. I have not now the volume at command; but I believe it is a quotation, and underneath I have written—Sir Humphry is particularly cautious; he would not have us to believe that he thought this subtile matter to be electricity, and nothing, he says, can be more remote from his opinion than to conjecture the cause of vitality.

The modern doctrine imputes the change of colour to the absorption of oxygen gas by, and the removal of carbonic acid from, the blood. "The blood, whilst circulating through the capillaries of the lungs, is divided into an innumerable multitude of minute streamlets, each so small as to admit but a single layer of its corpuscles; and in these, therefore, the surface which is placed in contact with the air is so enormously extended as to be almost beyond calculation. Hence, then, we can at once understand how a change may be instantaneously effected in it, which would occupy several hours, when the blood is less advantageously exposed to the influence of oxygen. (Carpenter.) This view would appear much clearer, could we believe that the fresh air at each inspiration reached the cells. The quantity of vitiated air remaining in the lungs after expiration is not less than a hundred cubic inches, and this must occupy the cells; the change of colour after each inspiration is instantaneous, which must baffle all attempts at explanation by the laws of diffusion of gases. No such objection can be raised to the electric doctrine; for the separation of the electricity from the oxygen may take place in the bronchial tubes, the electricity passing readily through the moist air of the cells into the blood, which, from the iron it contains, is admirably fitted to attract it. The particles of the blood, having become similarly electrified, repel each other, giving rise to a stream which necessarily flows towards the left auricle. Nor does this doctrine interfere with that of the absorption of oxygen. It is now known that the oxygen consumed exceeds that necessary for the production of carbonic acid, so that a part may be absorbed by the lungs.

I agree with Dr. Moran that the electricity which enters the blood in the lungs becomes nervous power, but I would confine the operation of that power to effecting the functions of animal life. I agree, also, with Mr. Lake, that electricity is elicited in the body by chemical decompositions and combinations; but not that that so elicited is carried to the brain, and thence dispensed. I take it, that the electricity from decomposition is of the nature of galvanism or magnetism, and passes to the ganglionic system of nerves, there to effect the functions of organic life.

Some years ago, in a communication to THE LANCET, I supposed that the sympathetic system of nerves was composed of two divisions, the one furnishing contractility to all the muscles of the body, the other effecting the chemical changes in growth and repair. Thus the muscle derives its contractility from organic nerves, but the nerve conveying the stimulus to contraction comes from a different source. Now, let us see how this nerve enters and traverses the muscle:—"The trunk of a nerve and its first branches penetrate between the muscular fasciculi in a tortuous course, the exact direction of which appears indifferent. But the minute filaments on which each branch ends are found invariably to traverse the muscular fibres at a right angle, and at short distances from each other, and then either to return to the same nerve, or to join a neighbouring branch. Thus, a nerve terminates in muscles by innumerable delicate loops; or the nervous filaments distributed transversely through muscular substance communicate equally at either end with the brain or spinal cord. The branches of the portio dura are found to unite by slender twigs with those of the three divisions of the fifth nerve upon the face; and in the tongue the union is equally distinct of twigs of the ninth nerve with twigs of the gustatory. It is remarkable that in many of these familiar instances the junction that takes place is between sentient nerves and nerves of motion."

In this nerve, which enters and traverses the muscle in a direction perpendicular to that of the fibre, and which communicates equally at either end with the brain or spinal cord, I see nothing more nor less than a conducting wire inducing contraction of the muscle, which, in its turn, may be compared to the magnet of an electro-magnetic machine. By the innumerable filaments by which the nerve traverses the muscle, the inducing force is multiplied in the same manner as we multiply the electrical intensity by making our conductors into the form of helices.

In the above quotation from Mayo, it is said to be remarkable, that in many of these familiar instances, the junction that takes place is between sentient nerves and nerves of motion; but I think it would be remarkable were such not the case, for by such junction we become conscious of the state of the muscle.

Portobello, N. B., Dec. 1846.

## Reviews.

*The Moral Aspects of Medical Life; consisting of the Akesios of* Professor K. F. H. MARX. Translated from the German, with biographical and illustrative remarks. By JAMES MACKNESS, M.D. London: John Churchill, 1846. pp. 348.

WE resume, with pleasure, our notice of the interesting work presented to the English reader by Dr. Mackness, of Hastings.

In considering the epistle to Dr. JAMES GREGORY, the *fifth* of the series, we were led to an estimate of the value of classical knowledge to the medical profession, and we gave, and would still give, our voice in favour of science as the *strength*, and the classics and general literature as the *ornament*, of medical education. In writing thus we are not conscious of underrating the value of classical knowledge; it must always be a high indication of culture, and a key to the nomenclature of the medical sciences. But those who set a disproportionate, and indeed unjust, value upon these things, produce in the bulk of the profession, not a general taste for such studies, but a positive contempt for them. And this is a serious injury. In the College of Physicians classical attainments are made of greater importance than either in the law or the church. Candidates for the licence, looking forward to the fellowship, think more of passing a good classical, than a sound medical, examination. Scanty physiology and pathology, decked out in respectable Latin, will stand higher than mere professional excellence, marred by a false concord or fault of prosody. Such manifest injustice produces an unfortunate reaction against polite learning in the body of the profession. The good time, we trust, is coming, when these anomalies will be set right. The tendencies of the medical age are preëminently in favour of intrinsic, in preference to extrinsic, ornament. Ours is the era of poetry of *act*, rather than of *word*. Even the commencement of our prescriptions no longer stands for the ♃, the sign of Jupiter, but for the simple word Recipe: this hieroglyphic has passed from an invocation of almighty Jove into a plain word of action; human skill takes the place of the favour of the immortal gods. We have had our poets and classical authors, and we are proud of them, but diseases would not now be charmed away even by the lyre of Apollo himself: we no longer sacrifice in the temple of the Dea Tussis, like the Romans, or inquire of the oracles of Delphi and Dodona, like the Greeks; but we bow the ear to the pleximeter, and we listen to the voice of the science-inspired tube of the illustrious Laennec, and there is nothing vague or mysterious in the answers of the sibyl. We have no vestal fires to preserve for the good of the commonweal, but to us is given with faithful care to tend and sustain that Hygeian flame first kindled by the genius of Jenner, and already and for ever the ægis of millions. If we might venture on an humble imitation of the peculiar humour of Professor Marx, though our foil may tell somewhat against the argument hid beneath his playful wit, we should insist, that to the medical man, strictly considered as such, glossology is of more importance than philology, and the study of the scapulary regions more useful than turning over the leaves of the ponderous scapula: to the physician, the rhythms of the heart and nerves are harmonies as delicate as the music of iambics, and chorea Sancti Viti is properly the subject of more interest than the preparation of the festive chorus of antiquity; the study of talipes valgus and varus is a higher duty than the scansion of poetic

feet; and it is a better part to make the lame walk, than Latin and Greek verse run, be it ever so trippingly.

The sixth letter is dedicated to ALBERT THAER: it treats of a momentous subject, the abandonment of the medical profession by its followers, and, by implication, also of medical treason and apostasy.

According to Professor Marx, Albert Thaer changed "the doctoral hat for the straw hat of the agriculturist," in the prime of life, and at the pinnacle of his professional reputation, because he failed to realize the ideal excellence he had set before himself in his youth; retiring, from a conscientious distrust of his professional skill and ability, and from a sensitiveness so morbid as to be unable to enter the chambers of the sick without pain and sensations approaching to faintness. According, however, to Dr. Mackness, and according, also, to Körte, the biographer of Thaer, there must be added to these causes a sense of the uncertainties of medical knowledge; a point which opens up to our consideration the whole question of medical scepticism.

In this letter the general constancy of medical men to their profession is contended for. As witness to the truth of this, we believe history might be confidently appealed to; but in the present age, and especially in our own country, there are many in the profession who manifest, if not an open unbelief, a too general tendency to medical doubt and heresy. There are amongst us many reeds shaken by the wind. We wish, rather than believe, the following to be the truth:—

"It is a matter of frequent experience in universities, that students of law or divinity quit their professional studies to choose the study of medicine, but it very seldom occurs that a medical student is unfaithful to his flag."

"How much must usually precede the breaking the bonds of friendship or marriage? One's profession is likewise a sacrament, if not of the heart, of time and mind. Before one can bring oneself to such a parting, the peace of the soul must be endangered, trust broken, and hope irretrievable violated."

Let us examinein to some of the causes of medical scepticism generally, and as it exists amongst ourselves. The study of disease and its cure differs essentially, in many particulars, from that of any other branch of natural knowledge, and this consideration merits the first importance in any justification of or assault upon medicine. For the basis of our art, we have the study of the living body, anatomy, and physiology; as a superstructure, we have pathology and diagnosis; and lastly, therapeutics, or the action and administration of remedies. In each of these departments of our science, it must be granted that great progress has been made. Even in recent times, enough of law, and order, and design, to furnish a new Paley, has been worked out. In the eye is embraced all the science of optics; in the ear, of acoustics; in the animal tissues, chemistry; and in the living motions, mechanics; in the nervous system we have begun to trace the actions of imponderable forces; and respecting the still more hidden phenomena of life and development much has been ascertained. Within the range of anatomy and physiology everything, as far as we understand it, is harmonious and clear. In pathology and diagnosis, also, which include the chief phenomena and laws of disease, we possess a large fund of accurate knowledge. In the majority of cases of organic disease, we can predicate, from the symptoms, the lesions going on within the body; and in a great proportion of cases, a certain number of phenomena being given, we can foretell the changes which are to follow. There can be no surer signs of definite, positive knowledge than these. Then, again, in therapeutics, it cannot be gainsayed that medicine has gathered from the ends of the earth, and from every available science, a great number of appliances and remedies, the objective influence of which upon the living economy, and even upon special organs, and in specific diseases, is well understood. We believe, that by the steady consideration of such truths as these, medicine cannot fail to be in the end justified of her children. Timid men will come to distrust themselves rather than their art. Surely, even now no physician need fear to look his fellow men in the face, because of the suspicion that his art alone is behind other arts in advancing the welfare of his species. We need not multiply examples; but the New World could not have been populated as it is, nor could our own population have increased to their present numbers, or our fens and marshes have become fruitful fields, without the discovery of Quinine; nor could our commerce have covered the globe, nor our naval superiority have extended beyond our own shores, and the home seas, but for the discovery of Citric acid and its curative powers. Before the advent of the one, much of the muscular power now given to the loom and the plough was prostrated by the shakings of ague; while before the knowledge of the other our mariners were forced to pass much of their time basking upon green islands, seeking for anti-scurvetic fruits and juices. We suppose this to be quite sufficient for those who presume to say that our philosophy is at zero, and our practice a system of guessing.

But we must candidly admit the shortcomings of our art, and examine its deficiencies. We fully believe they are not such as to justify the sneers of the laity, or to make the faithful mind either sceptic or renegade. Take a case of disease under treatment, and look at the elements at work, striving each for the mastery; physiological laws labouring to modify the pathological changes, and therapeutic actions striving to influence both, so as to make them subservient to recovery. Watch, for instance, a case of severe local inflammation of the intestines. Pathology, taking its departure from physiological conditions, may destroy the intestine, but in effecting the destruction, lymph, possessing physiological properties, is thrown out, and this unites the diseased intestine to the abdominal parietes, so that, if pathological action goes on, the intestine bursts, not into the peritonæal cavity, which would be fatal, but externally, which is not incompatible with life. And what does therapeutics attempt in such cases? It endeavours to prevent the extreme pathological and physiological changes, so that there shall neither be death, adhesion, nor perforation of the intestine; and failing in this, it comes in subsequently in a surgical form, as in that beautiful operation devised by Dupuytren for the cure of artificial anus, and the restoration of the natural channel, in which physiology and pathology are both invoked. In such cases, the different phenomena are tolerably simple. We can understand the pathological, physiological, and therapeutic changes, and the termination in health or death, according as either element obtains the mastery. However, in more complicated cases, affecting many organs, or even the whole economy, the principles of life, and death, and cure, wage a more mysterious struggle; we can see some signs of order and law at intervals; but it is almost as difficult to separate and trace the elements of the different actions in their progress, as it would be to trace the separate forms of a number of serpents coiled and moving together. This is enough to shake the courage of any fearful mind, and can only be removed by reference to the simpler cases, the alphabet of our art, where our knowledge and our power are indubitable, by remembering that advances are constantly being made into the darkness that lies before us, and by considering that the cases in which the accomplished physician sits hopelessly by, are few in number, even at the present. There is no problem in the physical world so complex, no path so labyrinthine, as that the physician has to solve and tread; hence it is scarcely wonderful that some should shrink from the effort and the responsibility, as dreamers shrink from an ocean of numbers or space.

Some authors, who assume to be philosophical, talk and write a great deal about Nature, and with as much consequence as though they had specially been taken aside and admitted within the veil. With them, physiology is Nature, pathology is Nature, therapeutics is Nature; and they sum up all in the *vis medicatrix Naturæ*, as the great healer of diseases;

human knowledge and human skill being made to play a very humble part in the matter. And these writers, calling disease Nature, tell us of the fixed laws which disease follows, and of the respect we should pay these laws, as of divine ordinance, our province being, as they say, never to oppose and thwart, but servilely to step after and wait upon them. And if we dare to do more than this, that cant of an older ignorance is levelled against us, and we are straightway accused of infringing on the prerogatives of the Deity. Formerly it was held to be blasphemy by the ignorant that we disappointed *Nature* of a disease; now, the learned seem to have taken the same ground. Doubtless it was the intention of Nature, if disease be Nature, that we should all have small-pox; but the time is gone when even the vulgar complain of "presumption," because the law of Art has thwarted the law of Nature and stayed the virulence of the malady. The following are the opinions of one of the most eminent of this school of writers, Dr. Andrew Combe:—

"We must be profoundly impressed, or I may say *saturated*, with the great principle or truth, that all the operations and actions of the living body, whether healthy or morbid, take place according to *fixed and discoverable laws*, and that God has left nothing to chance. With this grand fact before us, it becomes palpably evident that we can do nothing rational, in the way of either prevention or cure, except in so far as we act in accordance with these laws. Many medical men have, however, a very different impression from this. A good physician will always seek to be, and never aim at being more than, Bacon's '*servant and interpreter of Nature.*' A greater than he created man and ordained the laws of his being, and no surer road can be found than that traced by the hand of his Creator. Overlooking this truth, and viewing disease as an entity ungoverned by any definite laws, and not destined to run through any definite course, many medical men talk as familiarly of *their* 'curing' and 'arresting disease' as if they had an absolute control over the whole animal functions, and could alter their laws of action at pleasure. *To my mind, no clearer proof of presumption and philosophic ignorance can be found than this usurpation of the prerogatives of Deity; and its results are often very unsatisfactory.*"*

"In all cases and on all occasions, *Nature is truly the agent in the cure of disease; and that, as she acts in accordance with fixed and invariable laws, the aim of the physician ought always to be to facilitate her efforts, by acting in harmony with, and not in opposition to, those laws.* Disease, as already remarked, is a mode of action of a living organism, and not an entity apart from it. In accordance with this view, experience shows that when we favour the return to a normal action by simply natural means, recovery will ensue, in most cases, without the use of drugs at all. So far from being always necessary to a cure, drugs are required only where the power of Nature to resume her normal action proves inadequate, or is impeded by a removable obstruction. Even then it is still Nature acting in accordance with her own laws that brings about the cure. She may be *aided*, but *she ought never to be thwarted;* and medicine will advance towards the certainty of other sciences only in proportion as we become saturated with this guiding principle."†

As far as there is any precise meaning in this passage, it inculcates great respect for the natural progress of disease, and great delicacy on the part of the medical man in interfering with any of its phases; and it assumes, that to attempt at "curing" or "arresting" disease, as is the good habit with many of our brethren, is a crime amounting to "usurpation of the prerogatives of Deity." Incalculable mischief would flow from such pseudo-philosophic twaddle if it could ever enter the minds of medical men generally. Doubtless there are cases in which a disease runs a certain definite course, as in the mild exanthemata, where gentle guidance is all that is proper or required; but to make such a generalization respecting disease as a whole, is a very "mid-summer madness." Such, however, is the way in which some reputed thinkers have, by the aid of Nature, edged themselves off to scepticism in physic.

This respect for Nature, as seen in disease, is not new; the illustrious Sydenham's first aphorism, in his essay on acute diseases, is to the same effect. He writes—"A disease, in my opinion, how prejudicial soever its causes may be to the body, is no more than a vigorous effort of Nature to throw off the morbific matter, and thus recover the patient." We must be cautious how we let even such an authority as Sydenham bias us unduly on so vital a point, seeing that the tendency of such doctrines is towards a total medical scepticism. The argument was natural in the time of Sydenham, when there was, strictly speaking, but little physiology, and no pathology; it was one of the theories upon which he hung valuable facts, as precious jewels are often strung upon the meanest threads.

By the term Nature, the elder medical writers meant a very comprehensive agent. It was the anima, the archæus, which presided over every operation of the living body, from conception to death, whether for good or for evil tendencies. And in the form of scepticism which we wish to illustrate, much the same meaning is forced upon this term. We are told in so many words, that Nature is disease, and disease Nature, and that she is all-sufficient, or sufficient but with slight aids, to the cure of her diseases. We are minute on these points, because we believe it will be a serious mischief if even one medical practitioner should be led to look on disease as a friend rather than as a foe, and as having resources for purposes of self-rectification far beyond any which medicine can bring into play.

Now, as regards the propriety of allying physiology and pathology together, under the term Nature, and treating her as a benign power always working with regularity and attempting the safety of the individual. We would say of physiology, that it embraces all the functions and powers of life, nutrition, and strength. Physiology includes all the operations of the vis vitæ, and the vis formativa, by which organic and inorganic matter are drawn, in opposition to physical laws, into the living organism, and appropriated to the healthy support of all its organs and functions. We would say of pathology, that it includes all the phenomena occurring within the living body, as the result of the vis necatrix, a principle of decay within the living body as evident as the vis vitæ, being acted upon by physical and psychical causes, so as, in the end, to produce the inevitable destruction of the body either by disease or slow decay. Physiology, then, if what we have said be correct, is synonymous with *life;* pathology, with *death;* the one is health, the other is disease. Physiology builds up, pathology destroys; physiology is busied in elaborating the healthy animal tissues; pathology works, it is true, in a definite way, but it is to produce morbid elements, such as pus, or tubercle, or melanoma, which are directly antagonistic to health.

In disease, as we have already said, there are attempts visible enough on the part of the economy to preserve itself. But all this sanative action is physiological action. There is, too, in all diseases, an attack on the integrity of the body, and all this destructive action is pathological. So, since that

"——— mortal taste
Brought death into the world"—

hath it ever been. The unerring tendency of pathology is to the destruction of the living body. It is mischievous, therefore, to class physiology and pathology together, under the term Nature, as one benign influence. Nature, as far as she is curative, as far as she deserves the title of *vis medicatrix Naturæ*, is purely physiological, either acting in the ordinary manner; or physiology, acting under the new circumstances induced by disease, just as in experiments we place physiological actions under new conditions. From that Nature, then, which may be made synonymous with Hygeia, we must exclude *all* pathology; and though pathology be as *natural* and inevitable, under certain circumstances, as health, *we must not hesitate to thwart and oppose it to the utmost, and without any fear of coming under the ban of interference with the ways of Providence.* The true place

* British and Foreign Medical Review, April, 1846—509, 10.
† Loco, cit., p. 519, 20.

for the serpent-rod of Esculapius is between life and death, to give support to the one, and opposition to the other, with all the wisdom and strength of which it is the emblem. So much, then, it seemed necessary to say respecting the misuse of the term Nature, as a lure towards professional scepticism.

The *seventh* letter of the series appeals to Dr. Lettsom: it treats principally of toleration, of quackery, of the public recognition and reward of great medical services, and of medical history.

Medical toleration comes very appropriately to be considered after the subjects of medical scepticism and secession. That Professor Marx considers some limit must be given to professional latitudinarianism would appear evident by his immediately passing from an eulogium on the liberality of Lettsom in matters of religion, to a warm commendation of him, because he contended for true medicine against quackery. Yet the author of the "Akesios" would seem to approve the doctrine of Reimarus, the discoverer of the use of belladonna in dilating the pupil, who maintained that no restrictions or penalties should exist to deter unqualified or ignorant persons from the pursuit of medical practice. The same idea is pursued in this country by some medical and some non-medical persons, and by the whole herd of charlatans; the watchwords of the motley crew being, "No medical monopoly," "Free trade in physic," "The medical liberty of the subject," and so forth. If such cries are worth answering, the answer is easy. There exists no such thing as "medical monopoly," there being no limit to the number of medical men, and no bar to the introduction of medical knowledge from any part of the world. Science is cosmopolitan. In reality, medicine is in pretty nearly the same state as in the days of chivalry, when a learned degree was equivalent to knighthood, and the diploma of the physician, like the golden spurs of the knight, passed current *ubique gentium*. It tells forcibly upon this point, that the very last physician elected to the Fellowship of the College of Physicians—Dr. Baly—is a graduate of Berlin. When foreign degrees are complained of, it is not as foreign but as incompetent degrees. Formerly, as is well known, the utmost laxity prevailed, both at home and abroad, respecting diplomas. The medical mind had become so dead and leaden, that what we now consider criminal passed as matter of course. Even the excellent Denman, father of the present Lord Chief Justice, in his graphic memoir of himself, says, with the utmost simplicity:—

"I then (1764) came to London, and lodged at Mr. Norton's, a surgeon and apothecary in the Strand, with whom I also boarded. I attended dissections and lectures in anatomy, and began to think it might be useful if I took my degree as M.D., and got a diploma from the University of Aberdeen, on the recommendation of Dr. Kelly and Dr. Kirkpatric."

As though the M.D. was as easily procurable as a baptismal name at the font; sponsors and fees being the only essentials.

We have now, however, a natural horror of degrees which may be purchased for mere money, the parchment and the title being as much a matter of merchandize as the grossest articles of trade. The traffic in medical degrees, happily banished from this country, but still existing in Germany, where degrees may be had for money, and in some of the Italian universities, where a handsome present of food forms the chief requisites—this traffic is, we say, to the medical faculty, what the sale of Indulgences was, in the dark ages, to the church; quite as vicious and quite as censurable. With respect to "free trade in physic," it would not be freedom, but tyranny, to force the regular physician, or the surgeon, to even a Poor-law Union to be legally and highly qualified, while the ignorant empiric should be allowed to attend the rich, without any qualifications save those of impudence and presumption. "Medical liberty of the subject," too, strictly analyzed, is merely the horrible assertion, that any man ought to be allowed to call himself surgeon or physician, and poison or assassinate his fellows *ad libitum*, so he but commit his crimes under the pretence of treating their diseases. For medical men to sanction unqualified practice is little else than fraternizing with knavery. We may truly say to the proposition of Reimarus, that if paralyzing the irides admit light into the eyes of the blind, paralyzing the portals of the profession would only admit darkness and confusion of the most deplorable kind.

Of quackery, having laboured and intending to labour hard for its discouragement, we feel some right to speak. Dr. Lettsom's example was, indeed, a noble one. Would that we could have him amongst us again. When shall we see another man, high in practice, giving himself with energy to the defence of his profession and his brethren against this Briarean monster! The men of our time, who fill the high places of medicine, are sadly degenerate; yet we have no doubt Lettsom looked forward with a belief, that every generation of medical advance would render quackery more impossible and degrading; instead of which, there has recently been a hopeless yielding to quackery as to an inevitable and incurable evil.

Let us examine into the source of this anomaly. Time was when medical practice consisted entirely of the recognition of symptoms, or sets of symptoms, grouped into diseases, and of the influence of therapeutic means in relieving or exaggerating them,—the whole of such knowledge being of a purely empirical character. Hence it was that certain compounds, medicaments, or nostrums, were the *idola* of the older physicians. After the philosopher's stone had been given up, men still thought Nature held hidden within her bosom specific remedies for all diseases, and it was considered the duty of the physician to search and find them out. Even Sydenham confesses to have spent some years in this kind of labour; but with so little success, that he deemed it prudent not to communicate the results to the world. The feeling still blindly lives on with a few medical men even in the present age, and the system of quack and patent medicines is the hideous fabric in which its relics are now preserved. That some remedies should be made out in this way was as natural as that the alchemists should, in their mysterious antics, make some real chemical discoveries; hence several nostrums thus derived usefully remain in our pharmacopœias; but that medical men should now pursue the same paths, and foster in any way such empiricism, is not less extravagant and absurd than it would be for chemists to return to alchemical spells and manipulations. We desire to produce such a revival of professional feeling, that all vestiges of this barbarity may be rooted out from amongst us. The Mithridatic formula, containing more materials than we have chemical elements, was not more absurd than is the prescription of the present day which contains a quack medicine, whether it be pulvis Jacobi or pilula Morisoni. Medical men ought neither to testimonialize quack medicines, nor prescribe them, nor become proprietors of such things. Yet all these faults really exist. Physicians sin after this manner, and they meet a singular reward. Pythagoras taught that the souls of men entered the body of inferior animals after death; and quackery, by a moral Pythagoreanism, so soon as one of our eminent men dies, seizes his name and fame, and attaches it to some vile nostrum or other for public advertisement.

Medical men ought to know of no such things, and to suffer no such things, as quack medicines. The profession and the public ought to be defended from ignorant and unqualified practitioners, and this defence should be the national fee to the profession, to let all its discoveries be open and for the good of all. In ordinary cases, men who make improvements must be satisfied with this and the fame and professional reputation thence accruing. It is most preposterous that a therapeutist should acquire any special right or property, when there is no possibility of patenting or reserving mental treasures of equal and far greater importance. Only fancy Harvey attempting to make the circulation his own property, or Jenner taking vaccination to the patent office,—such things

would be absurd; and yet a clamour is continually being made about a patent for some extract, solution, or residuum, as though the very rights of property were involved in its preservation intact. We say that, in ordinary cases, professional privileges are the legitimate rewards of discovery, and in extraordinary cases, there should be special rewards from the state and public bodies, and these rewards should neither be as few nor as niggardly as heretofore.

The last point treated of in the letter to Lettsom is, medical history; and here everything remains to be accomplished. A history, not of books nor of men; of countries, or of schools of medicine; but a philosophical history of the ideas which have been age after age evolved and made definite by the medical mind, would be of incalculable benefit to medicine. We want the same philosophic light thrown upon our professional life as that which has been thrown in recent times upon general history, and which has made it scientific instead of didactic, a detail of the functions, instead of the facts, belonging to the human race. We want medicine treated as one great whole, from the votive tablets in the early temples of Esculapius to the latest pages of Science. Then we are convinced that medicine would prove to be a fabric of fair if not of perfect proportions; its outline presenting proofs of symmetry, and its organs performing appropriate functions; all being animated by scientific ideas as by a soul; and then we are persuaded it would appear plain also, that its various imperfect institutions, its fleeting theories, and its temporary systems, were but as excreta, mean and worthless in themselves, but necessary for the health of the body medical, and indications of progressive growth and nutrition from facts and conceptions becoming more and more perfect in every succeeding generation.

## Medical Societies.

### WESTMINSTER MEDICAL SOCIETY.

Saturday, December 12, 1846.—Mr. Hancock, President.

CASE OF STRANGULATION OF A PORTION OF THE ILEUM, FROM A CONGENITAL BAND OF FIBRES PASSING FROM THE APPENDIX CÆCI TO THE MESENTERY.

Mr. Marshall stated, that cases of strangulation of the intestine were comparatively of rare occurrence, one or two only being related previous to the commencement of the last century. Cases of intus-susceptio, however, were much more frequent. This might be inferred from the numerous specimens in most museums of pathological anatomy in this and other countries. Dr. Copland was the first who had treated the subject systematically. Mr. Marshall proposed to divide cases of strangulation into two kinds—viz., those arising from a band or bands of lymph thrown out during inflammation of the peritonæum, and remaining quiescent, so to speak, until a fold of intestine becomes incarcerated by these bands. The second kind consisted of those arising from adventitious bands, produced by a prolongation of peritonæum, or mesentery, as in the following case, which occurred to himself:—

Mrs. O——, twenty-four years of age, a woman of good constitution and healthy aspect, in the eighth month of her first pregnancy, was seized on Saturday morning, March 21st, with severe pain, extending over the whole of the belly, of an intermitting character, becoming aggravated at intervals, varying from a quarter to half an hour. The pain was accompanied by sickness and vomiting; but there was little or no tenderness on pressure on the abdomen. Pulse 80; skin moderately cool; the bowels had been acted upon by a dose of castor oil taken some hours previously. This woman had had twice or thrice during the time of her pregnancy similar attacks of pain; but described them to be of a more severe nature now than on any former attack. A grain and a half of opium was administered, together with a carminative mixture. In the evening the pain had somewhat abated, and the vomiting nearly ceased.

22nd.—She had slept very little during the night; the pain was as severe as yesterday morning, with shorter intervals of intermission, and the sickness and vomiting returned. Opiates were continued at intervals, and a saline effervescing mixture, together with aperients, and fomentations to the abdomen. In the evening, the pulse was upwards of 100; slight distention of the bowels from flatus, and the breathing became rather quick. An enema was administered, and followed by a copious and healthy evacuation. The thirst was now considerable.

23rd.—She had passed another restless night, with general aggravation of the symptoms; the pulse had increased in frequency to 120, and full; the breathing became extremely hurried, the thirst intolerable, and the countenance anxious. Sixteen ounces of blood were abstracted from the arm, which greatly relieved the difficulty of breathing. The pulse became small and weak after the bloodletting, but was not diminished in frequency. A grain of calomel and half a grain of opium were now ordered to be given every four hours, and the saline effervescing mixture continued. The glyster was again repeated, but no fæcal evacuation followed.

24th.—Ten A. M.: Had vomited a considerable quantity of a dark-green fluid during the night, but not possessing any fæcal smell. The pain was somewhat abated, but was still general, and not local. A state of collapse soon followed, and the patient died in about four hours after, and about eighty-six hours after the time of her being first attacked.

*Post-mortem examination, twenty-four hours after death.*—The abdomen was found much distended by gaseous matter; a considerable quantity of fluid escaped on making the first incision into the abdomen. The gravid uterus was found occupying the lower part of the abdomen, extending upwards to the umbilicus. The transverse arch of the colon towards the right iliac fossa was considerably distended; a portion of the ileum, in an abnormal position and highly inflamed state, was found strangulated by means of an adventitious band formed by the peritonæum, and extending from the appendix cæci about its middle to a separate part of the ileum superiorly. A space was thus formed, large enough to admit the thumb, through which the strangulated portion of the ileum passed, about eighteen inches of which, doubled on itself, were thus enclosed. On examining the degree of tightness with which the band pressed upon the ileum, it gave way under the finger, but had been tied again by a thread, and could be examined in the preparation which was before the Society. On a minute examination of the strangulated ileum, the whole of the coats were found highly congested, and pervaded in their entire length by a dark colour, indicating a near approach to gangrene, although no solution of continuity and softening was observable in any part of the tissues. Immediately to the right of this ligamentous band, a portion of the peritonæum was observed, passing from the cæcum itself to the ileum, forming a pouch by its curved free border, into which the finger for about two inches could be insinuated. Mr. Marshall thought it difficult to assign any cause for this displacement of the ileum, but that it probably arose from the gravid uterus having displaced the small intestines, and that during an effort to expel the fæces the strangulation took place, or that some mechanical violence had been the cause; for it was stated to Mr. Marshall, that about a fortnight previous to this last attack of illness, her husband had thrown a large book at her, which struck her on the abdomen. As to remedial measures, Mr. Marshall said there were none, except such as are offered by an operation, which the profession seemed now to regard more favourably than formerly, more especially since the numerous successful operations for ovarian dropsy; but he thought the cases scarcely parallel, for in the one instance we have a disease in which a sure diagnosis can be formed, whilst in the other, a very doubtful one is all that can be arrived at. Dr. Copland, however, was inclined to believe that a tolerably accurate diagnosis could be made, in most cases of intestinal strangulation, by means of percussion, as the sound emitted by the strangulated portion of the bowel would be sufficiently indicated by dulness; and that the diagnosis would be strengthened, if there were pain, accompanied by tenderness on pressure. Mr. Curling, in his case read at the Medico-Chirurgical Society last week, was inclined to cut down on the stricture; as was likewise Mr. C. Hawkins. Mr. Marshall considered mercury, in its crude state, in cases of intus-susceptio, a very questionable remedy; but in cases of strangulation wholly inapplicable: that he once witnessed the exhibition of it to a patient labouring under intus-susceptio, and that the greater part of it was immediately vomited up again, with excruciating agony to the patient.

Dr. Snow considered it a congenital malformation, as there were no signs of old inflammation, and but a very little recent lymph. The appendix was adherent by a mesentery of its own, leaving an aperture through which the thumb could pass. The strangulation, however, was caused by a separate band. In the "Mémoires de l'Académie de Chirurgie," he found a case exactly resembling this, where a band three fingers'

breadth long, and one inch from the cæcum, was attached to the appendix and the mesentery. He thought that the pushing of the uterus may have caused the bowels to become strangulated; and this he considered borne out by M. de la Faye, (vol. iv.,) in whose case strangulation was brought on by change of posture. The man had had several attacks of pain previous, which were probably owing to the bowel becoming strangulated for a short time. Dr. Snow then showed the impropriety of active purging in cases where suspicious pains have existed before. At the *post-mortem* of Mr. Marshall's case, the uterus had to be opened before the seat of strangulation sould be seen; the colon was turned over; the ilium lay on the outside of it, requiring the parts to be reversed, after the band was broken, before they could be placed in their proper position; the tongue was red and dry; the mucous membrane of the stomach a little softened. He then mentioned a case where the appendix vermiformis was found with a mesentery attached to it, in an embryo; another, where the cæcum and appendix were both found in an umbilical hernia; and a third case where the appendix was in the pelvis.

In answer to a question by Mr. Brooke, Mr. Marshall said that the pain in his case was general, and not at all local.

Mr. Brooke mentioned, that in the case narrated by Mr. Curling elsewhere, the exact spot was pointed out by the patient himself. At this spot, there was great tenderness on slight pressure; but nowhere else could any tenderness be found. Hence it was argued that the seat of injury was near the surface, and that in consequence an operation might have been performed. He had attended a cabman, who, having fasted all day, ate a hearty supper of cold potatoes, with some bacon; in the night he felt pain in one part of the abdomen, to the left of the umbilicus. His symptoms were those of indigestion. About forty-eight hours subsequently, stercoraceous vomiting came on. The large intestines were completely washed out by enemata, yet the vomiting and thirst continued. He died on the fifth day: the pain had much subsided the day preceding; he got out of bed, was taken in a collapse, and died. An examination of the body proved the injury to be in the spot where he had felt the pain—two inches of intestine had slipped under the cæcal appendage, just enough to prevent the passage along the bowels, but to stop the circulation. In this case the operation might have been performed; but generally there is too much distention and unsatisfactory indication of the spot. Could he have known then what he now knows, he would have performed an exploratory operation, using the same precautions as to temperature &c. that Dr. F. Bird uses. Mr. Brooke then stated the question to be—Is not a surgeon called upon to operate, if the indications of the seat of injury are probable?

Mr. Clarke remembered a case of Mr. Bryant, of Kennington, where there was internal strangulation, and the pain was quite local, and therefore a case fit for operation. But the questions to be solved first are, is it strangulation or intus-susception? and, what symptoms justify an operation? He doubted if the remarkable dulness on very careful percussion could be found in one spot only, in many cases, as advocated by Dr. Copland: the operation would generally be a *dernier ressort*, and not performed soon enough to save life.

Mr. Norman would not trust too much to local pain, until there was a diagnosis of the various sources of obstruction to the intestines. In a case he had seen, the intestines were bound closely together by old inflammation, causing a gradual stricture.

Dr. Chowne doubted if the attachment to the appendix was congenital, as adhesions take place very often, as is exemplified by adhesions of the ovaries and Fallopian tubes. He then narrated the following cases, illustrative of the formation of bands across the abdomen:—A man died after eleven days of constipation, a film being thrown out over the intestines. One of them becoming swelled, bursts through this film, pushes it aside, and rends it so as to reduce it to a band. This man had no pain during eight days, referrible to any part. No effect was produced on his pulse, or on his countenance; only there was constipation. He then became seriously ill.—Another patient had had no other symptom than constipation for six or seven days, who died about the 10th. Dr. Chowne felt assured that pain would never show us the seat of injury. Percussion was fallacious, from the abdomen being everywhere inflated. There are cases, also, in which, at the point of death, the bowel becomes disentangled, and recovery takes place.

Mr. Hancock considered the condition of the patient, in strangulation of the bowel, to be worse than in disease of the ovary, therefore the operation would not be so successful. He then related the following case:—A gentleman ate profusely: he took some castor oil, and his bowels acted well, yet he got worse. Mr. Hancock then saw him, and recommended venesection, calomel, and opium. He heard nothing of the patient for eight or nine days, when he found him in collapse. For two or three days he had vomited stercoraceous matter. Suspecting the existence of hernia, he examined him carefully, and found a hardness in the left iliac region. He made an opening over the inguinal canal: from the peritonæal cavity came forth several ounces of pus. The gut was quite black, and nearly mortified. He made an incision, and several pints of fæces passed. The patient revived instantly, but died twenty-four hours after. No post-mortem was allowed. He would not open the abdomen at all, except to save life.

Dr. Coley asked what was the best time to operate. In collapse, a fatal result would probably follow. In a case which during a fortnight showed no urgent symptoms, the pulse not being more than 100, an artificial anus was made in the sigmoid flexure, and life prolonged six months. He thinks there is no risk in abdominal incisions, if the patient be in good health at the time.

## PATHOLOGICAL SOCIETY OF LONDON.

December 21st, 1846.—Dr. Copland in the Chair.

Dr. Garrod, Dr. Hudson, Dr. M'Intyre, Dr. Protheroe Smith, R. Barnes, Esq., E. E. Baron, Esq., H. C. Curtis, Esq., John Dalrymple, Esq., H. C. Johnson, Esq., John Marshall, Esq., — Sharpe, Esq., C. Walsh, Esq., R. Wollaston, Esq., were elected members.

Dr. Clendinning exhibited a specimen of

### HÆMORRHAGE CONFINED TO THE SPINAL CANAL, WITHOUT ANY WELL-MARKED DISEASE OF THE CEREBRUM OR CEREBELLUM.

This specimen was taken from a man of intemperate habits, aged thirty-three, who was admitted into the Marylebone Infirmary on Nov. 22nd. On admission, there was observed coldness of the surface, weak but regular pulse, dilated pupils, and general prostration. Shortly before admission, while in a public-house, he suddenly leaned back on his seat with a vacant stare, losing all consciousness. The usual treatment for apoplexy was adopted without effect, and he died on the third day after admission. The post-mortem was made thirty-seven hours after death.

The cerebral arachnoid and pia were firmly adherent in the median line to the anterior portion of each hemisphere; a small part of the cortical substance, opposite the cribriform plate, appeared softer than natural, accompanied with slight congestion of the corresponding medullary portion; about two ounces of clear fluid in the lateral ventricles. The spinal arachnoid cavity was posteriorly filled with fluid, dark coloured blood; there were, however, a thin coagula on parts of the cords and membranes, which were generally stained deeply red. One lung was congested inferiorly. The heart weighed eleven ounces and three quarters; the liver weighed sixty-five ounces; and the kidneys were double their normal weight. The spleen weighed five ounces and three quarters; the stomach was normal. Dr. Clendinning remarked that the following positions might be hazarded in reference to this case:—

1. That it was a case of comatose disease of the apoplectic class.
2. That the coma was produced immediately by the cerebral congestion.
3. That the existing cause of the coma was probably the liquor he had taken.
4. That the remote causes were hypertrophy of the heart, and intemperate habits.
5. That the spinal hæmorrhage should be regarded as a complication rather than a cause of the coma.

Dr. Copland remarked, that affections of the spinal cord had of late been very frequent, and that he had had in his own practice three cases within a very short time.

Mr. Nathaniel Ward then read a communication, accompanied with drawings, from Dr. Letheby, on two cases of poisoning. The following are the particulars of the cases:—

### POISONING BY SULPHURIC ACID.

Case 1.—On Monday, Dec. 29th, 1845, a boy, aged nine, was admitted into the London Hospital, under Dr. Little, suffering from the effects of oil of vitriol. He was at play in the street, when a strange boy gave him a teaspoonful of it to drink; he swallowed about an ounce of the acid, and was instantly seized with excruciating pains in his throat and stomach. He

ran home, and, according to the father's account, looked as if somebody had been smearing his lips with white paint. He was carried as quickly as possible to a neighbouring surgeon, who administered a great quantity of chalk and magnesia; five minutes, however, must have elapsed before anything was done. His father then brought him to the hospital, and he became very sick, throwing up a quantity of brownish matter, from which the chalk readily subsided, leaving a supernatant liquor, strongly resembling porter; it was chiefly mucus, charred by the sulphuric acid. He appeared to be suffering a great deal, the countenance was anxious and deadly pale, the extremities cold, and the pulse scarcely perceptible. Under active treatment he rallied, and in about seven hours fell into a quiet sleep; he passed a very comfortable night, and got out of bed twice to void his urine. In the morning, the countenance still looked anxious; he complained of pain in his throat and stomach, though it was not increased by pressure; the lips were swollen, and surrounded by reddish-brown scabs, the effects of the acid; the tongue also was covered with a pearly-white epithelium, which had already began to peel off from its sides, (as illustrated in the drawings;) the skin was hot and dry; the pulse 132, hard, and jerking. He was ordered albuminous food, and two leeches were applied over the top of the sternum. This febrile condition lasted for four days, the skin remaining hot and dry, and the pulse quick and jerking: during this time he was copiously salivated, and he spat up a great deal of white, shreddy epithelium; the urine was high-coloured and increased in quantity, while the bowels remained obstinately constipated. On the fifth day, an active purgative relieved them, and from that time he gradually got well. The urine which he voided during the first four days of his illness was submitted to chemical analysis. Its quantity was greater than natural, it had a deep-red colour, a strong acid reaction, and a specific gravity varying from 1046 to 1030; it did not contain the least trace of albumen, but held so much of the triple phosphates in solution, that on neutralizing with ammonia they were thrown down in the form of a copious white precipitate. On testing for sulphuric acid, there was found, on the first day, a quantity equal to sixty-two grains of the strongest oil of vitriol; on the second day, forty grains; on the third day, 18.3 grains; and on the fourth, the equivalent of 12.7 grains. The urine was not examined on the following day, but on the sixth it had again become natural. In all, therefore, 133 grains of monohydrated sulphuric acid were thus got rid of—a quantity which is about equal to an ounce and three-quarters of the dilute acid of the London pharmacopœia.

The case offers the following peculiarities:—

1. That he should have recovered after the poison had remained so long on the stomach.

2. Its detection in the urine shows that the acid had been absorbed.

3. Its action was almost entirely local, the only constitutional symptoms being a little fever with copious diuresis.

4. That the duty of getting rid of the poison rested with the kidneys.

5. That as much as, or rather the equivalent of, 133 grains of the strongest oil of vitriol should be permitted to circulate with the blood of a child nine years old without producing any very dangerous consequences.

POISONING AND DEATH FROM ARSENIOUS ACID.

Case 2.—Harriet T——, aged nineteen, a robust, healthy girl, took, on Tuesday night, Sept. 1st, about two ounces of fly-water containing two grains and a half of white arsenic. It rendered her somewhat restless during the night, producing watchfulness, and a slight pain in the stomach. In the morning, she became sick, and complained of great thirst; the pain of the stomach also had become much more intense. In the course of the day the sickness increased, and she was repeatedly purged, her countenance looked pinched, and the extremities became cold. From this state, however, she soon rallied, and on Wednesday night she became cheerful, and slept comfortably, though she was disturbed once or twice by the thirst, which still distressed her. On Thursday morning she was worse, being cold and drowsy. Her mother now sent her off to the hospital, but it was found to be too late for medical help; she was evidently in a dying state: the countenance was pale and anxious, the extremities cold, and bedewed with a clammy perspiration; the pulse was hardly perceptible, and she lay in a state of incipient coma. When roused, she spoke of what she had done, and seemed conscious of her danger. From this time, (nine o'clock,) she became more and more comatose, and at twelve she gradually sank, dying about thirty-six hours after the administration of the poison.

*The body was examined twenty-one hours after death.*—The *brain* was found to be very much congested, and the lateral ventricles filled with half-coagulated blood. The *lungs* were natural; the *heart* flabby, and distended with dark jelly-like blood. On the endocardial membrane, especially where it covered the auriculo-ventricular valves, there appeared a number of hæmorrhagic spots: this was illustrated by the drawing. The abdominal viscera were somewhat congested, particularly towards the region of the pelvis. The *stomach* was pale, nearly empty, and its mucous coat raised by a number of vesicles containing air. Along the pylorus it had acquired a distinct gamboge tint—an effect which was in all probability due to the formation of a sulphuret of arsenicum. The tissue of the stomach was examined chemically, and it gave unequivocal evidence of the presence of arsenic in it.

Without commenting on this case, I will merely refer to a few points which may be of some interest to the medical jurist:—

1st. That two grains and a half of arsenious acid should be sufficient to cause death. I believe that this is the smallest fatal dose on record.

2nd. That the operation of the poison should have been so slow; for the fatal symptoms did not appear for more than twenty-four hours after its administration.

3rd. The local symptoms were very slight; death appeared to result from coma, coagulated blood being found within the cavities of the ventricles.

4th. The ecchymoses on the valves of the heart, as mentioned by some authors, were here very evident.

5th. The congested state of the pelvic viscera was another point of interest.

6th. An analysis of the tissues of the stomach yielded distinct evidence of the poison, notwithstanding the smallness of the dose taken.

7th. This was farther evidenced by the yellowness of its mucous coat, and it was peculiar that the sulphuret should have been so soon formed.

Dr. Gull remarked, in reference to the case of poisoning by sulphuric acid, without wishing to invalidate the conclusion arrived at by Dr. Letheby, that the quantity of sulphates carried off normally by the kidneys had not been taken into consideration.

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Mr. Prescott Hewett presented a preparation taken from a woman who died of

STRANGULATED OBTURATOR HERNIA.

The patient, aged sixty-seven, was admitted into St. George's Hospital, with symptoms of strangulated hernia. She stated that she had suffered from hernia in the left groin for the last seven years, and that she had been in the habit of wearing a truss. Four days previous to her admission the gut had slipped down behind the truss, which was followed by intense pain in the abdomen; she, however, succeeded in reducing a portion of the tumour, which was of the size of a pigeon's egg, and the following day, a surgeon reduced the remaining portion of it. On her admission into the hospital, no tumour could be felt in the left groin; but she was in a very low state. Stercoraceous vomiting, hiccough, &c., were present, but without pain or tenderness in any part of the abdomen. Injections, and calomel and opium, were administered without any relief; and as a small swelling was obscurely felt in the left groin on the following day, an incision was made in this region, and a small, hard tumour was laid bare, situated close to the external abdominal ring, which was large and quite free. The symptoms went on increasing, and the patient died on the second day after her admission.

On examining the body, an old hernial sac, of the size of a small walnut, was found in the left groin. This sac, which was quite empty and flaccid, was traced through the external ring into the abdomen, where its opening into the peritonæum would scarcely admit of the passage of a quill. The convolutions of the small intestine were of a dark colour; but no inflammatory effusion existed in any part of the peritonæum. After a careful examination, a knuckle of small intestine was found passing through the left obturator foramen, where it was tightly fixed; the gut was, however, withdrawn from its situation, when two-thirds of its diameter were found to have been strangulated, producing an appearance resembling that of a diverticulum. The strangulated portion of gut was healthy in structure, but of a dark livid colour; it was situated about eight feet from the ilio-cæcal valve, all the portion of intestine above the strangulation being much dilated, and that below it, much contracted. The sac which had contained this portion of the gut was of a dark colour; it was of the size of a large walnut, and situated to the inner side of the obturator

nerve and vessels, a large branch of the artery partly encircling its neck. The whole of this hernial sac was situated beneath the obturator externus muscle, between it and the ligament, the fibres of the muscle being expanded over the surface of the sac. Its point of communication with the cavity of the peritonæum easily admitted the tip of the forefinger.

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Dr. Henry William Fuller exhibited a specimen of

ANEURISM OF THE AORTIC ARCH, BURSTING INTO THE TRACHEA AND ŒSOPHAGUS.

The patient, aged forty-seven, from whom this preparation was taken, was admitted into St. George's Hospital on the 8th of January, 1845, under the care of Dr. Seymour. His symptoms were of sixteen months' duration. They consisted, in the first instance, of pain constantly referred to a small circumscribed spot on the back, and of slightly obstructed deglutition. About three months before admission, these symptoms became very much worse, and when he presented himself at the hospital, he was complaining of most intense pain in the back, about two inches below the junction of the neck and thorax, of very considerable difficulty and pain in swallowing, accompanied by some pyrosis, and of a constant hacking cough, of about two months' duration. His left pulse was decidedly larger and stronger than the right, but there was no stethoscopic indication of cardiac, or other pectoral disease. There had never been hæmoptysis, or hæmatemesis, but on the 9th, the day after his admission, hæmoptysis to a larger extent took place, and was followed, on the 10th, by profuse hæmatemesis. No fresh hæmorrhage took place until the 13th, when hæmatemesis recurred, and he sank in the course of three quarters of an hour. The following is the result of the post-mortem investigation:—

*Thorax.*—The right lung was universally and firmly adherent to the walls of the chest, and was gorged with blood and frothy serum towards its posterior part. The left pleura was healthy, and the left lung crepitant throughout, containing far less blood and serum than the right. Pericardium and heart healthy, valves healthy; coagula in the cavities of the heart small, and, for the greater part, coloured. The whole of the thoracic aorta was thickly studded with atheromatous deposit, which existed, however, in greatest quantity in the ascending portion of that vessel. Just at the arch of the aorta, in the space between the origins of the innominata and the left carotid, but extending chiefly down the posterior wall of the vessel, was a large rugged opening, of the size of half-a-crown, leading into an aneurismal pouch, containing coagula of blood of various colours; this pouch was formed by the external coat of the artery, thickened, in some measure, by the surrounding tissues. Transversely, it projected from a little beyond the right margin of the innominata, which it somewhat pressed upon, to a little beyond the left margin of the left subclavian; superiorly, it passed about an inch above and behind the origin of the large vessels arising from this part of the aorta. But its chief projection was backwards, and rather to the left side, where it had insinuated itself between the trachea and œsophagus, and having become firmly adherent to these parts, had subsequently given rise to ulcerative absorption, so that the cavity of the pouch was thus made to communicate with that of the trachea, as well as with the œsophagus. The opening into the trachea was about the size of a sixpence, and irregular in shape, the cartilaginous rings having been partially and irregularly absorbed: it was situated about an inch above the left bronchus. The ulceration into the œsophagus, of an oval shape, and somewhat larger than a shilling, had irregular margins, the greater part of which were blocked up by a dark slough adherent to the neighbouring tissues. Part of this slough, however, had separated, and had evidently given passage to a large flow of blood, which was traced in the shape of a firm, dark coagulum, into the lower part of the œsophagus towards the abdomen.

*Abdomen.*—The stomach was distended by an enormous firm, dark coagulum of blood, which had exactly taken the shape of that organ, and retained it when removed from its situation. The intestines themselves were also filled with half digested blood, of a black grumous character. The mucous membrane of these parts was quite healthy. The other viscera were quite healthy.

In a pathological point of view, Dr. Fuller conceived this case to be exceedingly interesting. For it proves that the yielding nature of the œsophageal tube prevents its being easily subjected to pressure calculated to give rise to ulceration, and that hence arises the rarity of the occurrence of an aneurismal tumour bursting into the œsophagus. The cough and symptoms of pressure on the windpipe were only of two months' standing, yet the parts of this apparatus which had been subjected to pressure had been more completely destroyed than those which, for the reason above stated, had for nearly thirteen months resisted the ulcerative process.

Dr. Fuller thought the double ulceration into the trachea and œsophagus was rare, as he could find no record of a similar occurrence. From the previous attack of hæmoptysis, and the condition of parts as found after death, there could be little doubt that, had not the blood made its escape into the œsophagus, a violent effusion of blood into the lungs would soon have terminated the patient's existence.

Dr. Clendinning had very rarely seen absence of hypertrophy of the heart in cases of aneurism of the arch of the aorta; and he thought that though this condition could sometimes not be detected by the eye, the balance would indicate it.

Dr. Norman Chevers related the particulars of a case of aneurism of the arch of the aorta, in which the heart was rather smaller than natural, and could be invaginated into the aneurismal sac, the valves having become greatly enlarged, and equal in size to those of a bullock's heart. This and similar cases had led him to the inference that hypertrophy was not a necessary result of aneurism of the aortic arch, and did not take place in those instances in which the increased development of the aortic valves was great enough to prevent regurgitation.

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Mr. Avery exhibited

A PREPARATION TAKEN FROM A PATIENT IN THE CHARING-CROSS HOSPITAL, WHO HAD DIED ON THE SIXTH DAY AFTER THE OPERATION OF LARYNGOTOMY.

The patient, aged forty, who had, prior to admission, been treated as an out-patient for secondary syphilis, was suddenly seized with symptoms of acute laryngitis. Laryngotomy was resorted to on the night of the attack, with great relief of the dyspnœa. The slightest attempt, however, at swallowing, was followed by convulsive cough and regurgitation through the nostrils. After the third day, he could breathe pretty freely through the natural passage when the artificial one was closed, and he began to swallow more easily, although some portion of the food came through the tube in the larynx. On the fourth day, erythema extended from the wound to the upper part of the chest, affecting also both forearms and elbows. He continued to go on favourably till the sixth day, when he died quite suddenly. The specimen illustrated that thickened condition of the submucous cellular tissue of the larynx which had, during life, caused an almost entire closure of the rima. The epiglottis was in a state of rigidity, its valvular action being consequently lost, and there were observed two or three spots of albuminous exudation on the mucous membrane, and a film of it on either vocal chord. The deep glands on either side of the thyroid cartilage had suppurated, and on the left side was a quantity of pus, closely confined in the dense cellular tissue, extending interruptedly into the loose cellular tissue behind the œsophagus, to within two inches of the stomach.

Mr. Avery drew particular attention to the proximity of the artificial opening in the larynx to the vocal chords. He thought that this circumstance suggested the propriety of opening the trachea at its upper rings; and in support of this view, he remarked that no less than five fatal cases of laryngotomy, at more or less remote periods from the time of operation, had lately come under his notice, and in which cases he believed that disease in the vocal chords, arising from the proximity of them to the tube introduced into the artificial opening, had been mainly the cause of death.

Mr. Avery also exhibited a specimen of a polypus of the stomach.

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Dr. Herbert Davies exhibited a specimen of

HEART AFFECTED WITH PERICARDITIS AND ENDOCARDITIS, WITH PARTIAL CONVERSION OF THE INFLAMMATORY EXUDATION INTO OSSIFIC MATTER.

The pericardium was, in all parts, adherent to the heart, the adhesions, however, being easily detached by the finger: over the right auricle was found a portion of ossific matter, half an inch long, and a quarter of an inch broad, partly loose, and partly embedded in the tissue of the organ separating its muscular fibres. Several fibro-cartilaginous deposits over the right ventricle, one of them commencing to be ossified; cavities of the heart, and more especially the left auricle, dilated and hypertrophied; the aortic valves considerably thickened, and incapable of preventing the regurgitation of fluid; the mitral valve thickened and opaque in its entire

extent, and on its auricular surface presented a large deposit of bone, which formed a rough projection into the auricular cavity.

Dr. Davies remarked, that there was general dropsy, and that the pleuræ contained a large quantity of serum. The lungs, in consequence of the compression to which they had been subjected during life, and of the difficulty of the transmission of the blood through them from the mechanical impediment at the contracted mitral orifice, presented, on many portions, a fleshy appearance, or carnification. Abdominal cavity distended with serum; all the organs contained in it were gorged with blood. The spleen weighed nearly two pounds, and was greatly enlarged. The liver presented the nutmeg appearance, the result of impeded circulation through the heart, and the kidneys were also deep red, and evidently ingested through their entire extent.

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Mr. H. Haynes Walton exhibited a cast of

INGUINAL HERNIA OF THE CÆCUM, AND PART OF THE COLON, WITH AN ENTIRE PERITONÆAL SAC.

The patient, aged sixty, from whom the cast was taken, died very suddenly, having suffered before death from chronic inflammation of the brain and its membranes. The post-mortem was made twenty-four hours after death. The hernial tumour was on the right side, and was large, rounded, and symmetrical, the communication with the abdomen being, in comparison with the protruded portion, very small. The skin of the pubis was so distended over the penis as to conceal it. There was a distinct fluctuation anteriorly. The whole of the cæcum, the ascending and part of the transverse colon had passed into the scrotum, the inguinal canal was destroyed, there being a direct opening from the abdomen. There was no stricture, although the protruding points were closely adapted to the opening. The mesenteric portion of the peritonæum attaching the cæcum to the iliac fossa, together with the ascending and part of the transverse meso-colon, were drawn down from their positions, but still maintained connexions by bands of thickened cellular tissue. The stomach was pulled quite vertical. The small intestines were full of fæces.

*Dissection of the hernia.*—The skin was not thickened, and but slightly connected to the subjacent parts; there were distinct fasciculi of the cremaster muscle, passing anteriorly and laterally; the testicle was in front and nearly in the centre; the vessels of the spermatic were much separated; the vas deferens and the spermatic artery lay on the inner side, and were nearly mesial; the veins were about an inch external; the fascia transversalis was much thickened, and partook of a fibrous character; it was easily separated from the sac, which was about a line in thickness and quite opaque, not containing any fluid: the protruded parts were not in any way twisted, they were filled with fluid fæces; the omentum was rucked up into a small, hard lump at the bottom of the sac; there was no adhesion of any kind, either of omentum or intestine, to the sac. The relation the parts bore to each other in their passage through the ring, were, internally, ileum, next omentum, and, externally, colon; not more than an inch of the ileum had passed through the ring; the cæcum was in an unusual degree covered with peritonæum; the protruded parts presented no marks of constriction.

Mr. Walton remarked, that it was probable that there had been originally a protrusion of the small intestines, and at some subsequent period they had passed up, and the cæcum descended, and ultimately pulled the colon after it: there must have been a perfect meso-cæcum. This circumstance, of necessity, facilitated its descent, whether it passed into a sac already formed or not. Although there were no adhesions of the protruded parts to the sac, a return of them would have been difficult, if not impossible, on account of the smallness of the ring, the large quantity protruded, the locking of the cæcum against the outside of the ring, and the lump of hardened omentum. The smallness of the neck of the hernia is sufficiently explained by only one portion of large intestine passing through the ring. The fluctuation produced by the fluid fæces occasioned the idea of a complication of hydrocele with the hernia.

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Mr. Nathaniel Ward exhibited a specimen of

CARIES OF THE LEFT TEMPORAL BONE, AFFECTING THE EXTERNAL EAR, AND EXTENDING THROUGH THE TYMPANUM INTO THE ANTERIOR WALL OF THE PETROUS PORTION, ACCOMPANIED WITH A PERFORATING ULCER OF THE DURA MATER.

The carious condition of the bone had implicated the tempero-maxillary articulation, which was destroyed, with the exception of the fibro-cartilage. Opposite the carious anterior wall of the petrous portion, an ulcer, with smooth borders, about the size of a threepenny-piece, was observed in the dura mater. The entire surface of the left hemisphere of the brain was covered over by a layer of greenish-brown lymph; and a large quantity of arterial blood, apparently from a branch of the middle meningeal, which had ulcerated, was effused on its anterior, lateral, and upper portions, and on the corresponding parts of the dura mater. The condition of the brain and dura mater was illustrated by a drawing. The preparation was taken from a girl aged sixteen, who had been treated in the London Hospital, by Drs. Frampton and Fraser, for acute endocarditis.

On her admission, the purulent discharge from the ear was not sufficiently great to attract much attention, and she never complained of any head symptoms. As soon, however, as she was placed under the influence of mercury, the discharge greatly augmented; and sixteen days after admission, the soft parts of the external ear began to slough. The discharge increased daily in quantity, and ultimately became very profuse and horribly fœtid. About six weeks after her admission, profuse hæmorrhage came on at two distinct periods, and she died comatose, no paralysis or loss of consciousness having been previously remarked.

The meeting adjourned to Monday, Jan. 4th, eight P.M.

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## QUACK ABUSE OF SIR BENJAMIN BRODIE.

*To the Editor of* The Lancet.

Sir,—Is it not shameful that we have men amongst us (who ought to be gentlemen) who can pen such scurrility as appeared in a contemporary journal, of Saturday last, respecting Sir B. Brodie? For a man at the head of his profession—one looked up to as an equal to Sir Astley Cooper—to be "blackguarded"—I can use no milder term—by this anonymous scribbler, is really a disgrace to our profession.

December, 1846. J.

*** The manager of the concern in question, it is well known, is not a medical man; and that any one should pretend to conduct a hybrid medical journal, without possessing one iota of professional knowledge or professional feeling, is one of the most naked quackeries of the day. The contributors to such a disreputable production, few and feeble though they be, are suborners of quackery, and ought to be treated as such by the profession. That the thing should be a vehicle of "blackguardism" is as natural as that the sow should wallow in the mire. Its abuse of Sir Benjamin Brodie is of about as much importance as the abuse of the Lord Chancellor by a renegade medical man would be.—Ed. L.

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## QUACK ADVERTISEMENTS.

*To the Editor of* The Lancet.

Sir,—Your unceasing and able exposures of the progress of quackery are so deserving the support and favour of all who are desirous of upholding the character of the science of medicine, that in tendering you my individual thanks, I feel compelled to bring under your notice the conduct of the editors of *The Dublin Freeman's Journal*, the most extensively read paper in Ireland. It is the great organ of the popular party in this country, and of the members of the Catholic religion. Its pages are continually disgraced with the most foul and obscene quack advertisements; and, independent of the opportunity its extensive circulation affords your London quacks of selling their vile trash, it is calculated to prove more "dangerous to faith and morals" than the wholesome education to be afforded by the so-called "godless colleges" about to be established in this country. The editors and joint proprietors of *The Freeman's Journal* are both physicians; Doctor Gray, famous as one of the "state prisoners," who has written a good pamphlet on Medical Reform; the other, Dr. Atkinson, a member of the Court of Examiners of the Apothecaries' Hall of Ireland. It is hoped by the profession in Dublin that their unworthy conduct will receive your severe condemnation. The editor of *The Nation* has set a noble example to "medical editors of newspapers," by excluding altogether quack advertisements from the pages of his paper.—I am, Sir, your obedient servant,

Dublin, Dec. 1846. Erienensis, Jun.

# THE LANCET.

LONDON, SATURDAY, JANUARY 9, 1847.

No alteration in the University of Edinburgh having reference to the apostasy of Professor HENDERSON has, we believe, yet taken place. The English universities were once accounted slow and inapt at anything like reform or renovation, but it seems that the Alma Mater of the MUNROS, the CULLENS, and the GREGORYS, is even more indolent than her southern sisters. It is no trifling matter, however, that the University of Edinburgh should harbour within her bosom a professor of medicine holding homœopathic doctrines, while all the other medical and surgical professors are teachers of the legitimate school. Such an anomaly cannot exist without the most injurious results to the character of the University, its professors, and even the recent graduates it has sent forth. Some consistency should be observed; either the whole faculty of professors should be quacks, or they should all be orthodox. That there should be an open admixture of the two opposing elements is not to be tolerated in such an arena. Of one thing we are quite certain; namely, that parents will no longer send their sons, nor medical men their pupils thither, and that riper students, sufficiently advanced to judge for themselves, will not resort to an University in which such professional laxity is exhibited and tolerated. The patrons of the University and its professors may rest assured that the number of matriculations will diminish every medical year during which such an unnatural state of things is allowed to exist. With homœopathic teachers, they may depend on it, the classes will soon become infinitesimal.

But is there no means of remedying the evil? If Dr. HENDERSON has not honour or honesty enough to resign a chair after he has entirely abandoned the principles upon which he was elected to fill it, cannot the rest of the University Faculty bestir themselves to make him do so? We have conversed with some of the most distinguished members of the University residing in this metropolis, and they are strongly in favour of memorializing the Town Council, with a request that this body should call on Professor HENDERSON to resign a post which his present creed does not allow him to fulfil with good faith. We believe this ought to be done, and that, too, without loss of time. The graduates of the University should memorialize; so should the orthodox professors of the University, the whole body of private medical teachers in Edinburgh, and the students who have matriculated. Such a mode of proceeding could hardly fail of influencing the Town Council.

The movement only requires to be *commenced*, to ensure its successful result; for every honourable man connected with the University is scandalized by the present position of this long celebrated school. One homœopathic and one semi-mesmeric teacher, and their pupils seceding, as a natural consequence, from legitimate medicine to homœopathy and mesmerism, are evils that ought to be met promptly and determinedly. It will not do to say that Professor HENDERSON exerts no influence, in the face of the facts we formerly detailed relative to Dr. MADDEN'S perversion. Recently, another pervert of the same school, in the person of Dr. NEVILLE WOOD, has taken place; and if the position of Dr. HENDERSON be continued by a tacit consent or a silent disapproval, such apostasy must, in the nature of things, increase. A very grave responsibility rests upon the medical profession of Edinburgh We have said that we consider the Town Council, which appoints all the professors, should be appealed to; not only, as they have been, by the Colleges of Physicians and Surgeons, with a view to the prevention of future evil, but also with a view to the removal of that which actually exists.

The matter might be brought home to their business and bosoms. A baillie, we suppose, could be made to comprehend the absurdity of eating turtle soup with a bodkin; and a Lord Provost, of the difficulty of building a city with single grains of sand. Such things are, however, not so preposterous and absurd as the attempt to found a practice of medicine and the healing of diseases, upon doses of simple medicaments so attenuated and divided that a single grain of each of their medicines would be sufficient to supply the entire population of the globe, in every form of disease, for many generations. The drugs for four hundred millions of people for a whole century might be readily conveyed over the world in the nutshell carriage of Queen Mab.

THE controversy of the Royal Society is only slumbering. The officials who rule the affairs of this body find it quite impossible to bind truth, or to hide error from the light. Saint ANDREW'S day passed off quietly, and there was an evident self-gratulation and complacency at Somerset House. Compliments were bandied about, and the noble President, the Secretaries, the old and new Councils, and the various committees, seemed at their ease after the turmoils of the past session. But the stream, foiled in one direction, now threatens to burst out, with tenfold force, in another. Already investigations have been called for and commenced, and still more active measures are in preparation. To these we shall shortly have to allude more explicitly. We can promise that the Council will not be left throughout the present year to work its drowsy will as it lists. Let the members of the Council look to it; they will have sharp work to defend their predecessors from the consequences of their misdeeds, if they have the hardihood to attempt a defence of that which is morally indefensible.

CHIROPODY seems in a fair way of being set down as the latest variety of swindling, and the chiropodist as the newest specimen of the *chevalier l'industrie*. Not long since, one of the advertising gentry who manage to cling day after day in small print under the eaves of the first column of the *Times'* Supplement, published a jaunty-looking quarto, in green and gold, claiming a most exalted rank for the professors of chiropodic surgery. In fact, nothing less than a College of Chiropody, or a chiropodic chair in all the recognised schools, and an office of surgeon-chiropod to royalty itself, second only to Her MAJESTY'S sergeant-surgeon, would do for this enterprising and ambitious gentleman. A LEVI or an EISENBERG was able at any time to fill a column in the *Post* or the *Herald* with a string of testimonials. The corn-cutters seemed to have the pick of the whole peerage, from CORNWALLIS to ABERCORN, the choice of the reverend bench of bishops, and a whole host of doctors in law, divinity, and physic. Their career in London seemed triumphant, and their visits to the provinces produced rich harvests. Dowagers and antique beaux were boasting, by advertisement, of their nimble feet; solemn dull

men, such as Antony Jamaica, and R. Wardlaw, D.D., wrote prosy certificates, or made jokes in testimonials, about the great corn question and corn-law repeal, and every stiff and knobbed toe that could afford to pay for chiropody promised to become light and fantastic.

But a change, sudden as the tricks of harlequinade, has come over this brave dream. Now the professors of the art and mystery of corn-cutting are everywhere stooping more humbly than even is their usual wont at their noble calling. Chirurgical barons, German doctors, and counterfeit surgeons, have been thoroughly exposed. First, Dr. Locock writes to us to accuse Eisenberg of forging his father's, Dr. Henry Locock's, name to an authentication of his interesting operations on the deceased Lady Dick's toes. Then the eminent dedicatee, whose name he had affixed to his book, challenged him to desist; and now, one after another, at Cheltenham, Beccles, and other places, the itinerant operators are imprisoned for vagrancy, or swindling, or obtaining money under false pretences. Almost every post brings us some new detail of corn-cutting chicanery. It appears that, with certain of these gentry, there has indeed been a free trade in corn, the professors of chiropody having not only been in the habit of digging corns from octogenarian toes, but of manufacturing them by hundreds, for the astonishment of those entrusting their unfortunate members to chiropodic care, having first agreed to pay so much per corn. Quiet old gentlemen, and good trusting gentlewomen, who had talked hitherto of their one corn, at violent changes of the barometer, have, under these ingenious operators, been set agape with dismay at the sight of row upon row of horrid spicula, displayed upon paper, long enough to have grown through their pedal phalanges, and each one having its price; all produced, too, not from the honest cuticle, but from the pocket of the operator, and fabricated beforehand from porcupine quills or the parings of horses' hoofs, and transferred to the toes by a sleight of hand worthy of Herr Döbler or the Wizard of the North.

But, seriously, it is most extraordinary that this mean, but wholesale system of cheating, should have gone on so long unexposed, and still more extraordinary that medical men should have testimonialized the impostors, and recommended them to the public. In the metropolis, little of this has been seen; but in provincial cities and towns, medical men have been extremely free with their certificates, and they have, of course, been as freely advertized, and thus the public has been caught. We trust the exposures which have taken place will render the profession more cautious than heretofore. Nothing should be bestowed more sparingly than professional certificates; and the cases are extremely rare in which they can properly be granted at all.

## A MEMORIAL

*Presented to the* Right Hon. Sir George Grey, Bart., M.P., *Her Majesty's principal Secretary of State for the Home Department, by the Royal College of Physicians of London.*

The President and Fellows of the Royal College of Physicians are induced respectfully to address Sir George Grey, as her Majesty's Secretary of State for the Home Department, because they are unable, without the aid of the legislature, to complete certain changes in their constitution, which appear to be called for by the state of the profession and of society, and which they have long contemplated and desired to carry into effect.

The College is bound, by its charter of incorporation, granted by Henry VIII., and subsequently confirmed by Act of Parliament, to examine, and to license if found competent, all persons who desire to practise as physicians in London, and within seven miles round. But the office of examining and licensing those who wish to practise beyond seven miles from London was given by the Act which confirmed the charter, not to the College at large, but to a small body, composed of eight of its members, termed elects. The elects, not having been chosen, even at first, by the members at large, are endowed with separate functions, which they exercise independently of the College, the constitution of their body being such, that all vacancies occurring in it are required to be filled up by the survivors.

As might be expected, inconveniences have arisen from this divided jurisdiction. And it is worthy of observation, that amongst all the grievances complained of in the petitions for medical reform which were presented at one time, in great number, to parliament, none were complained of more than the existence of local and exclusive jurisdictions, and the exercise, by numerous independent bodies, of the power of examining and licensing medical practitioners. The latter circumstance, it was alleged, had caused a want of uniformity in the education and qualifications of practitioners passing under the same denomination; and from the former circumstance it has resulted, that licences valid in one part of the country are invalid in another—a restriction which proves most detrimental to the good of the profession, and even leads frequently to an infringement of the laws.

Of late years it has happened that the demand by physicians for licences to practise in the country, (termed extra-licences,) which was formerly small, has been greatly increased: hence the evils and inconvenience of the licences emanating from the College being divided into two kinds, and of their being granted by separate bodies, have become strikingly manifest, and have given rise to complaints, and caused disputes and dissensions, in various parts of the country.

Moreover, the Act of Parliament, already referred to, has also given to the elects the function of choosing annually one of themselves to be the President of the College. It has been thought that this part of the constitution of the College is susceptible of improvement; for that the choice of the President ought not to be deputed to so small a body, which is neither elected by the fellows at large, nor under their control.

For the reasons which have been stated, the College is desirous that a short Act of Parliament should be passed, enabling it to accept a charter modifying its former charter as regards the elects, and transferring their functions to the general corporation. An Act for this purpose was in fact prepared, with the sanction and coöperation of the late Government, and laid before Parliament. But it proceeded no further, because it was introduced in conjunction with other measures affecting the profession more widely, which were subsequently abandoned.

There are other improvements, lying more within its own power, to which the College has of late years directed its earnest attention.

In particular, it has extended and greatly improved the examinations of those whom it licenses to practise as physicians.

With respect to those who are admitted as fellows or members of the corporation, during very nearly two centuries, they were required, by the by-laws of the College, almost exclusively, to have been educated at the English universities, so that by long prescription the graduates of Oxford and Cambridge were admitted nearly as a matter of course into the order of fellows; and beside them, few indeed neither were, or could be, elected.

The object of this regulation was to ensure in the fellows of the College the best and highest education. And it had, confessedly, the effect of raising highly the character of the College, and through its influence, that of all orders of the profession in this country.

Nevertheless, the exclusiveness of the rule excited jealousy and discontent, and became a cause of frequent litigation, until, by repeated decisions of the courts of law, the right of the College to be the sole judge of the qualifications of those whom it would elect as fellows had been established beyond dispute.

In the present century, a high standard of education being adopted more generally, the restriction in favour of the universities of Oxford and Cambridge, which had been enforced so long by the College, became proportionately less requisite and proper.

Wherefore the College, although still retaining a conviction of the superior advantages to be derived from an education in those universities with which it had been so long connected, has nevertheless rescinded its exclusive by-laws.

For several years the fellows have been selected out of the order of licentiates, solely from regard to their character and attainments, and without distinction as to the place of their education.

To a considerable extent this plan has proved satisfactory to the profession. Yet a system of selection is attended always with some invidiousness. Therefore the College has resolved to adopt another principle in the admission of fellows, not liable to the foregoing objections, which will be perfectly equitable in its operation, and most honourable to those who avail themselves of it—viz., that the ordinary mode of admission to the fellowship shall be through an examination, high in character, comprehensive in extent, and open to all licentiates who may submit themselves voluntarily to it; whilst, at the same time, a limited power shall be preserved to the College of admitting as fellows, without examination, those persons who may have greatly distinguished themselves by scientific pursuits and discoveries; who, not having enjoyed the advantage of the best early education, may have made up for this deficiency by superior talents and energy, but whose age may be such, as well as their known attainments, that they ought to be exempted from the examination intended for younger men.

As far as the College is concerned, the changes and improvements which have been mentioned might have been effected earlier, had they not been retarded by circumstances over which the College could have no control. An outline of the reforms contemplated by the College was submitted to the Marquis of Normanby when Secretary of State, and was favourably entertained by his lordship. A change, however, in the Government followed soon afterwards, and delayed further progress.

The subject of these reforms was repeatedly brought under the consideration of Sir James Graham, and they met with his approval; but it seemed to him expedient that they should be brought forward simultaneously with the general measures which he contemplated for the regulation of the whole medical profession.

In consequence of the desire then expressed by the Government, the College proceeded, with the assistance of its own legal advisers and those of the Crown, and with considerable pains and expense, to prepare the draft of a new charter, modifying its former charter in the way which has been already explained.

The title of the College of Physicians of London was to be changed by the new charter to that of the "Royal College of Physicians of England;" and by one of its clauses, the College offered, for one year after its acceptance, to admit as members, without examination, all graduates of British Universities of a certain standing, now practising throughout England and Wales.

A conciliatory measure of this kind appears to be much required in the present state of the medical profession; for there are many physicians practising in England, not being graduates of Oxford or Cambridge, who yet are not, as legally they ought to be, possessed of a licence from the College of Physicians of London.

Therefore the College proposed this measure as the commencement of a more regular and effective system, and in order that it might, more perfectly than is possible at present, represent and regulate the interests of all physicians in this country.

The College will be ready to abide by the offer and concession which it then thought right to make, provided means can be devised whereby all physicians practising in England and Wales shall henceforward (reserving the rights of the Universities of Oxford and Cambridge) be required to submit their pretensions to the censors' board (to which the College deputes the examination of those whom it licenses,) in order that their competency may be properly tested, and that they may be enrolled as members of the College.

By another clause in the new charter, power was given to the College, in certain specified cases, to expel unworthy members. As circumstances sometimes arise requiring the exercise of such a power, the College believes that it would be expedient that it should possess it. A similar power has recently been given by charter to the College of Surgeons.

It was also provided by the new charter, that persons who, having exceeded the age of forty years, and having been duly examined by the College, are found competent to practise as physicians, shall be entitled to use the designation of doctor of medicine, although not graduates of any university; whereas, for all candidates who present themselves for the licence under the age of forty, it is made an indispensable requisite that they should have obtained the degree of doctor of medicine in some recognised university, before they can be admitted to examination by the College.

The reason of this distinction is, that in a practical profession like that of medicine, it is always right that those who, by superior talents and industry, have raised themselves in public estimation, should have the power of rising from a lower even to the highest rank in the profession. It seems reasonable that the College, to which such persons must apply for legal authority to practise as physicians, should be empowered to confer the title, which through common usage is necessary to render the licence intelligible by the public, and useful therefore to the possessor of it. In this way, a want which is occasionally felt in the profession might be supplied, without detriment to the universities, and without material infringement of the rule, which ought to be upheld, that those who intend to be physicians should resort to the universities for preliminary and general education.

Such being the objects and principal enactments of the new charter which has been prepared for the College, the salutary changes which it would effect are calculated, in the opinion of the College, to render it an institution more generally acceptable to the physicians of this country, and more useful to the profession and the public.

Therefore, the College respectfully but earnestly requests the assistance of Government, in order that a short Act of Parliament may be passed, enabling the Crown to grant this charter, on the petition of the College, and in order that the Crown may be advised to grant it.

FRANCIS HAWKINS, M.D., Registrar.

## Correspondence.

### INHALATION OF ETHER IN SURGICAL OPERATIONS.

*To the Editor of* THE LANCET.

SIR,—As notice has been given of a patent for the inhalation of ether in surgical operations, and as such notice may deter surgeons and dentists from using it in the mitigation of pain, I beg to ask your insertion of the following letter, which I have received from one of her Majesty's council "learned in the law."

Yours &c.,

Gower-street, Jan. 1847. F. BOOTT.

January 4, 1847.

"MY DEAR DR. BOOTT,—In answer to your question with respect to the patent alleged to have been obtained for "a process for procuring insensibility to pain by the administration of the vapour of ether to the lungs," I beg to say, that I am clearly of opinion no patent can be valid, giving the patentee the exclusive privilege of *administering the vapour of ether to the lungs*. If the word "process" is used to denote some particular apparatus for the convenient administration of the vapour, then the validity of a patent for such apparatus will depend upon whether the patentee is the first inventor, and the apparatus was not known to, or in use by, the public before the granting of the patent. The power of the Crown to grant patents is defined by the 21st Jac. I., chap. 3, which was passed to put an end to the abuse of the power of the Crown to grant monopolies. This power was, by this statute, limited to the granting patents *for any manner of new manufactures*. In commenting upon this statute in Rex *v.* Wheeler, (*2nd Barn. and Ald. Reports*, 245,) Lord Tenterden, describing the sort of inventions for which patents can be granted, says,—'The word *manufactures* has been generally understood to denote either a thing made, which is useful either for its own sake, and vendible as such—as a medicine, a stove, &c.—or to mean an engine or instrument to be employed either in making some previously known article, or for some other useful purpose, as a stocking-frame, or steam-engine for raising water from mines; or it may, perhaps, extend also to a new process to be carried on by known implements or elements acting on known substances, and *ultimately producing some other known substance* in a cheaper or more expeditious manner,' &c.

"I could cite abundance of other authority to the same effect, but it must be sufficiently plain that *no construction* of the word *manufactures* can give the Crown the power to confer by patent the exclusive privilege of administering the vapour of sulphuric ether for the purpose of producing insensibility to pain; or of *administering* any particular drug, or compound of drugs, for the purpose of producing any particular effect, although an inventor may have a patent for the *manufacture* of particular medicinal preparations. But who ever heard of

a patent for the performance of a new operation in surgery (as, for example, that by which squinting is cured)? I can see no distinction *in principle* between such a patent and the patent supposed to be claimed for the administration of ether. If this patent could be supported, the patentee might grant a monopoly to any particular surgeon of all operations to be performed with the assistance of the ether, or he might grant it to such surgeons in each town as he might please to select, to the exclusion of others; for though he might sell licences to *all*, he would not be *obliged* to do so. He might almost be said to hold in his hands, in some cases, the power of life and death. Upon the whole, I am satisfied you may safely advise your professional friends to continue the use of ether in their operations, without the slightest fear of legal consequences. Whether the instruments which are manufactured for the purpose are an infringement of any valid patent will be a question between the patentee and the manufacturers; but the operators can have nothing to do with this; and it would be most deplorable to have any interruption to such a mitigation of human suffering.

"Believe me, yours faithfully,

"—— —— Q. C."

## OPERATIONS PERFORMED AFTER THE INHALATION OF SULPHURIC ETHER VAPOUR.

*To the Editor of* THE LANCET.

SIR,—The intoxicating effect of ether, taken into the blood by inhalation, has long been known to medical men, and no doubt you are aware that the experiment is often made by students as a mere frolic. Its application to useful purposes is, however, quite a new idea; and from what I have seen, I believe it will prove a valuable auxiliary in operative surgery. We must not, however, arrive at this conclusion too hastily; it is only by taking a number of cases, and faithfully reporting its effect in each instance, that its true value can be ascertained.

I have tried it in nine cases of tooth extraction: six of these trials were made in the presence of several of the medical officers and lecturers at the Westminster Hospital, and the following were the results:—

CASE 1.—A girl, sixteen years of age. After inhaling for two or three minutes, she became snappish, and declared she would try no more. The tooth, a superior bicuspid, was then removed, with, apparently, the usual amount of pain.

CASE 2.—A female, thirty-five years of age. Inhalation failed to produce intoxication, and the patient expressed her desire to have the tooth, a lower molar, removed without further delay. This was done, and (as she declared) without her experiencing any pain.

CASE 3.—An Irishwoman, about forty years of age, after inhaling for a short time, became furious and unmanageable; her face flushed; pulse at the wrist full, and 120. She presently calmed down, and consented to have the tooth extracted, which was done, certainly not without pain, as she loudly uttered the usual exclamation. In about half a minute, she sank into the chair, her head drooped, her arms fell, and her pulse became scarcely perceptible. From this state she soon recovered, talked very cheerfully, and apologized for her unruly behaviour, being, as she said, "unaccustomed to spirits and water, or anything of that sort." Thinking there might be some error in the construction of my apparatus, I subsequently employed one resembling the Indian hookah, (pipe.) A small quantity of rectified ether was placed in the vase, with an air tube dipping down to the bottom of the ether. Another tube, with a mouth-piece attached, passed into the vase, above the surface of the ether. On exhausting the vapour, air rushes into and becomes saturated with ether, and thus furnishes a further supply.

CASE 4.—The patient was a girl, ten or twelve years of age, who, upon the promise of her tooth being removed without her feeling it, readily complied with my directions, and inhaled the vapour more systematically and effectually than the adult had previously done. She shortly fell into an easy trance, during which I placed her in the chair, easily separated the jaws with my finger, and then removed the tooth—a large, well-formed, permanent molar. Its extraction required a smart effort; but there was not the slightest evidence of pain or suffering. In the course of a few minutes, consciousness returned, and on her being asked if she would now have the tooth out, she replied "Yes." Nothing could have been more decided, nor more satisfactory to every one present, than this case.

CASE 5.—A female twenty-five years of age, after inhaling for two or three minutes, refused to continue it, as "she had never had a tooth out in that way before." She certainly was not intoxicated; yet the tooth, which presented the ordinary difficulty as to its extraction, was removed without the least flinching on her part, and she subsequently persisted in saying that "it did not hurt her in the least; she scarcely felt it."

CASE 6.—The patient was a strapping young Irishwoman, who had been suffering severely for several hours from a diseased wisdom tooth. She inhaled the vapour three or four minutes. It immediately relieved the pain, but failed to stupify her. I therefore removed the tooth without further delay.

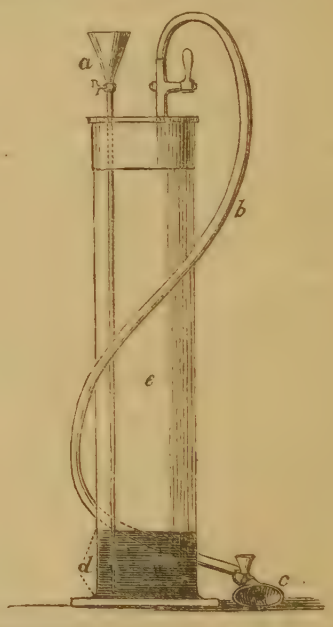
I have also tried it three times in private practice—once with decided success—in the other two cases it totally failed; the vapour from a large quantity of rectified ether, inhaled for a considerable period, failed to produce any effect, beyond a little giddiness, on two young ladies, sisters; but as these three cases occurred in private, they necessarily require, what in my opinion such cases should always have, to be worth anything, the corroboration of competent disinterested eye-witnesses.

It may, and I dare say will, be urged that my apparatus was imperfect, or on too small a scale. Just so. And yet we see in three cases effects widely differing, produced by the same agency. This is sufficient to show that we ought to proceed cautiously. I should hesitate to employ it if there were pulmonary disease, or a tendency to apoplexy; and I think in no case should it be tried by any other than a medical practitioner.—I am, Sir, your obedient servant,

J. CHITTY CLENDON,
Lecturer on Dental Surgery &c.
at the Westminster Hospital.

Conduit-st., Hanover-sq.
Jan. 1847.

P.S.—I send you the following sketch of an inhaler made for me by Mr. Clarke, philosophical instrument maker, in the Strand, which, I believe, will be found to answer the purpose better than those hitherto made use of.




*a*, Ether and air-tube; *b*, inhaling-tube, with stop-cock and valves; *c*, mouthpiece to ditto; *d*, ether; *e*, glass cylinder.

## INHALATION OF NARCOTIC VAPOUR.

*To the Editor of* THE LANCET.

SIR,—I have seen, by the communication in THE LANCET of last week, that Mr. Liston has lately performed an operation on a person rendered unconscious by the inhalation of narcotic and stimulating vapours. The credit of the discovery is given to Dr. Morton, of Boston, U.S.

In the early part of the year 1843, I published a work in Boston, U.S., wherein, at page twenty-six, I distinctly declare, that "*a congestive* or unconscious state may be induced by the inhalation of narcotic or stimulating vapours." I made the experiment on about twenty persons, and found that the condition so induced was difficult to manage.

I am sure you will give this insertion, in order that, if the application of stimulating vapours through the respiratory organs should be found productive of the greatest of human blessings, the alleviation of pain, I may at least enjoy the credit of having first suggested the idea to the world.—Your obedient servant, ROBERT H. COLLYER, M.D.

St. Helier's, Jersey, Dec. 1846.

## SUBSTITUTE FOR CORNS.

*To the Editor of* THE LANCET.

SIR,—The account of the impositions practised by the corn-cutter Wolff, detailed in the last number of THE LANCET, reminds me of a circumstance that happened to a friend of mine some six or seven years ago, precisely similar in the mode of extraction or extortion, but unparalleled, I should hope, in the amount.

The Hon. ——, aged about seventy-eight, having two troublesome corns, sent for one of these corn-cutters in London. He arrived, undertook to extract them, and added, "You will not object to paying ten shillings a corn?" The reply was, "Not at all, nor a pound either, if I could but get rid of them." The operation commenced; when it was over, the corn-cutter presented my friend with a paper on which were arranged 116 corns, or dark somethings which he designated such, and smilingly announced his claim of £58! My friend was staggered, he could scarcely credit his senses; but being a shy man, who could not endure a hubbub, it ended in his writing a cheque on his banker for £58, and getting rid of the fellow. He then began to reflect that he must have been imposed on; felt annoyed, and thoroughly ashamed of himself; and next day, without saying a word to any one, slunk off to his banker's to stop payment. But the corn-cutter was too quick for him, the cheque had been cashed. With the desperate hope of rescuing something from the chiropodist, he now resolved on extending his voyage to the far east of the City, where his man of skill abode; but his courage was no match for the assurance of the latter. To my friend's polite suggestion that there might have been some error in the amount, the answer was, "You agreed with me for ten shillings a corn; I showed you 116 corns—that is £58: but I shall attend your corns in future gratis, and shall obey your commands whenever and wherever in London you may be pleased to send for me." My poor friend submitted, and inwardly cursing the chiropodist for a knave and himself for a fool, he bent his steps homeward. It was some weeks before he could resolve to confess to his family how he had been fleeced. The story was too good to keep, and in the presence of himself, his brother, (a noble earl,) and two or three other members of the family, his excellent lady, with tears of laughter in her eyes, related the affair to me. I refused to credit it at first, but it was literally true; and I could only vent my indignation by replying to the old earl's question of what I would have done in such a case, that "I would have made the fellow eat up his corns, and then have kicked him down stairs."

At the moment when an opportunity has occurred of bringing to justice one of these charlatans, the publication of my story may assist in convincing the public that such impositions are really practised, and may encourage the prosecutors in this case to persevere in detecting and punishing the fraud. Sawdust and bonedust may do very well for bread and manure, but when a spicula from a horse's hoof is to be palmed upon the people for corn,—and charged war-price, too,—the legislature should look to it. The fellow's name was Levi.

My story may sound improbable to many; I therefore enclose my own name, and that of all the parties, for your private information, deterred only from publishing them by feelings which will be understood.—I have the honour to be, Sir, your very obedient servant, W. ——, M.D.

December, 1846.

*** One mode of palming off the parings of horses' hoofs as corns, by the chiropods whom some medical men delight to testimonialize, we have had minutely described to us. The chiropodist kept the corns in a bottle full of a thick, dark-coloured fluid, which he smeared over the toes of his patients, his own fingers, and particularly upon the pair of forceps which extracted the corns. All he had to do was, after some preparatory cutting and paring, to pick the shavings out of the liniment spread over the foot, or to watch an opportunity of taking them direct from the bottle. He professed a certain virtue to reside in this fluid, which, when the ends of the forceps were dipped in it, assisted in the extraction. These swindlers frequently produce substances as corns so long, that had they been taken from the human foot they must have perforated bones of the toes.—ED. L.

## QUACK FIRMS.—LETTER II.

*To the Editor of* THE LANCET.

SIR,—Agreeably to the promise contained in my former letter, I shall now proceed to let the readers of your valuable journal into the arcana of the puff review system adopted by the quack firms, and carried out by them to an extent that would appear quite incredible to the majority of your readers.

To that portion of the newspaper press, the circulation of which is so limited as to render the revenue derived from advertisements a matter of almost vital importance, the plan of the "consulting surgeons" is to pay for a large number of advertisements in advance. To this plan, however, is annexed the very modest and business-like condition, that a highly panegyrical review of the "Silent Friend," or of some work of a cognate kind, should simultaneously appear in another part of the pandering journal. However, it must not be supposed that, for the production of this precious document, the wits of the accommodating journalist are put in requisition. Oh, no; it is invariably written by the quacks themselves, or, more correctly speaking, by some *ame damnée* of the press, these fellows being much too ignorant to do the deed themselves. As there are very few newspapers, and these only of the very lowest description, (unscrupulous as too many of them are in the article of advertising,) that will so far brave public scorn as to publish these reviews, the quacks, to get out of this dilemma, send the usual advertisement of their work to some well-known and otherwise respectable journal, which, *proh pudor!* inserts it without any apparent scruple. Appended to this advertisement is an address "to fathers of families, clergymen, guardians, and especially to sufferers under any of the maladies" which are set forth in horrid array in the work thus advertised, recommending it to their perusal, and at the same time inviting the afflicted to apply to its authors for relief. The advertisement, with the above-mentioned address attached to it, or such portion of it as may best answer the purpose of these artful schemers, is then taken to another paper. But in its new form, an important change has taken place, (and I intreat your readers to mark it well,) by which this impudent address is made to appear as if it actually emanated from the respectable journal in which it had originally appeared as a mere advertisement. Perhaps my meaning will be more clear when I say that the address now appears as though it were an extract from a well-known newspaper; and to make this impression the more sure, the name of the paper is affixed to it in glaring letters. By this clever trick too many are led to believe that a work having, to all appearance, such recommendations in its favour, must afford the very best guarantees for the perfect respectability of its authors, not only as duly qualified practitioners, but as eminent members of the profession. I ask you now, Sir, were impudence and fraud ever carried to such an extent as in the instance I have just stated? And if this *coup de filou* does not, through the scandalous neglect of the legislature, bring these rascally schemers within the letter, it most assuredly brings them within the spirit, of the law, against obtaining money under false pretences.

In the meantime, the unsuspecting public, not dreaming that a gross fraud is attempted to be practised on them, rush into the toils thus artfully laid; and if some of them are so fortunate as to escape, minus the savings of many years of rigid abstinence and hard toil, there are, I fear, too many others whose health is wholly and irrecoverably wrecked into the bargain. Indeed, more than one instance has been brought under my own personal cognizance, of persons who were wholly and solely induced by these supposed favourable opinions of respectable newspapers, to call on these quack firms, where they confidently hoped to obtain, not only the certain, but the prompt relief, which forms the staple article of all their advertisements. When I asked such people how they had allowed themselves to be persuaded to call on such notorious scamps, their uniform reply was, that seeing the names of respectable journals appended to favourable notices of their works, in which they were described as surgeons, they naturally took them, not only for regularly educated members of the profession, but also for being as eminent as they were represented. I must not omit here another circumstance

which greatly promotes the fraudulent views of these quacks —namely, the impression which almost universally prevails, that no one would dare assume the name and practice of a surgeon without a diploma. When persons labouring under this mistake are told that there exists no law for the repression or punishment of such frauds, it is impossible to describe their astonishment at the culpable indifference thus manifested by the legislature to an evil of such magnitude.

I have reserved for the end the crowning scheme of these quack firms, and with it I shall close this letter. This notable contrivance, which shows that they are perfect masters of the deceptive, although utterly ignorant of the healing art, consists in their selecting the name of some eminent surgeon, and under the auspices of this *clarum et venerabile nomen*, setting up a new Priapian firm, which is announced to the public in the usual way. Thus a name which is another word for unsullied integrity and for well-earned professional fame, is forced into the service of a quack firm, and used by it for the purpose of levying black mail on the weak and defenceless. This trick is adopted by another set of scamps, (the founders of fictitious mercantile houses,) though not always with equal success; and this, owing to the great sensitiveness of the legislature towards every case of infraction of the rights of property, indifferent as they are to the at least as important question of public health. The career of the latter, however successful at first, is, comparatively speaking, a brief one; and instead of being able, like the "Consulting Surgeon," to laugh at laws and law-makers, and in the contemplation and enjoyment of their ill-gotten wealth, to brave the finger of public indignation, they are, in most cases, sent to travel at the country's expense, to enable them, at a distance from the scene of their former exploits, to ruminate on the unequal distribution of rewards and punishments, as exemplified in their case and in the more nefarious one of the quack firms.

Returning from this digression, I have known country people, who, by means of this clever contrivance, have been duped into the belief that the eminent surgeon whose name had been so unceremoniously used by the quacks, was in reality a partner of their firm. A remarkable instance of this kind occurred some years since, when a friend of mine was consulted on a case of obstinate gonorrhœa. Upon the patient being asked what course of treatment he had undergone, he replied that, among other things, "he had taken Sir Astley Cooper's pills." "Oh! you have been under Sir Astley Cooper?" "No," was the rejoinder. When asked what he meant by saying he had taken his pills: "Why," he replied, "I saw them advertised in the newspapers." "What! Sir Astley Cooper advertise pills in the newspapers?" After a little more equivoque, it was discovered that he meant a nostrum, which was sometimes advertised under the name of "Ashley Cooper's Pills." He added, that he had bought the pills in consequence of the resemblance of the name, and of his perfect belief that they had been prepared and sold by the celebrated surgeon.

Having, I fear, trespassed too much already on your indulgence, I shall reserve for another letter the names and lives of the persons composing the principal quack firms.—In the meantime, I remain, with great respect.

Dec. 1846. DETECTOR.

*** In support of our correspondent we may remark, that the sum of *sixteen hundred guineas* mentioned by us in a former article as having been extracted from a Scotch gentleman, snared by these disgusting advertisements, was paid to a quack who falsely assumed the name of "Brodie," and the title of "Surgeon." Probably the real Sir Benjamin, eminent as he is, never met with a more lucrative case. That such miscreants can possibly be confounded, even by the weakest of mankind, with the distinguished Coopers and Brodies, is most extraordinary, and cannot but redound to the discredit of our profession. Yet such is the fact!—ED. L.

## Naval Medical Intelligence.

PROMOTIONS.—Admiralty, Dec. 19th, 1846.—Surgeons: T. Frazer (1838), to *Crocodile;* E. J. Sinclair, M.D., to be agent at sick quarters, Wick, N.B.—Assistant-surgeons: N. Barrie, to *Ceylon;* W. L. Gordon (1846) (Act.), to *Caledonia*, for service of Plymouth Hospital; N. B. Alexander (1842), to *Ceylon.*

QUARTERLY NAVAL OBITUARY.—Surgeons: R. H. Beaumont (1795), P. Henry (1801), G. Hogan (1813), R. Austin (1815), J. Kittle (1836), R. Butler, M.D. (1843).—Assistant-surgeons: A. Kift (1812), E. Pinkerton (1825), T. Wallace (1841).

"DREADNOUGHT" SEAMAN'S HOSPITAL.—That portion of the fines, penalties, &c., recovered from the merchant captains and seamen, and paid, by the Seaman's Registry Act, to this the only universal charity in the world, amounts this year to 1200*l.*

## Army Medical Intelligence.

APPOINTMENTS.—War Office, Dec. 22nd, 1846.—56th Foot: Assist.-surg. G. A. Cowper, M.D., from 66th Foot, to be surg.; J. H. May, Gent., to be assist.-surg.—71st; Assist.-surg. H. C. Reade, from h.-p. 79th Foot, to be assist.-surg., *v.* Grant, prom. in Rl. Newfoundland Cos., to be surg., *v.* Pink, appointed to Provisional Battalion, *v.* S. A. Piper, M.D., who retires upon h.-p.

Dec. 29th.—Surg. R. J. G. Grant, from 16th Lt. Dragoons, to be surg., *v.* surg. A. Wood, M.D., who exchanges with 9th Light Dragoons.—13th Foot: Assist.-surg. F. W. Tupper, from 57th Foot, to be assist.-surg., *v.* Prout, appointed to the Staff.—36th: Assist.-surg. J. Jopp, M.D., from the 2nd Foot, to be surg.; F. Smith, Gent., to be assist.-surg.—48th: Staff Assist.-surg. J. Dickson, to be assist.-surg., *v.* Johnston, prom. on the Staff.

HOSPITAL STAFF.—Assist.-surgs.: J. T. O. Johnston, M.D., from the 48th Foot, to be staff surg. of the second class; A. A. Prout, from 13th Foot, to be assist.-surg. to the Forces.

Jan. 1st, 1847.—66th: J. T. La Presle, Gent., to be assist.-surg., *v.* Cowper, promoted in 56th Foot.

MONTHLY MILITARY OBITUARY.—Surg. Hamilton, h.-p., 46th Foot, Strathaven; Dr. Thomson, h.-p. staff-surg., Edinburgh. —Assist.-surgs.: Macready, 31st Foot, Barrackpore; Turnbull, 94th Foot, at sea.—Veterinary-surg. Robertson, 7th Hussars, Athlone.

## East India Medical Intelligence.

### BAD HOSPITAL ACCOMMODATIONS IN INDIA.

A recent Indian Paper states:—

"We continue to receive most melancholy accounts of H.M. 22nd Regiment, in the barracks at Colabah, (near Bombay.) The hospital, as well as five tents pitched outside, is full of sick; and the total number of sufferers from fever now amounts to no fewer than 183. Besides this, there is scarcely a man really well in the barracks. The number of admissions daily into the hospital is twenty-five, and the men describe the fever to be the same in form, duration, and severity, as that from which they suffered at Sukkur. The total strength of the companies at Colabah is 650 men, and there were 750 admissions and re-admissions from fever during the past month. At the last weekly health inspection of the soldiers by the surgeon of the regiment, only twenty-four men of the Grenadier company paraded, and those sickly, the remainder being still all in hospital. On the 15th of August last, this company, in strength about 100, marched out of Poonah, in perfect health and efficiency, and were admitted by all to be as fine a body of men as any in her Majesty's service. And, indeed, to the second division, which marched from Poonah, the same remark may with equal justice be applied. There is a poison contracted, and infused into the system of every man, woman, and child, of this fine regiment, by its unfortunate stay in the Colabah barracks, which a twelvemonth's residence in a healthy locality will not eradicate. The families of the soldiers suffer in the same degree as the men; even children at the breast, we hear, are afflicted with fever and ague. At this moment the small Female Hospital appropriated to the reception and treatment of sick women and children of the 22nd, and Queen's Depôt, is crowded with inmates. The space available is said to be extremely small. There is only one room, thirty feet by fourteen; and in this contracted space, women during their accouchement have likewise to be accommodated. Attached to this miserable building, there is neither kitchen, lavatory, nor other convenience. The Soldiers' Hospital, we are informed, is alike faulty. The edifice itself is well constructed and freely ventilated, but it contains not a single convenience —no place for bathing, (so necessary in a tropical clime,) or even for personal cleanliness. There is no shower-bath; all the outhouses, for whatever purpose used, are disagreeable and defective. The cooking-house is described as being a positive disgrace to a regimental hospital. It is small, ill ventilated, and constantly filled with smoke, which appears to have no

outlet. The cooks, we understand, suffer constantly from sore eyes, and owing to the smoke and limited space, are unable to prepare the various diets for nearly 200 patients."

Since the above report, however, the bulk of the regiment has been removed to Poonah. Not only are such the hindrances, however, to the sick being made well, but by some extraordinary indifference, the chances of the healthy being assailed with disease appear to be culpably multiplied, and that almost within the precincts of the capital of British India.

The *Calcutta Englishman* of Oct. 28th last, speaking of the 98th regiment, just arrived there, says:—

"We were sorry to hear that no better means of landing were afforded them than common cargo bhurs, in consequence of which they were long delayed in the sun: had they been allowed the use of the master attendant's boats, they would have been all on shore by half-past six. The unfortunate recruits of the same corps were sent to Dum-Dum, as we mentioned the other day, and were put into a stable without even a mat to keep the rain out. They lost their serjeant-major by an attack of cholera the second day. A committee of officers has reported that the place into which the men were put is unfit for human beings, and hardly tenable for beasts of burden. The men were taken from a comfortable barrack to an open stable, though the barracks have not been used to this day, and are not wanted. The men have had to pay the expense of conveying their baggage to Dum-Dum, and now have to pay for bringing it back again, in order to join their regiment in the fort. We understand that no medical comforts were provided for the sick at Dum-Dum. A little more care and forethought would not be amiss in such matters, for the efficiency of a regiment depends in no small degree upon the health of men newly arrived in the country."

Surely expatriation to an unsuitable climate need not be aggravated by want of due care on the part of authorities whose duty it is (or ought to be) to watch after the well-being of our public service; and least of all should this be in India, where we are no longer, as once, mere denizens on sufferance, but the lords paramount of the soil. When sanatory reforms at home have begun in right earnest, we shall soon find crying occasion for others in the colonies, as Major Tulloch's reports, and such as the above, amply testify.

## Medical News.

Apothecaries' Hall.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, Dec. 31st, 1846:—Cornelius Black, Chesterfield, Derbyshire; Charles Thompson, Leicester.

Quackery.—Act of the 2nd Geo. 3rd, chap. 14, commonly called Lucas's Act, made perpetual by the 31st Geo. 3rd, is neither dead nor obsolete. By this, "It is enacted, that if any apothecary, chemist, or druggist, or other person or persons, who now do, or hereafter shall, make, prepare, compound, *sell*, expose to sale, or keep for that purpose, any kind of drug or medicinal preparation or compound whatsoever; shall presume to make, prepare, compound, dispense, or *sell* any other officinal preparation or composition, or make up any extemporaneous prescription of any physician or surgeon in this kingdom by any other form or rule than shall be directed and appointed by the College of Physicians, such offender shall forfeit and pay for every such offence the sum of ten pounds. Such penalty to be sued for and recovered in a summary way before the lord mayor and recorder, or other chief magistrate, and to be levied by distress and sale of the offender's goods. One moiety to be applied to the purchase of medicines for the poor, and the other for the use of the informer."—*Dublin Medical Press.*

Magisterial Appointments.—We have just learned that J. Waddy, Esq., a respected medical practitioner, has been appointed a magistrate for the County Wexford. This may, we hope, be considered as an instalment of the debt due to the medical profession—*Dublin Medical Press.*

Vital Statistics of Highworth, Wilts.—The small town of Highworth is on the summit of a range parallel to and on the north side of that called the White Horse Hills. In the district are about 5000 inhabitants. The town is well supplied with water, and its cottages are mostly good and well situated; the district is undulating, the land well cultivated, and the villages are mostly placed on rising ground; there is little wood or stagnant water. "The following (says a Correspondent) is an abstract of the casual diseases which have occurred in my practice during the last four years, and which will exhibit the prevailing disorders of the neighbourhood. Indigestion must be taken to include all cases of pyrexia and disordered stomach and bowels which required medical aid, and had recovered without becoming more aggravated disease. Debility principally includes the complaints of females from 14 to 17, and from 45 to 55. Diarrhœa includes dysentery. Scrofula is meant to embrace all cases which have not developed themselves into abscess, ulceration, consumption, mesenteric disease, or glandular swellings. Rheumatism comprises lumbago, sciatica, &c. I have carefully omitted all cases of midwifery, and the diseases concomitant thereto, as also all accidents and surgical cases, as not dependent upon peculiarities of climate or locality. The average number of deaths has been 42 annually, out of which number 15 have occurred in infancy, 10 from old age, 5 of consumption, and 1 from accident each year. In 1845-6, in the practice mentioned, 112 cases of eruptive disease are noted, independently of 15 of psora, (scabies?) which disease had materially declined, as had small-pox and shingles, from the number in previous years. Of remittent fever there were 16 cases, scarlatina 17 ditto, hooping-cough 18, phthisis 22, mesenteric disease 9; and of other scrofulous diseases 41 cases, 21 of ophthalmia, 26 of phlegmonous inflammation, 6 of enteritis, 7 of cystitis, and 6 of erysipelas, 9 of asthma, 16 of epilepsy, 62 of debility, 12 of hæmorrhoides, 10 of hernia, 5 of paralysis, 11 of dyspepsia, 177 of indigestion, 74 of diarrhœa, 109 of rheumatism, 96 of catarrh, 88 of abscess and ulcers, 3 of cancer, and 21 of vermes. The above will form a tolerable average of the relative frequency of certain diseases in a country practice, as reported to us in a communication too lengthy to print entire, though we shall preserve it for future comparative reference. Contrary to what might have been expected in such a locality, atonic diseases appear to have been by far the more prevalent, and the communication would have been far more valuable if it had stated what was the relative condition of the labourers in that part of the country, what their usual diet, &c., or other circumstances of domestic life, to account for the great preponderance of dyspepsia, rheumatism, debility, &c. in an apparently healthy and hilly district. Some of our medical contemporaries have very lately called attention to an extraordinary number of deaths from fever occurring, also in an usually healthy locality, in a contiguous county (Upton, in Berkshire); and as such occurrences may be justly presumed to be independent of geographical inconveniences, it is clearly desirable to know to what remediable causes they may fairly be attributed.

A Medical Card.—Mr. William Hay, Member of the Royal College of Surgeons, Licentiate of the Society of Apothecaries, London, Senior Surgeon to the General Eye and Ear Infirmary, and late Surgeon to the Lying-in-Hospital, Leeds, Park-square, No. 23. [The real name is Hayes.]

Abscess in the Liver.—I have at present a case under my care, in which I opened an abscess in the liver, below the second false rib, on the 3rd of the month, and gave exit to upwards of a pint of matter. Twenty days afterwards, another abscess of the liver burst into the lungs, and for two days a large quantity of matter was expectorated, the discharge also continuing from the opening in the side. Afterwards, when the discharge from the side was copious, very little matter was expectorated; and when much matter was expectorated, but little was discharged from the side, giving reason to believe that the two abscesses had become united into one. Some days after, purulent matter, to the extent of three or four ounces at a time, was passed by stool. At present, no matter is expectorated, but a large quantity, most offensive, continues to be discharged from the side, and matter occasionally comes away by stool. The idea occurred to me of washing out the abscess by attaching a common injection-pipe to a large bladder filled with warm water, the pressure of the water being sufficient to force it into the abscess, the point of the pipe being inserted into the external opening; but the case was and is so hopeless, that I did not like to incur the risk of having it supposed that death was hastened by any experiment of mine, in case the patient should die shortly after. Such a proceeding, however, might, I conceive, be adopted in some cases with advantage.—*Dr. T. Moore, Gwalior.*

Medical Handbill.—"30, Melton-street, Euston-square. W. S. Gibson, Surgeon, Licensed Practitioner in Medicine Midwifery, &c., may be consulted daily from 11 to 1 A.M., and from 6 to 10 P.M.—In all affections of the chest, viz., inflammation of the lungs, bronchitis, asthma, cough, pleurisy, and other varieties causing pain, difficulty in breathing, profuse expectoration, spitting of blood, &c., and such symptoms tend-

ing to the production of consumption. In all affections of the bowels, viz., inflammation, spasm, pain, looseness, constipation, &c. &c. In affections of pregnancy and diseases of children, and in all diseases to which the human body is liable. Mr. Gibson may be successfully consulted, his attention having been much directed to the above complaints. His treatment will generally be found to arrest the progress of these fatal diseases, and to procure the sufferer renewed health and vigour. Mr. Gibson's mixtures for the cure of the above affections, 1*s.* 6*d.* each. The great success Mr. Gibson has had in all cases of midwifery, both natural and preternatural, that have come under his care during the last ten years of his professional practice, has induced him to make known for the benefit and economy of the public, that he still continues to attend midwifery, at the unusual low fee of 10*s.* 6*d.* each case, medicine and attendance included; but all desirous of Mr. G.'s attendance, are requested to bespeak him or the fee will be 1*l.* 1*s.* Reference can be given if required, to a great number of cases and some of the most dangerous description. Consultation gratis. Vaccination gratis."

Injunction.—The London Medical Directory.—His lordship, the Master of the Rolls, on Saturday last, granted an injunction against John S. B. Budgett, of Temple-chambers, Fleet-street, and John Johnson, of Brook-street, Holborn, to restrain them from printing and publishing a work under the title of "The London Medical Directory," the same being pirated from an elaborate work, bearing a similar title, published by Mr. Churchill, the medical bookseller.

College of Physicians.—It is rumoured that Dr. Hastings, of Albemarle-street, after passing the examinations of the censors for the licence of the College of Physicians satisfactorily, has been blackballed, instead of being elected into the College after the usual manner. Dr. Hastings has applied to the Court of Queen's Bench, with a view to procure a reversal of this arbitrary exercise of authority.

Mesmerism.—Mr. Dorville, of Alphington, near Exeter, has addressed a challenge to the mesmerists of the neighbourhood, offering to give £50 to the Devon and Exeter Hospital, or to the poor, if Mrs. Bird, the pretended arsenic-eater and clairvoyant, will accurately describe the contents of a sealed packet, upon condition, that if she fail to do so, Messrs. Parker, Longmore, and Janson, should forfeit £50 for the same purposes. These gentlemen have been unbounded in their vaunting approbation of the woman Bird, but they have suffered more than a week to pass without accepting the challenge. They will probably be as chary of meddling in the matter as the mesmerists were of touching Sir Philip Crampton's £100, though clairvoyants are abundant, and any one might have had it for the asking *and* describing.

South London Dispensary.—The committee of this institution reported to a general meeting, held recently at St. George's Cross, that during the past year the number of patients admitted was 3020, that of these 2380 had been cured, 470 relieved, 34 had died, and 136 were still under care. In the course of a conversation, which arose upon the application of three gentlemen to be admitted candidates for the office of surgeon, made vacant by the resignation of Mr. C. Meymott, it was decided that no one could be deemed eligible who kept an establishment for the sale of drugs.

Lincoln Lunatic Asylum.—Dr. Nicholson, one of the physicians to this institution, is still zealously engaged in the attempt to reform the regulation under which all the patients of the asylum are turned over, once a month, from one medical attendant to another—a proceeding by which patients are submitted to one kind of treatment for a month, and then, in the next month, are placed under a different regimen. Many evils arise from such an extraordinary regulation, but the governors of the asylum appear to be extremely slow at perceiving the absurdity and mischief of the system they defend. Dr. Nicholson has, however, expressed his determination to persevere to the utmost in his philanthropic endeavours.

The Late Westminster School of Medicine.—The Council of the Royal College of Surgeons have withdrawn their "recognition" of the anatomical lectures professed to be delivered in this School; but from an alleged desire to protect those pupils who had already entered on attendance there, in order to procure the necessary certificates, those documents will be received from the anatomical lecturers dated up to Christmas last.

Operations Without Pain.—An operation was last week performed by Mr. J. G. Lansdown, at the Bristol General Hospital, the patient being previously placed under the influence of sulphuric ether vapour. In this case, the thigh was removed without any manifestation of pain on the part of the patient. The operation appears to have been as perfect and satisfactory a test of Dr. Morton's discovery as that performed by Mr. Liston. The inhalation of ether was performed by means of an apparatus constructed by Mr. Herapath. Wine was given at intervals during the operation, and it was stated, that insensibility may be increased or diminished by administering wine and the etherous vapour alternately.

Dr. M'William.—We are happy to state, that Lord John Russell has given to this eminent officer the valuable appointment of medical attendant to the Board of Customs, recently become vacant. This appointment was conferred in the most handsome manner, without any application on the part of Dr. M'William, Lord John's secretary stating, in the letter which announced it, that the appointment was conferred on account of Dr. M'William's distinguished services in the river Niger, in the year 1841. Most of our readers will remember the disastrous results of this expedition; but only a small number may be aware of the share that Dr. M'William had in saving its shattered remains from utter destruction.

## CORRESPONDENTS.

We should like to meet with the plaintiff who would bring an action against some one of the parties who have "obtained money under false pretences" from an unfortunate patient. His proceedings at law might prove highly beneficial to the public.

We do not possess the slightest information on the subjects named by *Observator*. No Bill has been laid before Parliament relating to any appointments bearing the title in question.

We cannot publish the communications of *Mr. Robinson*, which have already been printed in two or three non-medical journals.

The *China Mail*, Oct. 29th, the *Eastern Counties Herald*, Dec. 31st, 1846; the *Scottish Herald*, Jan. 1st, and the *Bucks Advertiser*, Jan. 2nd, 1847, have been received.

*A Pupil.*—We believe the certificate would be satisfactory; a Memorial should be presented to the Society.

*A Country Surgeon.*—Certainly not; the 24th clause only guarantees the chemists and druggists their present right of the sale of drugs. For a druggist to prescribe would be then, as now, illegal.

*L. A. C. of fourteen years' standing.*—The present title would not be interfered with, *except* upon the Register.

*Dr. J. C. Hall*, (East Retford.)—We shall be happy to receive the articles on Quackery.

*R. W. J.*—We should prefer a longer time of preparation than three years.

*R. L. D.*—The indenture would probably be excused. The secretary should be addressed.

*Mr. Humphreys*, (Bangor,) who was accused of unduly assuming the M.B. of the University of London, writes to state he is a legally qualified practitioner, and that those who have attacked him are not so. It appears that Mr. Humphreys is a licentiate of the Hall, and an under-graduate of the University of London, by which we suppose is meant, that he has passed the first examination for the M.B. degree; that alone would be a guarantee of considerable professional attainments; but no under-graduate, with proper respect for his University, would use a degree to which he was not entitled, however surrounded by others appropriating false titles to themselves.

*Daily News.*—We can see nothing improper in the names of Dr. Bright and Dr. Ferguson being mentioned in the paragraph relating to the death of the Sardinian minister. Our correspondent is indeed straightlaced.

*Mr. Gower* (Hampstead) writes to suggest, that in certain cases the registrar-general should have the power of ordering post-mortem examinations, and paying medical men, in cases where the cause of death is uncertain, but in which a coroner might hesitate to order an examination. There can be no doubt that post-mortem examinations ought to be performed much more frequently than at present, and in cases occurring in private practice, as well as in hospitals. This is a subject worthy the attention of the Pathological Society, and would extend its interest from the hospital physicians and surgeons to the profession generally.

*S. B.*—There is only a very remote chance indeed of any prosecution in such a case.

*Dr. R. Barnes* is thanked; but the subject had better rest for the present.

*Court Medical*—The communication from Dr. George Webster and Dr. W. Tyler Smith shall be inserted next week.

*Mr. Battley* will perceive his paper in print in the present number of The Lancet.

*Dr. Fairbrother's* interesting account of the operation performed at the Bristol General Hospital, while the patient was under the influence of ether, arrived too late for this week's Lancet. It shall appear in the next number.

Communications have been received from—A Well-wisher to the noble art of Medicine and Surgery; Mr. William Hunt; A Pupil; Mr. Battley; A Country Surgeon; L.A.C.; Dr. J. C. Hall, (East Retford;) R.W.J.; S.D.T.; R.L.D.; Mr. Stidolph; Dr. Reid; Detector, with letters 3 und 4; Dr. Ormerod; Mr. Holmes Coote; Dr. Skae; *The Western Times;* Mr. Humphreys; Mr. Gower, (Hampstead;) Dr. Julius Budge, (Bonn;) Mr. Youl; T.B.; Dr. Robert Barnes; Mr. Silvester, (Worcester;) Dr. Boott; Mr. Chitty Clendon; Dr. Collyer, (Jersey;) Mr. W. Smith, (Bristol;) Dr. Gavin Milroy; Dr. Fairbrother, (Bristol;) Mr. David Davies; ASubscriber for some years; Amator Justiciæ; Mr. F. R. Hunt; Dr. Lockead Robertson; Common Justice, &c.

# Lectures on Surgery,

DELIVERED IN

## THE THEATRE OF ST. GEORGE'S HOSPITAL,

DECEMBER, 1846.

BY SIR B. BRODIE, BART., F.R.S.

## LECTURE III.

### DISTORTIONS OF THE SPINE NOT CONNECTED WITH CARIES.

THE treatment, which I described in the last lecture, is all that is required in the great majority of cases of spinal curvature, as to which you may be consulted. Where it is diligently pursued, it will seldom fail either to remove the curvature altogether, or to reduce it so far as that it will not be noticed except by the critical eye of an anatomist. There are a few cases, in which, even though you have recourse to it at an early period, this treatment will be found to be insufficient, and you will find it necessary to have recourse to other means of relief or cure. The same observation is applicable to what may be called inveterate cases of spinal curvature—where the curvature has been neglected for some years, where you are not consulted until the patient is of that age, that not more than one or two years remain during which it can be expected that any improvement in the figure will take place. You may lay it down as a general rule, that in any case in which the figure is so altered as that the distance of one scapula from the spinous processes is three times as great as that of the other, the curvature will not only not be removed, but will actually continue to increase, if you act altogether on the simple means which I have already suggested.

Dr. Bouvier, of Paris, who has paid great attention to cases of this description, and has an establishment for the reception of young ladies affected with curvature of the spine, was (and I suppose that he is so still) in the habit of recommending that his patients should never walk, except on crutches of such a height that they should not be able to plant the entire sole of the foot on the ground, nor to stand except on tip-toe. The *modus operandi* is plain enough. It resembles that of the various climbing exercises. The weight of the upper extremities is taken off the spine, and that of the lower extremities tends to bring the vertebræ into a straight line, at the same time that all the muscles of the spine are kept in action. Whatever I have myself seen of the result of this practice has been in its favour. But it is difficult to give it a fair trial in private families, and my experience of it is limited. I have heard it said that it has a tendency to raise the shoulders, and to make the patient what is called high-shouldered; but the same remark has been made as to some other exercises, of which I know that they produce no such effect in reality. I have also been informed, that the lateral pressure of the crutches has a tendency to flatten the ribs on the sides of the thorax. I suppose that this must depend a good deal on the manner in which they are used, and, at all events, that such a change in the form of the ribs will be produced only where the use of the crutches has been begun at an early age, and continued during a long period of time.

You will recollect the objections which I offered to the use of artificial support, in the cases not only of healthy girls, but also of those in whom there exists a moderate degree of spinal curvature. These objections, however, do not hold good with respect to inveterate cases of this kind. In fact, wherever there is a great degree of spinal curvature, the use of exercise and the recumbent position are of themselves quite inadequate even to prevent the increase of the distortion; and in such cases some mechanical aids are absolutely required.

Various kinds of apparatus have been contrived for this purpose. The principal requisites are, that it should be at the same time strong and light; that in all cases it should be so constructed as to take off the weight of the shoulders, and that in certain cases it should make a permanent pressure on the projecting or bulging ribs; at the same time, that the ribs in the opposite sides which are unnaturally depressed should be free from pressure altogether. These things can be accomplished only by means of a machine made of steel, well fitted to the pelvis on which it is to rest, with a crutch on each side, or something which will answer the purpose of a crutch in supporting the axilla; there being some additional contrivances for adapting it to those cases in which it is necessary to give support to the bulging ribs. Whatever some writers may have said formerly on the subject, there need be no apprehension of any ill consequences from the pressure made by the machine on the pelvis. Even in a case of rickets, I am inclined to believe that pressure may be applied to the pelvis in such a manner as not to occasion those ill consequences which follow the application of it to other bones. However that may be, in the cases which we are now considering the bones are not rickety, and you may be assured that there is no danger of harm being done to the pelvis.

Of the two machines which are placed on the table, one is made by Mr. Bigg, of Leicester-square. It has the advantage of lightness, and of being in no way inconvenient to the wearer. It takes off the weight of the shoulders sufficiently, and it admits of being easily adjusted to the alteration which takes place as the patient grows in height, or improves in figure. It is well adapted to those in which a moderate degree of support is required, but in which anything beyond this would be superfluous.

The other machine is made by Mr. Laurie, of Bartholomew Close. It supports the shoulders equally with the former. It gives a lateral support where that is required—that is, to the bulging ribs; at the same time that it leaves the other parts of the chest altogether free from restraint or pressure. It is not quite so light or convenient to be used as the other, but when carefully adjusted it is convenient enough, and in cases where the distortion is considerable it is very much more efficient.

The machine which has been described under the name of "Tavernier's Lever Belt," consists of a large belt, which closely embraces the pelvis, having a steel busk, or lever, attached to it posteriorly, not at right angles, but somewhat inclined to the side opposite to that of the dorsal curvature, some leathern straps being attached to the leathern belt in front, and to the lever behind, in such a manner as to give support to, or compress, that side of the chest on which the bulging of the ribs has taken place, without in any way restraining the side opposite. The operation of it is therefore similar to that of one of the machines which I have just shown you, with this exception, that it gives no direct support to the shoulders. The contrivance is ingenious, and having the merit of simplicity, cannot fail to be preferable to most others, if it really answers the intended purpose. How far it will do so I cannot venture to say without a greater experience of its effects than I have hitherto had.

In whatever manner the necessary mechanical support is supplied, it must be borne in mind that it is not to supersede other methods of treatment. The machine should be taken off at bed-time, the use of it being resumed in the morning. It should also be taken off for two or three hours in the middle of the day, during which time the patient should be employed in some of the exercises described in the last lecture, lying down to rest at intervals. She should live as much as possible in the fresh air, and always lie down to rest when she returns home after walking or riding. The use of the machine being now begun, it should be continued until the period of growth is expired. The figure is then made for life, and, as I have already explained to you, all further treatment is useless.

Other methods of treatment, in addition to that which I have just mentioned, have been recommended by some of those who are supposed to have paid particular attention to cases of this kind. Couches have been contrived, on which the patient may be laid during a part of the day for the purpose of having the spine artificially extended. One of these is the inclined plane which I have already mentioned. But a more effectual method of obtaining the same object is afforded by the couch invented by the late Mr. Shaw, and of which you will find an account in his works on spinal distortions. Such contrivances are chiefly useful in the cases of those patients who are not, in the first instance, strong enough to have recourse to the necessary exercises. But the same system has been carried further than this, the forcible extension of the spine being continued even during the night, and combined with lateral pressure on the bulging side of the chest and pelvis. Whether such a plan can, for any length of time, be pursued with safety, may be a matter of doubt; but of this I am satisfied, that it is productive of no advantage that is worth obtaining at the expense of so great a sacrifice of ease and comfort, and that, as to its being pursued in a private family, it is out of the question. Whatever good can be done, may be done by other and less objectionable means. I say "whatever good," using the term advisedly, for you must not yourselves expect, nor lead your patient or her friends to expect, too much. In the ordinary and slighter cases of spinal curvature, you may generally suc-

ceed in removing it altogether, or so far that no one will observe it; it being of course understood that the patient and her family give you their assistance, and that the plan which you propose is diligently pursued. In the worse forms of spinal curvature you may generally succeed in very much lessening the deformity, and you may always prevent its further increase. Where there is an hereditary disposition to it, the removal of the curvature is more difficult than where no hereditary disposition exists. In such cases you must be cautious as to the promises which you make in the first instance. In cases of long standing, where you are consulted after many years of careless neglect, and where the patient has nearly attained her full growth, the utmost that can be expected is some very slight improvement. The vertebræ and the ribs are altered in their shape, and it is now useless to expect that their natural shape should be restored. It is by no means improbable that masses of new bone are deposited on the surface of the lumbar vertebræ, fixing them to each other; in other words, that they are anchylosed. In any case of considerable distortion, you may form some notion as to the probability of your being able to render the patient service, in the following manner:—Supposing her to be provided with one of those contrivances for mechanical support which I have already mentioned, let her height be measured against the wall before the machine is applied, and again afterwards. In some instances, the application of the machine will cause an addition to the height of one or two inches, or even more than this; in others, none at all. In the former case, it is reasonable to expect that the figure may be improved, while little or no improvement is to be expected in the latter.

On adverting to my former lecture, I find that there are some points on which it would have been well that I had offered some observations, though I omitted to do so.

It is not unusual to find young persons affected with spinal curvature complaining of pain in the back and sides; and it seems not unreasonable to suppose that some such inconvenience may arise from the displacement of muscles and nerves from their natural position; but, on the other hand, we also find that these complaints are often made by those in whom the alteration in their figure is very trifling; and also that some of those in whom there is a considerable degree of distortion make none at all. I very much suspect that, in the majority of cases in which such pains exist, they are to be attributed to a weak state of constitution, and a general deficiency of nervous energy, rather than to any other cause; in fact, for a delicate young woman to refer pains to her back is as much a matter of course as it is for her to refer them to her head; and of those whom I have just mentioned, there are very few who will not tell you (if you ask them on the subject) that they have pains in the head as well as in the back. If this be the proper view of the matter, it is plain that, for the relief of these pains, you are to look, not to local, but to constitutional treatment.

I explained to you, in the first of these three lectures, that wherever there is much deviation from the natural figure of the spine, there must be a corresponding change in the position of the thoracic and abdominal viscera. Nor is this all. The viscera (the lungs and liver more especially) become actually altered in shape. We cannot but suppose that such alteration must interfere in some degree with the due performance of their functions. Nevertheless, it is not uncommon to see persons in whom a very considerable degree of distortion exists living to be old, and not apparently suffering in their health to a greater degree than their more fortunate neighbours.

The lateral, or (as Mr. Shaw has not improperly named it) the serpentine curvature, is not the only kind of deviation from the natural figure of the spine about which you will be consulted.

In persons advanced in life, the upper part of the spine is not unfrequently bent forwards, so that the spinous processes present a gradual curve posteriorly. This is the result of a habit of stooping forward, which may, I suppose, be itself traced to a deficient power in the muscles of the back and neck. But a habit of stooping from any other cause may produce the same effect. Dr. Potts showed me the spine of a madman, a patient in a French hospital for lunatics, who was reported to have remained for many years with his head bent forwards, and in which such a gradual or hoop-like curvature exists in a very remarkable degree, the bones at the same time being unusually light, in consequence of their not containing the proper quantity of phosphate of lime. This last circumstance is in conformity with what happens in other cases. In proportion as bones are less exercised, so are they found to contain a smaller proportion of earthy matter.

The same kind of curvature is occasionally met with in young persons of either sex. The head and neck are bent forwards, the whole spine, from the neck to the upper part of the loins, presenting a convex line posteriorly, there being at the same time an appearance of hollowness in the loins. This change in the figure of the spine may exist in various degrees, from that which is scarcely perceptible to that which constitutes a disagreeable deformity. It may generally be traced to natural formation in the first instance, aggravated afterwards by a careless habit of stooping. In proportion as the head and neck are inclined forwards, so must the back and the shoulders be thrown backwards, in order that the centre of gravity of the trunk may be prevented from deviating too far from its proper place; and this sufficiently explains the peculiar appearance which I have called the hollowness of the loins.

So far as this state of things depends on original formation, it is needless to look for any remedy; nor, indeed, is the deformity such as to make it an object of much importance; but, so far as it is aggravated artificially by bad and careless habits, a great deal of good may be done by simple means, provided that you are consulted at an early period, and the patient will use the necessary exertion to assist you in the treatment. If she writes or draws, it should be while she stands at a high desk; if she reads, her book should be placed at such a height, that she need not stoop to read it. The same rule should be observed if she uses her needle, or is engaged in any other kind of work to which girls are accustomed. A drill-sergeant, or a good dancing-mistress, may render her much service.

Probably not less than thirty-five years have elapsed since the late Mr. Grant, of Bath, proposed, as a remedy for lateral curvature of the spine, that the patient should be in the habit of walking, balancing a weight on the head. It must be confessed, however, that in this last class of cases the remedy is of little value. If a light weight be placed on the head, it contributes to increase the power of the muscles of the spine only in a very small degree. If a heavy weight be employed, it increases the influence of one of the causes on which the curvature depends. In those cases, however, which are under our immediate consideration, this kind of treatment may be had recourse to with great advantage. A light weight should be placed on the crown of the head, near the forehead, and the patient should accustom herself to walk, balancing her head so that the weight may remain where it was placed. The weight then should be such as will easily fall off, if she be not careful to prevent it. Nothing answers the purpose better than a book,—a very thin book is sufficient in the first instance, but a thicker one may be afterwards employed, as the muscles of the neck are made stronger by exercise.

In practice, it is important that you should distinguish this kind of spinal curvature from that which is the result of caries of the bodies of the vertebræ. In both, the curvature is in the same direction, but in the former it is always gradual, in the latter always angular. The only case in which there is any chance of error, even on a superficial observation, is where there is caries, with considerable destruction of the bodies of the lowest cervical and upper dorsal vertebræ. Here the angular form of the curvature is not always to be perceived by the eye, but it is sufficiently plain to the touch. The neck, too, is absolutely shortened, and appears as if it had sunk downwards between the shoulders.

What I am about to mention is a thing of no importance in itself, and, in fact, in no disease at all; but I recollect being somewhat perplexed by it when I first met with it, and I have known others to be perplexed by it also. For these reasons, I think it worth while to call your attention to it.

Women, as they advance in life, are liable to an apparent protuberance in the situation of the last spinal process of the neck. It generally occurs in those who are in what is commonly called good condition, (*embonpoint*,) and seems to arise partly from the habit of stooping forwards, and partly from an increased deposit of fat over that part of the neck. Of course the care of the surgeon is here quite superfluous; but I have known this appearance to be mistaken for disease. In one case, a caustic issue had been made on each side of the neck; and in another, it was supposed that a tumour had formed which would one day require an operation! I call your attention to the subject merely that you may not fall into similar errors.

The case which I am about to relate affords an example of spinal distortion of a very different nature from those chronic affections which I have already described, being, in fact, the result of inflammatory action, and corresponding to those contractions which follow inflammation of the muscles or joints of the extremities.

A young gentleman, ten years of age, after some exertion in playing with his brother, was seized with severe pain, referred to the left side of his neck, with inability to move his head, or even to open his mouth. The head remained bent to one side, so that the cheek almost rested on the shoulder. Inflammation followed, the left side of the neck being swollen, and exquisitely tender to the touch. Leeches and other remedies were had recourse to, and the inflammatory symptoms subsided. The neck, however, remained bent to the left side, and was in this state when I was consulted, three months after the commencement of the attack. At this period, all attempts to restore the head and neck to their proper position were ineffectual. Partly from the position which the parts had assumed, and partly from the wasting of the muscles, the transverse processes on the right side of the neck were unusually prominent, so as, in the first instance, to produce an impression on the mind that the vertebræ had been actually displaced, though a more rigid examination showed that there had been no displacement in reality.

Sir Charles Bell was consulted on the case with me, and we agreed in recommending a course of vapour baths, and shampooing. This plan was, I believe, carefully pursued. In the course of three weeks, there was a perceptible improvement; and when I last saw the patient, about two years afterwards, the head and neck were very nearly restored to their natural position.

I conclude that the circumstances of this case are best explained by supposing that the inflammation induced by an apparently trifling accident had left the soft parts on one side of the neck in a rigid and contracted state. Probably, in the first instance, there might have been some laceration of muscular fibres. From the degree and extent of the inflammation which followed, we may, however, conclude, that in whatever part it had its origin, it was not afterwards limited to a single order of textures. I have known several cases, in which precisely the same symptoms, and followed by the same results, occurred, independently of all kind of local injury. In one young lady they were the sequelæ of what was regarded as a simple continued fever: in others, supervened on an attack of scarlet fever or measles. In all the cases which have fallen under my observation, the patients, after the inflammation has completely subsided, have derived benefit from the use of the vapour bath, friction, shampooing, and exercises. In some instances, the relief has been complete, in others partial; the difference depending, as in cases of contracted joints of the extremities, on the amount of inflammation, in the first instance, and on the time which has been allowed to elapse before the proper remedies were had recourse to after the inflammation had subsided.

Undoubtedly in these cases much more good is to be done by the employment of proper means for subduing the inflammation in the beginning, and thus lessening, if not preventing, the subsequent contraction, than by any system of treatment afterwards. I was called in to see a young lady, twelve years of age, with Mr. W. Cathrow, of Weymouth-street, labouring under symptoms of acute inflammation on one side of the neck. There was severe and constant pain. The parts were tender to the touch. The head was bent towards the affected side, so that the cheek almost rested on the shoulder, and every attempt to restore the parts to their natural position aggravated the patient's sufferings. We prescribed the application of leeches and fomentations, and administered calomel combined with opium, so as to affect the gums, with occasional purgatives. Under this treatment, a rapid amendment took place. The inflammation and pain subsided; and the pulse was reduced to the natural standard. After two or three months, the only vestige of the disease was, that the neck was somewhat stiff, and still in a slight degree drawn to one side.

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To the honour of Brown, the author of the Brunonian system, it is related, that when suffering under very severe privations in prison, in London, he indignantly rejected the offer of a considerable sum of money from a vendor of quack medicines, for permission to give a composition of powerful stimulants the name of "Dr. Brown's Exciting Pills." This anecdote deserves to be related in the present day, in the ears of all those who, without a bribe, suffer their names to be affixed by quacks to various nostrums, and do not attempt either to defend themselves or to vindicate their profession, by punishing the offenders.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION; AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

### EXTIRPATION OF THE MAMMARY GLAND FOR SERO-CYSTIC SARCOMA; RECURRENCE OF DISEASE TWICE IN THE NEIGHBOURING PARTS, WITHIN THREE YEARS FROM THE FIRST OPERATION.*

Case 1.—H. L——, aged thirty-nine, a stout, healthy-looking woman, had the right breast freely extirpated by Mr. Lawrence, three years ago, for an enormous sero-cystic tumour, the surface of which was occupied by a reddish and bleeding fungus, the size of the two fists. The wound healed readily, and she remained well for nearly two years, when she noticed a small tumour on the same side, near the axilla. This mass, about the size of the closed fist, when removed, proved to resemble very closely in structure the tumour first extirpated. It was composed of a firm homogeneous structure, of yellowish-white colour, and interspersed with cysts of various sizes, containing a glairy fluid. There were, however, some softer and more vascular portions, which were viewed at the time with considerable suspicion. She recovered quickly from the operation, and remained well nearly eight months, when she noticed about the cicatrix, and towards the axilla, a third tumour, which, rapidly enlarging, attained (from her account) in six weeks the size of a large orange. Admitted into Lucas ward November 12th, 1846.

Nov. 14th.—The tumour was extirpated in the usual manner by Mr. Lawrence. The surrounding healthy parts were freely removed, and the dissection was carried close to the walls of the chest. The morbid structure, which appeared constricted into two halves by the cicatrix consequent upon the former operations, felt soft, and almost fluctuating, and closely approached the surface on that part detached from the chest. It was composed of two larger and of several smaller cysts. From one of the former a small quantity of glairy fluid issued; but the cavity of both was filled by a soft, grey-coloured, and transparent mass, tinged in parts of a darker hue, by blood-discs, either in vessels with very thin walls, or extravasated. Microscopical examination detected a quantity of free granules, oil globules, and nucleated cells, contained in a very delicate and sparing fibrous stroma. The patient was carried to bed, and the wound, which did not admit of being closed by sutures, was covered with a soft bread-and-water poultice.

Nov. 20th.—There is an erysipelatous blush about the wound; the surrounding integument is swollen and painful upon pressure; she has been sick, and complains much of thirst; bowels confined; skin hot; tongue moist. Two aperient pills immediately; an effervescing draught three or four times a day.

24th.—There is less redness about the wound, which is free from pain, and discharges freely; the bowels are regular; the tongue clean and moist: she has regained her appetite, and complains only of feeling weak. Still in the hospital.

A case similar to that here related is recorded by Sir B. Brodie, in his excellent description of this disease in a recent work.† It appears that he "removed from the breast of a private patient, in the month of November, 1836, a large sero-cystic tumour, which had existed many years, and was slowly, but gradually, increasing in size. The tumour, on a superficial view, appeared to be one uniform mass of solid substance; but it consisted of a congeries of membraneous cysts, the cavities of which were filled with a fibrinous matter. A bristle, introduced at one of the ducts of the nipple, entered one of the cysts by a smaller circular aperture. The wound healed, and the patient remained well till 1845, when, in the month of September, she again consulted Sir B. Brodie for a small tumour which had shown itself in the neighbourhood of that which he had removed before. As he was on the point of leaving town, she placed herself under the care of Mr. Aston Key, who extirpated the morbid growth. The following is the description given by Mr. Key of the tumour:—"It was solid, containing an amber-coloured pulpy mass, disposed in cells. In one small spot there was a dark-coloured mass resembling the fungoid tubercles that occur on the cheek, and that are of

* For a detailed account of the early particulars of this case, vide THE LANCET, vol. i. 1846, p. 393.

† Lectures illustrative of Points in Pathology and Surgery, p. 145.

malignant character. The cyst containing the mass was dense, and in one spot adhered firmly to the pectoral muscle."

It appears to me extremely questionable, whether, in the two cases here related, the recurrence of disease can be explained upon the supposition that, after each operation, portions of the morbid growth were left behind. Mr. Lawrence was particularly careful to carry the incision into perfectly healthy parts; the cut surfaces were most minutely examined, and it was the opinion of the several surgeons present, that the extirpation of the tumour was complete. Whatever may be the commencement of the disease, whether it consist in a dilatation of the lactiferous tubes, or in the formation of simple cysts, or cystoids with endogenous development of secondary cysts, it must be allowed that even after the complete removal of the mammary gland, a disposition to the generation of fresh cysts remains, which manifests itself either in the cellular tissue of the axilla, or in the pectoral muscle, the fibres of which become degenerated and eventually atrophied. Although in these cases an operation, which should be performed long before the protrusion of a fungus is strongly indicated, it is as well that the surgeon should not give too strong an opinion as to the permanence of the cure to be obtained by such means. The fluid contained in different cysts of the same tumour varies much in character and consistence. In some, it is a clear watery serum; in others, it is of a reddish-brown, or even black, colour, but also watery; the colour is owing to the presence of altered blood discs, pigment cells, or dark granules. Other cysts, again, contain a thick glairy fluid, which speedily coagulates into fibres when exposed to the air. All the cysts are lined by numerous and large epithelium scales. The hæmorrhage attending the removal of a breast affected with cystic sarcoma is sometimes very profuse. In one case in which Mr. Lawrence was assisted by Mr. Havers and by myself, twenty-two arteries were tied. It will be interesting to watch the progress of the case of Harriet L——, any further particulars connected with which shall be related in a future report.

CIRCUMSCRIBED SCIRRHOUS TUMOUR OF THE FEMALE BREAST; OPERATION.

Case 2.—Anne P——, aged thirty-five, a healthy-looking married woman, the mother of four children, noticed, about four months ago, a hard, moveable, subcutaneous tumour, the size of a walnut, occupying the upper part of the left breast. It had given her no pain, and her attention was first accidentally attracted by an undue fulness of the part.

Nov. 7th, 1846.—The tumour was extirpated by Mr. Lawrence. It was imbedded in fat, but was unconnected with the true glandular structure. Upon making a section, there appeared a transparent, light-grey coloured surface, with opaque yellowish-white spots and streaks of various sizes, disseminated about. Under the microscope it resolved itself into a moderately abundant fibrous tissue, caudate or oval cells of various sizes, containing a clear nucleus, with two or more nucleoli, free granules, and oil globules. The opaque, yellowish-white spots consisted of granules and oil globules.

Magnified 800 diameters.

The patient objecting to the employment of sutures, the wound was covered with a soft poultice, and left to heal by granulation.

24th.—The wound is nearly cicatrized; she has left her bed. Still in the hospital.

CIRCUMSCRIBED SCIRRHOUS KNOT ATTACHED BY A PEDICLE TO THE SURFACE OF THE FEMALE MAMMARY GLAND; OPERATION.

Case 3.—A. B——, aged sixty, applied at the hospital, Sept. 29th, 1846, with a small, hard, and moveable, scirrhous knot, situated between the integuments and the surface of the right mammary gland, and attached to the latter by a narrow pedicle. A small incision was made through the skin by Mr. Lawrence, and the little knot, which slipped out readily, was removed, with a small portion of healthy mammary gland.

*Microscopical examination.*—It was composed of a dense fibrous structure, which contained nucleated cells of irregular form.

The wound healed without an unfavourable symptom.

Magnified 800 diameters.

Cases 2 and 3 have been reported, not as possessing any remarkable points of interest, but as illustrating a form of cancer, the existence of which has been denied by some authors—namely, the circumscribed scirrhous tumour, as contrasted with infiltration of scirrhous matter in the tissues of different organs. Interesting as a proper comprehension of this point may be pathologically, its surgical importance is of much greater moment. The general result of operations performed for the removal of circumscribed scirrhous tumours is encouraging. Life will most probably be prolonged for four, five, or even more years; some cases are on record where the cancer has not returned. But in the infiltrated form of the disease, the consequences are so disastrous, that some of the most eminent surgeons in this metropolis decline attempting an operation under any circumstances whatever.

I shall next proceed to the consideration of scirrhus affecting the male breast, of which there are two well-marked instances at present in the hospital; one in Pitcairn ward, under Mr. Stanley; the other in Bentley ward, under Mr. Lloyd.

## Original Papers.

### ON EXPERIMENTS IN PHYSIOLOGY, AS A QUESTION OF MEDICAL ETHICS.

By MARSHALL HALL, M.D., F.R.S.

*To the Editor of* The Lancet.

Sir,—Will you dedicate a small space, in the forthcoming number of your journal, to the following extract from my work on the Circulation of the Blood, published in 1831; and allow me to ask my professional brethren whether the proposition or statement made in it meet with their approval?

We are greatly in need of a code of medical ethics. I have ventured to sketch what appears to me to be ethical in regard to experiments in physiology.

It has become necessary to re-state these principles, from the fact, that certain writers are still to be found cowardly and base enough to calumniate the physiologist, who is guided by the strictest principles of morality and of conscience in his difficult and painful career.

Is it right to "kill and eat," to preserve strength and health; and is it not right to perform experiments, with all the precautions which I have laid down, to promote that very science, on which not only the preservation, but the restoration, of strength and health depend?

Or, if an animal is to be destroyed, is any more lenient mode of killing it known than that inflicted by asphyxia; and of the modes of inducing asphyxia, is any so prompt as strangulation, in which sensibility does not survive one second of time? May I ask the writer in the last number of the *Medical and Chirurgical Review*, how it will please him henceforth to dispose of superfluous puppies and kittens?

I am, Sir, your obedient servant,

London, Jan. 1847. Marshall Hall.

P.S.—I am informed that I am favoured, for the hundredth time, with a notice by my critic of old, Dr. Forbes. It is said to be "very severe," and—Professor Alison and Dr. Carpenter being ashamed of the procedure—to be by the Editor's own hand; malignity has choked *his* judgment.

I have certainly no wish to be praised by the laudator of Mesmer, Hahnemann, and Priessnitz, the detractor of Louis. But, seriously, does not the whole case loudly call for a Court-Medical?

"THE PRINCIPLES OF INVESTIGATION IN PHYSIOLOGY.

The sources of our knowledge in physiology, as in all natural science, are observation and experiment. The former consists in a sustained and watchful attention to events which pass under our eye in the ordinary course of nature; the latter, in devices for placing natural objects in new and unusual circumstances or situations.

Unhappily for the physiologist, the subjects of the principal department of his science, that of animal physiology, are sentient beings, and every experiment, every new or unusual situation of such a being, is necessarily attended by pain or suffering of a bodily or mental kind. Investigations in this science should therefore—being exposed to peculiar difficulties—be regulated by peculiar laws; otherwise the physiologist will scarcely escape from the imputation of cruelty.

The first principle to be laid down for the prosecution of physiology is this:—We should never have recourse to experiment, in cases in which observation can afford us the information required.

The various cases of monstrosity, and the interesting facts supplied by comparative anatomy, afford us ample scope for pure observation. They are a sort of natural experiment. And it appears to me, that, in general, they present to us far less equivocal phenomena than any which can result from an actual operation involving the infliction of violence or of pain.

The physiological argument deducible from the facts observed in cases of monstrosity, was first clearly drawn by Mr. Lawrence in this country, and afterwards by M. Lallemand, in France. The subject deserves still further attention, and will be repeatedly noticed in the following pages. M. Geoffroy Saint-Hilaire has beautifully portrayed the anatomy of monstrosity. It still remains to elucidate its physiology in the same complete and philosophical manner.

It may be remarked also, that comparative physiology has not kept pace with comparative anatomy; but the subject appears at present to be obtaining due attention. It will be seen, in the course of this little work, how indispensable the knowledge of comparative anatomy is to the physiologist.

In addition to the sources of physiological discovery afforded by cases of monstrosity, and by comparative anatomy, the various results of disease and of accidents afford us examples of undesigned experiments. M. Lallemand appears to me to have availed himself of these circumstances as a physiologist, more completely than any other observer. And here the eloquent expression of Celsus may not inaptly be quoted:—'Quæ cognosci in vivis possunt, in ipsis curationibus vulneratorum, paullò tardiùs, sed aliquanto mitiùs, usus ipse monstrabit.'

As a *second principle* of the prosecution of physiology, it must be assumed that no experiment should be performed without a distinct and definite object, and without the persuasion, after the maturest consideration, that that object will be attained by that experiment, in the form of a real and uncomplicated result.

It will be repeatedly observed, during the course of the following pages, that it is one of the most difficult things in physiology to devise an unequivocal and unexceptionable experiment. I fear most physiologists have erred in this point of view, and have regarded and detailed, as the simple effect of one particular cause, what was in reality the unsuspected result of several.

Now an experiment made in violation of the first of the principles just proposed, must be viewed as *unnecessary;* an experiment made in violation of the second, as *useless;* and both, as *unjustifiable.*

Equally unjustifiable is the needless *repetition* of an experiment. This can only be proper where it is incumbent upon us to satisfy the requisitions of science, by removing a remaining source of uncertainty or error. To repeat a physiological experiment, in order to gratify the mere curiosity of individuals, appears to me to be inadmissible.

It must be admitted as a *third principle* in physiological investigations, that we should not needlessly repeat experiments which have already been performed by physiologists of reputation. If a doubt respecting their accuracy, or the accuracy of the deductions drawn from them, arise, it then, indeed, becomes highly important that they should be corrected or confirmed by repetition. This principle implies the necessity of a due knowledge of what has been done by preceding physiologists. I shall rejoice if anything brought forward in this little volume shall induce my readers to pore over the works of Harvey, of Hunter, of Haller, of Spallanzani, of Whytt, of Legallois, of Dr. Philip, of M. Flourens, of M. Edwards, &c.

Having, after due consideration of these principles, concluded that a given experiment is at once essential and adequate to the discovery of a truth, it must next be received as an axiom, or *fourth principle*, that it should be instituted with the least possible infliction of suffering.

In this point of view, Dr. Philip has the highest merit. That gentleman discovered that in many cases the newly dead animal might be substituted for the living one, not only without disadvantage, but with the great advantage of at once avoiding the infliction of pain, and its effects in complicating the result of the experiment. In every possible instance, therefore, his experiments were made upon subjects incapable of feeling pain. It was, in fact, but taking the rabbit killed as for one purpose, and applying it to another and a higher one.

In all cases, the subject of experiment should be chosen from the lowest order of animals appropriate to our purpose, as the least sentient; whilst every device should be employed, compatible with the success of the experiment, for avoiding the infliction of pain. The batrachian reptiles are especially animals of this kind; and for many physiological purposes, they may be promptly deprived, not only of sensation, but of motion, by the prompt division of the spinal marrow.

Lastly, it should be received as a *fifth principle*, that every physiological experiment should be performed under such circumstances as will secure a due observation and attestation of its results, and so obviate, as much as possible, the necessity for its repetition.

With these objects, physiological experiments should, if possible, only be instituted with the aid of competent witnesses. Sources of error will in this manner be detected, should they exist, whilst unequivocal truths will be duly authenticated. The necessary repetition of the experiment will be instituted, while its unnecessary repetition will be avoided.

In order fully to accomplish these objects, it would be desirable to form a SOCIETY for physiological research. Each member should engage to assist the others. It should be competent to any member to propose a series of experiments,—its modes, its objects. These should be first fully discussed,—purged from all sources of complication, prejudice, or error,—or rejected. If it be determined that such series of experiments be neither unnecessary nor useless, in the sense which I have attached to those terms, they should then be performed, repeated, if necessary, and duly attested. Lastly, such experiments, with the deductions which may flow from them, may then be published with the inestimable advantage of authenticity.

Pursued in this manner, the science of physiology will be rescued from the charges of uncertainty and cruelty, and will be regarded by all men, at once as an important and essential branch of knowledge and scientific research.

This appears to me to be true, when the object of investigation is merely to acquire knowledge, although we may not foresee its future application to any useful purpose; how much more so when its application is obvious beforehand! I will suppose the case of drowning: whether our object be the restoration to life of a fellow-creature taken out of the water in a state of suspended animation; or the rescue from death of another fellow-creature under a criminal prosecution for supposed murder; I cannot imagine that an experimental investigation to determine the surest means of restoration in the first case, or the evidence of accidental or forcible death in the second, can for one moment be deemed otherwise than absolutely incumbent upon us. And if such a case be so imperative upon us, where shall we draw the line of distinction between it and others?

The whole science of medicine and surgery, indeed, is dependent on physiology. To exclude physiological investigation would be to erect an utter barrier to the progress of our art, viewed in any other light than as mere empiricism. They alone can repair a machine who understand its construction and its movements.

In thus stating the argument in regard to what is right and just in physiological investigation, I have steered a course equally distinct from the heartless cruelties practised by some soi-disant physiologists, and the senseless declamations of others, against what they are pleased to call vivisections. The whole argument may be concentrated to a point:—Are Harvey, Haller, and Hale, worthy of our applause for their researches into the circulation, and the action of the heart?

Let us remember that they performed experiments. It is not, therefore, to experiments that we can object, but to such experiments as are unnecessary or useless, or performed without regard to the pain or sufferings inflicted. We may, at the same time, admire the conduct of one experimentalist, and condemn that of another.

Having ascertained any fact or facts, they should, in my opinion, in accordance with a *sixth principle*, be laid before the public in the simplest, plainest terms. Controversy can be of little service to science. If there be a difference of opinion, let us adopt the advice of Celsus:—'Quum hæc per multa volumina, perque magnæ contentionis disputationes, a medicis sæpì tractata sint atque tractentur, subjiciendum quæ proxima vero videri possint; quod in plurimis contentionibus deprehendere licet, *sine ambitione verum scrutantibus;* perinde ut in hac ipsare.'

In quoting the opinion of other authors, I think it should always be in their own words. I have uniformly observed this rule in the following pages. From the frequent misconstruction of the meaning of an author, without this precaution, I would consider this as a *seventh* and *final principle* of treating physiology.

Such are the principles to be adopted in our investigations and disquisitions in physiology. If they be carefully observed, this science will be divested of the charges—hitherto not undeserved—of cruelty and of uncertainty; and its beauty and importance will be recognised together. What an anomaly it must appear hereafter, that in the early part of the nineteenth century, that department of physic which teaches the nature of the functions in the animal economy, was not recognised as an essential separate branch of the study of physic and surgery in the schools of this metropolis."

## ON THE WRITINGS OF SYDENHAM.

### By GAVIN MILROY, M.D., &c.

### No. III.

Having in my last paper (*vide* The Lancet, Nov. 14th) endeavoured to exhibit the general and predominating features of Sydenham's writings, I now propose to give a brief, but I trust a fair, analytic sketch of them in succession, dwelling more particularly upon those points in his theory and practice which will best serve to present a correct view of his characteristic qualities as a medical author. My present paper will be chiefly occupied with the historical portion of the "Observationes Medicæ Circa Morborum Acutorum Historium et Curationem," which, it is well known, contain a faithful record of the epidemic diseases which prevailed in London, during a period of fifteen years, from 1661 to 1675 inclusive. The grand end and object of this, the first and most important, work of our author, may be said to be, to point out and illustrate the marked influence of what he has called the epidemic constitution of the seasons, in favouring or counteracting the development and diffusion, and in modifying the type, nature, symptoms, and course, of febrile diseases. Now this peculiar disposition or diathesis of the atmosphere does not depend upon any condition of its sensible or appreciable qualities—as, for example, of heat or cold, moisture or dryness, and so forth. These agencies unquestionably exert a considerable influence on the spreading, as well as on the severity or malignancy, of most epidemics; but assuredly they are not sufficient in themselves to produce or originate them. They may render the human body more susceptible at one time than at another of their morbific operation, but they cannot occasion their primordial growth. Sydenham thought much and deeply upon this subject, and his works contain repeated allusions to it. While admitting the unsatisfactoriness, in a scientific point of view, of the solution, he felt himself compelled to suppose that there must be some occult and inappreciable constitution of the liver to account for the striking dissimilitude in the symptoms, course, and issue, of (what appears to be) the same disease in different years or seasons, and not less for the prevalence of certain epidemics at one time, and their entire absence at another, although all the circumstances of weather, climate, situation, and so forth, appear to be the same, or nearly so. His conjecture—that there is probably "a certain secret and inexplicable alteration in the bowels of the earth, whence the air becomes impregnated with such kinds of effluvia as subject the human body to particular distempers so long as that kind of constitution prevails, which, after a certain course of years, declines and gives way to another"—does not assist us out of the difficulty: there seems to be just about as much evidence for the astral, as for the telluric, hypothesis of epidemic generation. But although we cannot admit the solution suggested by our author, there is no practical man but will readily acknowledge the important truth which he has taken so much trouble to unfold and illustrate —viz., the influence of epidemic constitution of the seasons on the development, type, and diffusion, of most febrile diseases. It would be easy to adduce confirmation of the truth of this position. Take the history of erysipelas, for example: who is there that does not know that this disease is apt to vary exceedingly, in point of frequency and severity, at different times, and that it must not be treated on the same principles in every year alike? In one season, it is of a decidedly sthenic character, and requires a vigorous antiphlogistic treatment; while in another, its nature is unquestionably asthenic, or adynamic, and then we must trust chiefly to tonics, and even stimulants, due regard being always paid to the state of the *primæ viæ*. As with erysipelas, so it is with synochus or typhus. No prudent physician will ever dogmatically lay down a certain absolute line of practice, to be pursued in all cases, and in all seasons, for the treatment of diseases like these, that may be so deeply modified by a variety of causes, some of which are discoverable, while others are wholly mysterious, and beyond our ken. Hence alike the folly as well as the danger of much that has been written in the course of the present century, more especially among our continental brethren, on the pathological and therapeutic history of fever; as if the morbid condition of the system, designated by that term, was uniformly identical in its nature and phenomena. Very different was the doctrine taught by our great author, who (in a passage we have quoted on a former occasion) has remarked, that "epidemic diseases, especially continued fevers, differ so extremely, that the same method which cures in the middle of the year may possibly prove destructive at the close of it," or in the course of the following one.*

Besides this diversity in the type of febrile diseases depending upon what Sydenham has called the "epidemic constitution of the season," there is another circumstance tending to affect their character, which well deserves to be considered. It is this:—"When several of these diseases appear in the course of the same year, some one or other of them becomes predominant, the rest being reduced as it were to subjection; so that they decrease as it increases, and they immediately wax in strength when it begins to wane. And thus the two sets alternately prevail, according as the genius of the year and the sensible qualities of the air favour the one or the other the most. That disease which rages most severely about the autumnal equinox and causes the greatest devastation, gives its name to the constitution of the year; for whichever then decidedly prevails over the rest, will readily be recognised as having the ascendancy over them during that year; and to the disposition or character of it all the other synchronous epidemics accommodate themselves, as far as their nature will permit. Thus, for example, when the small-pox prevails much, the fever occurring here and there throughout the year, evidently partakes of the same inflammatory nature which it exhibits. Both diseases attack in very nearly the same manner, and there is the most marked affinity between the peculiar phenomena of each, (the cutaneous eruption and the symptoms thereon dependent being excepted,) as is abundantly obvious from the great tendency to spontaneous sweats, and to the flow of the saliva, in both. In like manner when dysentery is the dominant epidemic, the fever of that year exhibits many of its features, excepting only, that in the former the morbific matter is discharged by stool, and there are certain symptoms directly induced by the diarrhœa; for in both, the mode of invasion is the same; and in both, aphthæ and such like symptoms are equally apt to make their appearance."

There is only one other general reflection of our author, touching the history of epidemic diseases, that we shall introduce here, before proceeding to the more immediate subject of the present paper. It occurs in the fourth section of his Observationes:—"As every epidemic disease has in each individual its periods of increase, status, and decline, so like-

* The following passage from a recent work of one of the most experienced of our naval physicians, may be appositely quoted here. Talking of the remittent and intermittent fevers, and the dysentery, at Hong-Kong, he says:—

"A practitioner arriving here in the summer of 1844, would find a much larger proportion of the sick under his care recover than did the practitioner of 1843; he would probably, with a laudable desire to accomplish more than the men earlier in the field had done, modify the means of treatment used by them, or apply something different; and to this modification or alteration of means, not to the comparatively slight morbid impression, he would be apt to ascribe his better fortune, counting it the effect of professional merit, not of changed circumstances. Having satisfied himself of this, he would readily arrive at the conclusion that his predecessors were inefficient practitioners; that they did not understand, or did not properly perform, what was required of them by the obligations of their office; and that they were therefore chargeable with the heavy crime of having allowed men to die who might have been saved."—*Medical Notes on China, by J. Wilson, M.D., F.R.S.*

wise every general constitution, which favours the development of some particular epidemic, has its progressive periods, according to the time that it prevails; for it grows every day more violent until it reaches its acme, and then subsides by nearly the same steps, till it becomes extinct, and yields to another. With respect to the symptoms, they are always most severe about the beginning of the constitution; then they gradually abate, and, towards its close, they become as mild and favourable as the nature of the disease from which they proceed will admit."

Truly has Sydenham remarked, that it is only by a series of accurate observations, sedulously carried on for a number of successive years, that we can rationally hope to understand the history of epidemic diseases, or to discover anything respecting the laws which regulate their seemingly most irregular development. As far as we yet know, they arise in no stated order or succession of years; but it seems not impossible that there may be greater regularity in their invasions than is generally supposed, and that, as it has been found that there is a certain degree of uniformity in the character of the returning seasons, after certain revolutions or cycles of years, so, in like manner, it may be with the return of epidemic diseases. At all events, the question is a highly interesting one, and well deserves a much more attentive consideration than has been paid to it for the last fifty years. The present system of the registration of diseases may be expected, in the course of time, to afford valuable materials for the future elucidation of the subject.

It is to be borne in mind, that the observations of our author were all derived from his experience in London and its immediate vicinity. In addition, therefore, to their great value in the general history of febrile diseases, they constitute a most interesting commentary on the sanatory condition of our English metropolis in the seventeenth century. I trust, therefore, that the reader will lend me his patient attention in the perusal of the following chronological statements, as they will afterwards be found to possess considerable practical interest, and to bear, not immaterially, upon the plan of treatment pursued by Sydenham in the various diseases that will come under review. A certain amount of repetition is unavoidable in such details, but I hope that this will not deter any one from accompanying me in their examination.

*The epidemic constitution of the years* 1661, 1662, 1663, *and* 1664.—1661. The autumnal intermittents which had prevailed for several years before, appeared with new force (more especially a bad form of tertian) about the beginning of July in this year, and daily increasing in severity, committed widespread ravages in the course of the following month. Their violence then gradually diminished, so that they were comparatively rare in October, and at length entirely ceased on the approach of winter. The prominent peculiarities of the tertian of this season were these:—The paroxysms were more severe; the tongue was drier and blacker than usual; the loss of appe tite and the prostration of strength were greater; the interparoxysmal apyrexia was less decided, and there was a marked tendency to a double fit: in short, all the concomitants of the fever were more violent, and the disease was more than ordinarily fatal. When it attacked persons who were somewhat advanced in life, or whose constitutions were unsound, and more especially if their strength had been injudiciously lowered by bleeding or other evacuations, the fever often lasted for two and even three months.

The intermittents were followed, as winter came on, by a continued fever, which exhibited most of the bad characters of the tertian just mentioned. The type of both was evidently the same. The only difference seemed to be, that the one attacked at successive intervals, its force abating between each attack; while the other kept its hold without intermission. "The continued fever," says Sydenham, "appeared to me to be a sort of compendium of the intermittent, and each paroxysm of the intermittent a compendium of the continued fever." Then, indulging (contrary to his own precepts) in a little unmeaning speculation, he adds, "The difference between them consisted chiefly in this, that the continued fever completed its period of effervescence uninterruptedly, and in the same tenour, while the intermittent effected this by fits and at successive times."

It is certainly much to be regretted that our author has not given a more minute and circumstantial description of the continued fever of this season, were it for nothing else but that we might be able to compare its symptoms and characters with those of the other continued fevers, of which we have an account in the course of his "Observationes, &c." All that we are told respecting it (except indeed what may be gathered from the plan of treatment recommended, and from the remedies administered) is contained in the following paragraph:—

"Besides the symptoms which accompanied other fevers, the present one had these in particular:—faintishness and very great exhaustion, vomiting, a dry and black tongue, a marked and sudden prostration of strength, and great dryness of the surface; the urine was constantly either turbid and thin, (*tenuis*,) either condition equally a sign of crudity; a diarrhœa often supervened in the decline of the disease, (unless the physician checked it at first,) whereby it was prolonged and rendered more obstinate. In its own natural course and disposition the fever scarce lasted above fourteen or twenty-one days; then going off by a sweat, or rather a gentle moisture, the urine at the same period exhibiting for the first time the proper signs of concoction."

Whether this form of fever had existed previously to 1661, when Sydenham began his "Observationes," and if it did, for how many years it prevailed, we have now no means of ascertaining, nor does it appear that he could distinctly make out. He has himself alluded to this point, remarking, that however this might be, he felt convinced that there was but one species or type of the disease during the whole of the epidemic constitution now under consideration—viz., from 1661 to 1665.

The tertian, which had committed such wide-spread ravages in 1661, became much milder, and more limited, in the following years, (1662-3-4,) in which, indeed, the quartan became the predominant form of intermittent fevers, more especially of those which prevailed during the autumnal season. As they invariably decreased in severity and frequency after that period, the continued fever (which never entirely ceased to exist) now raged with greater violence until spring, when the vernal agues began to make their appearance. These usually subsided about the beginning of May; and then cases of small-pox occurred here and there, until the setting-in of the autumnal fevers, (intermittent and continued,) when they ceased to be observed. It would seem from the following passage, that this member of the exanthematous family returned, with greater or less force, every year:—

"The small-pox varies considerably, according to the constitution (of the season) in which it appears; but as I did not sufficiently attend to it at that time, I shall only mention this peculiarity—viz., that in those years (1661, 1662, 1663, and 1664) it prevailed much in the beginning of May, but usually went off upon the coming in of the autumnal epidemics. The tops of the pustules had, for the most part, small pits, about the size of a pin's head. In the distinct kind, the eighth day was attended with most danger; for then the sweat or moisture which had hitherto continued suddenly ceased, the surface of the body became dry, nor could the perspiration be excited by any kind of cordials; a delirium, great restlessness, pain, and sickness, a frequency of making water in small quantities, succeeded, and the patient often died in a few hours, very unexpectedly."

So much for the quadrennial constitution, from 1661 to 1664 inclusive, characterized chiefly by the prevalence of regular continued fever, (synochus?) and of intermittents, with the appearance of small-pox during the summer months. "How many years," says Sydenham, "they might have prevailed before, I cannot say; but of this I am convinced, that they very rarely appeared in London for the next three years —viz., from 1664 to 1667."

*The epidemic constitution of the years* 1665 *and* 1666; *and that of the years* 1667, 1668, *and part of* 1669.—The winter of 1664-5 was extremely cold, and accompanied with a very sharp frost, which continued until nearly the end of March, when it suddenly gave way. Thereupon arose numerous peripneumonies, pleurisies, quinsies, and other inflammatory diseases; and along with these appeared an epidemic continued fever, which differed from that of the preceding constitution, not only in type, but also in making its appearance at a season of the year (spring) when continued fever is seldom met with, The peculiarities of this year's fever were these:—

"The pain in the head was more violent; the vomiting was more copious; the diarrhœa, which was generally prevented in the former fevers by an emetic, was increased thereby, and yet the vomiting continued; the surface of the body was dry, as in the fevers of the preceding constitution; but after bleeding especially, a sweat was easily procured, and being encouraged, soon abated the symptoms; and this might be done at any time of the disease; whereas in those fevers it could not be safely attempted till the thirteenth or fourteenth day, and was not easily raised even then; and, lastly, the blood drawn by venesection resembled that of patients affected with pleurisy or rheumatism in point of colour, although it was certainly not so buffy, with an inflammatory crust."

This fever, which was manifestly of a decidedly sthenic or phlogistic character, our author has called "pestilential," from its being the precursor of the plague, which made its appearance about the middle of the year 1665, when the weather was warm and fine. Spreading more and more every day, it reached at length its acme about the autumnal equinox, at which time it destroyed in London alone nearly 8000 persons in the course of one week, although two-thirds at least of the inhabitants had retired to the country for fear of infection. From this period it gradually subsided, and was so far conquered by the winter's cold as to seize very few persons during that season and in the following spring, when it ceased entirely.

It is a circumstance deserving of particular notice, that it is quite manifest, from Sydenham's description of the plague, as observed by him in 1665, that it was of a decidedly inflammatory character, as we have just seen to have been the case with the diseases which immediately preceded its outbreak, and which had been more than usually prevalent in the spring of the year. Hence, as we shall afterwards see, he was led to adopt an active antiphlogistic practice in its treatment.

The epidemic pestilential fever, which had immediately preceded the outbreak, and never entirely ceased during the prevalence, of the plague, continued to exist during the whole of the following year, and up to the spring of 1667.

1667.—At the approach of the vernal equinox of this year, the small-pox—which during the immediately preceding *pestilential constitution* was scarcely, if at all, met with—began to make its appearance, and spreading more and more widely each day, became fairly epidemic about autumn. Its violence then gradually subsided, so that on the approach of winter it was very much abated. It returned, however, in the following spring, (1668,) and continued to prevail, more or less extensively, until, as before, it was checked by the cold of winter. It afterwards increased a third time with the returning spring, (1669,) but did not then rage so severely, nor so generally, as it had done in the two preceding summers; and in August of this year it disappeared completely, and was succeeded by an epidemic dysentery. Fortunately, the type of this long-prevailing small-pox was unquestionably favourable, the proportion of deaths to the number of seizures being, on the whole, but small.

At the same time (spring, 1667) that the small-pox broke out, there arose a new sort of continued fever, not unlike to it, save in the absence of the pustules, and of the symptoms consequent upon them. Sydenham has accordingly affixed to it the epithet "variolous." Its peculiarities are described by him to have been these:—

"1. The patient was seized with a pain below the pit of the stomach, and such a soreness that he could not bear to have it touched, which symptom I do not remember to have observed in any other disease besides this fever, and this kind of small-pox. 2. A pain in the head, a heat of the whole body, and also very visible petechiæ. 3. Little thirst. 4. The tongue like that of a healthy person, unless that it was sometimes white, but very rarely dry, and never black. 5. Profuse spontaneous sweats in the beginning, which afforded no relief, and being promoted by a hot regimen and hot medicines, soon endangered a delirium, augmented the number of the petechiæ, and rendered all the other symptoms more violent. 6. A laudable separation in the urine from the beginning of the illness, that gave hopes of recovery, but did not relieve the patient more than the above-mentioned sweats. 7. This disease, by wrong management, generally proved very obstinate, neither terminating by way of crisis, nor spontaneously, in the manner of other fevers, but continued for six or eight weeks, accompanied with violent symptoms, unless death interposed, and put a stop to it sooner. 8. When no considerable evacuation had preceded, and cooling juleps had been used, a pretty plentiful salivation sometimes arose towards the decline, whereby the disease was carried off beyond expectation, provided this discharge was not checked by evacuations, or the use of heating medicines."

This variolous or varioloid fever, although it attacked fewer persons than the regular small-pox, lasted quite as long as it did; but in the winter, when the latter abated, the former prevailed, and when the small-pox returned in the following spring, the fever went off, so as to leave the former the predominant epidemic of this constitution. The fever, however, never fairly ceased during the whole of the time, until, at length, it disappeared, along with the small-pox, in the month of August, 1669.

These two epidemic diseases were accompanied, more especially during the last summer, with a diarrhœa, the constitution of the air then, doubtless, inclining to the production of the dysentery which set in afterwards, and which resembled the then prevailing fever in so many respects, that "it seemed, in fact, to be nothing else but this very fever turned inwards, and fastened on the bowels"—a doctrine which has encountered the ridicule of several hasty writers in modern times; but which, if examined with the same spirit as that in which it was propounded, may be found to contain some not unimportant truths. Sydenham has given us his reasons for the opinion in question, in the following passage:—

"I considered that the diarrhœa was the same disease as the then reigning variolous fever, differing from it only in form, and appearing under another symptom. For having observed that a chilliness and shaking did likewise ordinarily precede this diarrhœa, and further, that it generally arose from the same cause with the then reigning fever, it seemed probable to me that this fever proceeded from inflammatory rays turned inwards upon the intestines, and irritating them to this discharge, whilst the blood, in the meantime, by this revulsion, was freed from the ill effects these rays would otherwise have occasioned, without any visible external sign of a fever. To this we may add, that the parts below the pit of the stomach were so tender as not to abide the touch, which symptom, as we mentioned above, happened in the small-pox and fever of this constitution; and the same pain and tenderness of the flesh often reached to the epigastrium, and sometimes there was an inflammation, which ended in an imposthume, and destroyed the patient; all which, apparently, showed this diarrhœa to be of the very same nature and essence with the then reigning fever: and this opinion of mine was further confirmed, from the good success which bleeding and the use of a cooling regimen always had in stopping this diarrhœa; for it readily yielded to this method, which is the same we used in the cure of the variolous fever, as we have frequently mentioned above. But when it was treated in a contrary manner, either by giving rhubarb, and other lenient purgatives, to carry off the acrimonious humours supposed to irritate the intestines to these discharges, or by administering astringents, this disease, though naturally gentle, frequently proved mortal, as the bills of mortality of the current year sufficiently testified." The diseases, therefore, of this last-described constitution from 1667 to 1669 were, small-pox, variolous fever, and diarrhœa.

*The epidemic constitution of part of the year* 1669, *and of* 1670, 1671, *and* 1672.—1669. In the beginning of August of this year, the cholera morbus, the dry gripes or colic, (*tormina sine dejectionibus,*) and likewise a dysentery, which had been but little met with for the preceding ten years, began to rage. The first of these diseases, although more extensively spread than our author had ever known before, was, as it almost always is, confined to the month of August, scarcely reaching into the first week of September. But the colic continued to the end of autumn, and accompanied the dysentery, prevailing even more generally than it did. On the approach of winter, the former disease entirely ceased, nor did it return during the following years of this constitution, although the latter became so widely epidemic.

Between these two forms of intestinal disorder there arose a new kind of fever, which attacked not only those who were affected with them, but also those who had entirely escaped. Occasionally, indeed,—but this was rare,—it was accompanied with slight gripings; the bowels were in some cases relaxed, in others confined. "Now, as this fever in some measure resembled that which frequently attended the above-mentioned diseases, it must be distinguished from others by the title of the *dysenteric fever;* especially since, as we shall afterwards show, it only differed from the genius and nature of the dysentery in this particular, that it had not those discharges which always accompany the dysentery, nor the other effects necessarily occasioned by this evacuation. Upon the approach of winter, the dysentery vanished for a time, but the dysenteric fever raged more violently, and a mild small-pox also appeared in some places."

In January, 1670, the measles made their appearance, and gradually increasing in frequency and severity up to the period of the vernal equinox, became so widely spread, that few families, and particularly no children, were suffered to escape. They then subsided by nearly the same steps by which they had increased. In July, they disappeared entirely, not to return during the prevalence of the present constitution, except in a few scattered cases about the commencement of the following year.

The small-pox which followed the measles differed in many respects from that which we have described above as occurring in the previous constitution; its symptoms were much

more irregular and anomalous. Although not nearly so frequent as the measles, it continued to attack a considerable number of persons until the first week or so of July, when the dysentery began to prevail even more severely and extensively than it did in the preceding year. This disease ceasing, as on former occasions, upon the approach of cold weather, the continued (dysenteric) fever and the small-pox set in and prevailed during the whole of the winter.

1671.—About the beginning of February, tertian agues made their appearance; and as they increased, the fever and small-pox diminished, in frequency. These intermittents, although not epidemically diffused, were certainly more numerous than had been the case since the year 1661. As is usual with those belonging to the vernal season, they now vanished entirely after the summer solstice. In the month of July, the dysenteric fever resumed the station which it occupied in the preceding years; and towards the decline of autumn, the dysentery itself returned a third time, but did not rage so severely as the year before, when it may be considered to have reached its acme of intensity. On the approach of winter it ceased, and the dysenteric fever and small-pox again were the dominant diseases during the rest of that season.

With respect to the epidemic diseases of the following year, (1672,) we read thus:—

"At the beginning of the two preceding years, two remarkably epidemic diseases raged—viz., the measles at the beginning of 1670, and intermittent tertians at the beginning of 1671, and prevailed so considerably as to overpower the small-pox, and prevent it spreading much in the beginning of these years. But in the beginning of 1672, when those obstacles to its progress were removed, and this distemper reigned alone, it of course proved very epidemic till July, when the dysenteric fever again prevailed, but soon gave place to the dysentery, which returned a fourth time in August, and was then not only less frequent, but attended with milder symptoms than in the former years. Moreover, the small-pox likewise attacked a few, so that it was not easy to distinguish which of the two diseases prevailed. I conceive, indeed, that the constitution of the air having a less tendency to produce the dysentery, rendered the small-pox powerful enough to equal it, otherwise than it happened in those years wherein the dysentery proved extremely mortal in August. The winter, as usual, put a stop to the dysentery, but the fever and small-pox remained, and the latter, according to its nature, became the chief disease, and continued all winter, and attacked a few in the following spring, and likewise in the beginning of summer; but it was considerably milder than this kind had been before."

It is to be observed, that when our author speaks of one epidemic disease being expelled by another, he does not mean that the yielding disease becomes quite extinct, but only much less frequent than before. Scattered cases occur every now and then—in one place to-day, in another to morrow.

*Of the epidemic constitution of part of the year* 1673, *and of the years* 1674, 1675.—1673. The dysentery continued to attack several persons during the spring and summer months, but gradually subsided, and disappeared altogether about the end of autumn. The small-pox, although less frequent and severe than it had been for the two preceding years, still prevailed; and indeed this disease, along with a peculiar kind of continued fever, which made its appearance in the month of July, were the predominant epidemics of the present year. "The pathognomonic feature of this fever was a peculiar comatose affection, which rendered the patient stupid and bewildered, so that in some cases he would dose for several weeks, and could not be roused except by bawling loudly into his ears; and then he only opened his eyes; and directly after taking medicine, or other substance administered to him, he fell into a sleep again, which sometimes proved so very profound as to end in an entire loss of speech. When this symptom or condition vanished, the patient grew better on the twenty-eighth or thirtieth day, the first sign whereof was his longing for some odd and uncommon kind of food. But the head continued weak for several days, and nodded sometimes to one side, sometimes to the other. As the strength returned, the cerebral weakness went off.

"In some cases, the patient did not sleep, but was rather quietly delirious, at times, however, talking wildly, as if in a passion; but the fury never rose to so great a height as is common in the small-pox and some other fevers; and there was also this difference, that he often slept confusedly at intervals, and likewise snored more deeply."

From our author's description of this fever, it is manifest that the brain was more than usually affected. In short, it would be called a "brain-fever" in the present day. He was at first so much puzzled by the peculiarity of its symptoms, differing as they did so much from those of any previous continued fever of which he had experience, that for some time he carefully groped his way, so to speak, by a diligent observation of all the *juvantia* and *lædentia*, before definitively deciding upon the line of practice he should adopt. We shall afterwards see how he acted, and then have an opportunity of discussing the wisdom of his remedial measures.

1674.—In January of this year, the measles broke out, and became as widely diffused as the epidemic which made its appearance at the same time in 1670. The disease did not exhibit the same regularity in the development of its symptoms, nor was it of so mild a character, as its predecessor. Increasing week by week in point of frequency, it reached its acme about the vernal equinox, after which time it abated as gradually, until, at length, it ceased soon after the summer solstice. During the first two months that this epidemic prevailed, a morbillous sort of fever occurred in a good many persons. It was accompanied with an eruption, chiefly on the back of the neck and shoulders, somewhat resembling that of the genuine measles, from which, however, it differed in being limited to the parts mentioned, and not scattered over the whole body. The fever, too, although manifestly of the same character, was more violent, and lasted fourteen days, and even longer.

As the measles, in 1670, introduced the black small-pox, so the present epidemic, which was equally wide-spread, introduced a sort of that exanthem, so extremely like the former, that it seemed to be the same revived, and not a new kind. For as, after the first two years of its prevalency, the pustules became daily less black, and grew larger by degrees until the end of the year 1673, when the disease became comparatively mild and gentle, it now returned with its former violence, and attended with a train of pernicious symptoms. For in the confluent kind the pustules appeared of a sooty blackness, unless the disease proved fatal before they came to suppuration; before maturation they were only of a brown or tawny colour. Moreover, when numerous, they were of a very small size, (for when there were but few, they were of the same size as in other kinds of the small-pox, and very rarely black,) and nearly resembled that kind which prevailed in 1670, its chief difference being, that this sort was attended with a greater degree of putrefaction, and was of a grosser and more indigestible nature; for when the pustules came to maturity, they were much more fœtid than in the other kind, insomuch that I could scarce bear to approach such as were very full, the smell was so offensive. It also ran through its successive stages more slowly than any other species I had hitherto seen.

The small-pox which we have now described prevailed during the autumn of this year, (1674,) and continued longer than ordinary in the winter months, the unusual warmth of the season doubtless favouring its persistence; for when the cold weather set in, it subsided, and soon gave place to the (comatose) continued fever noticed above.

1675.—This fever, which had existed during the whole of the year, made great devastation in the first weeks of July, but on the approach of autumn, it began to strike in upon the bowels, and to exhibit the symptoms, at one time, of dysentery, at another, of simple diarrhœa; while in a third set of cases the bowels escaped altogether, and the head was the part chiefly affected, the prominent feature then being a heavy stupor or sort of comatose oppression. Sydenham insists with peculiar emphasis on the circumstance of the intestinal affections, which proved fatal to great numbers during the autumn months, being (in his opinion) not any essential or idiopathic maladies, but rather symptoms only of the prevailing epidemic fever, which, as we have seen, exhibited at one time an enteric, at another, a cephalic type. It continued to be the dominant disease until the end of October, when the weather, which had hitherto been unusually warm this season, suddenly became moist and cold. This great atmospheric change produced coughs and catarrhs in greater abundance than Sydenham had ever witnessed in any previous season. As the head and bowels had been the parts hitherto chiefly affected, so now the lungs and pleura were those which were most frequently attacked; and our author again takes occasion to remark, with respect to the pleurisies and peripneumonies which took the place of the intestinal affections, that the primary and essential disease was the epidemic fever, and that the visceral complications were but secondary and adventitious. Let not this remark of our judicious author be regarded as one of mere profitless speculation; its bearing on practice will come under our consideration in a subsequent paper; but as the subject is one of the highest therapeutic importance, we cannot pass

it over now without giving one short extract from the part of the "Observationes" which we are at present noticing.

"Though I conceive that a true and essential pleurisy, which, as shall hereafter be observed, happens indifferently in all constitutions, does in all years equally indicate repeated bleeding, yet it sometimes happens that the peculiar epidemic fever of the year, from some sudden alteration of the manifest qualities of the air, readily throws off the morbific matter upon the pleura and lungs, whilst the fever, notwithstanding, continues exactly the same. Wherefore, in this case, though bleeding may be used to abate this symptom, when it is very violent, yet, generally speaking, little more blood ought to be taken away than is required by the fever whereon this symptom depends; for if the fever be of a kind that will bear frequent bleeding, it may likewise be repeated in the pleurisy which is a symptom thereof; but if the fever will not bear repeated bleeding, it will prove prejudicial in the pleurisy, which will go off with, or last as long as the fever does."

[It is perfectly true that an inflammatory affection supervening during the course of a fever will seldom bear the same amount of depletion as that which is primary and idiopathic; but it certainly seems very doubtful whether the pleurisies and peripneumonies just referred to were not of this last description; for it is expressly stated by our author himself, that they were produced by the sudden atmospheric transition from heat to cold and damp.]

*Recapitulation.*—We have thus seen, that during the fifteen years from 1661 to 1675 inclusive, there were five different epidemic constitutions, or, in other words, five peculiar diatheses of the air, productive of as many peculiar epidemic fevers. The type of these fevers, it has been shown, varied in the successive different constitutions. Perhaps they may be distinguished by the epithets synochoid, pestilential, variolous, dysenteric, comatose, or cerebral. It is the first of these—that which prevailed from 1661 to 1665, during what may be considered the aguish constitution of the season—that Sydenham regarded "as the principal and primary fever of Nature, in consequence alike of the regular method she employs in the digestion and expulsion of the morbific matter from the body within a definite time, and of its more frequent occurrence than any other description of fever." He calls it the "depuratory" form of fever. That it has some affinity with intermittents appears from the fact, that whenever it proved of long continuance, or when the patient was weakened by excessive evacuations, it was apt to assume a periodic character, a peculiarity which was not observed in any of the fevers that prevailed in the subsequent constitutions, under similar circumstances.

We have now come to the close of the "Observationes, &c.," in as far as they trace the history of epidemic diseases. The last section of the work, we may here remark, is devoted to the description of some of the principal intercurrent acute diseases—scarlatina, pleuritis, peripneumonia notha, rheumatismus, febris erysipelatosa, and angina—during the fifteen years that have been reviewed.

For an account of the epidemic diseases observed by our author subsequent to the year 1675, we must go to his first "Epistola Responsoria," published in February, 1680, and to his "Schedula Monitoria de Novæ Febris Ingressu," published only three years before his death. To render our chronological sketch complete, we shall now give a brief notice of the more prominent facts touching the history of the epidemic diseases of London between 1675 and 1686, that are recorded in these two writings.

*On the epidemic constitution of* 1676, 1677, 1678, *and* 1679.—"This year, 1676, produced the same diseases as were generated by the last-mentioned constitution—viz., from 1673 (in the autumn of which it commenced) to 1675 inclusive. But as this atmospheric diathesis was on its decline, the diseases were of a milder nature, and not so widely epidemic, notwithstanding the peculiar character of the present year with respect to the sensible qualities of the air, in which it differed considerably from the preceding years; for the heat of the summer and the cold of the winter were much greater than in almost any year that I remember. And as so strikingly dissimilar seasons gave rise to similar diseases, it is pretty plain that their production is owing to certain occult, rather than to the obvious and manifest, qualities of the air. At the same time, it must be acknowledged that the same diseases, in reference at least to certain of their symptoms, sometimes depend on the manifest diathesis of the atmosphere, as was observed in the cases of the measles and cholera morbus of this year."

There can be no doubt that the violence and duration of epidemic diseases are much influenced by the state of the weather, whether we refer their primary development to an occult or unappreciable condition of the atmosphere, or not. For example, as remarked by our author, the excessive heat of this year (1676) rendered the cholera more than usually severe.

In the following year, (1677,) Sydenham suffered so severely from his calculous and gouty complaints that he was wholly incapacitated from pursuing his professional duties. He has therefore left us no account of the diseases which then prevailed.

1678.—The constitution of this year presented the remarkable feature of intermittents—which had been almost extinct, except sporadically, in London, since 1664—again prevailing as an epidemic.* They made their appearance in spring, and, becoming more and more widely diffused, at length predominated over every other disease by the end of summer and beginning of autumn. In the winter, they yielded by degrees to the small-pox and the other reigning epidemics, till the return of the season favourable to them. We have seen that the quartan prevailed over the other types in the former epidemic; but now the tertians and quotidians were by far the most frequent. In many cases, the symptoms were so violent that there were scarcely any distinct intermission, but only a remission; and the disease assuming more and more of the character of continued fever, attacked the head, and proved fatal to very many persons.

1679.—These intermittents reappeared in July of this year, and proved very violent and destructive in the month of August. They prevailed, with more or less severity, until about November, when they gave way to a new epidemic, which seemed to be owing to the physical and sensible properties of the atmosphere at that time. This was a sort of convulsive cough, which was accompanied with fever, and occurred in violent paroxysms, so as to suggest some resemblance to those of pertussis. Vast numbers of persons suffered from it, and nearly whole families were sometimes seized at the same time. [It would seem, from many of the statements given, that this epidemic cough was of an inflammatory nature, as pleurisy was apt to supervene in those cases where an antiphlogistic treatment was not adopted.]

During the winter months, there prevailed a fever which resembled that which was so very epidemic in the winter of 1675, and which was attended, for the first month or two of its prevalence, with most troublesome defluxions upon the lungs, but was afterwards exempt from them, the primary disease, however, (the fever,) remaining of the same nature, and requiring the same mode of treatment. This fever lasted until the beginning of the next year, in the early part of which, intermittents again made their appearance. These continued to return in nearly the same manner for the following four years: 1680-1-2-3-4—viz., up to 1685. So powerfully did the epidemic constitution of this quadrenniad favour the development of intermittents, that he has informed us, that during the whole of this time he did not meet with any continued fever, unless such as proceeded from injudicious treatment of ague, or was one of those intercurrents which generally occur more or less frequently every year. He goes on to predict, that whenever the force of this intermittent type of constitution (if we may so speak) shall abate, then the continued fever, which he on the former occasion termed depuratory, will return, and remain for a certain term of years, before the plague again makes its appearance. [It was the belief at that time that this pestilence generally returned once in about thirty years.] "For it is most probable that epidemics will succeed each other hereafter in the manner above described, provided Nature does not deviate from the order she has observed for the last twenty-four years."

1685.—From the "Schedula Monitoria," however, (which was published in the September of 1686,) we find, that in February of 1685 there arose a new and peculiar sort of fever, which was altogether dissimilar from any that had been seen for the eight foregoing years. It may be worthy of notice, that the winters of 1683-4 and of 1684-5 were unusually severe, and that it was on the first setting-in of the thaw in February of this last year that this new fever began to be seen, and which subsequently spread itself over every part of England, and proved much more widely diffused, and more severe, in many other places than in London. Sydenham at first regarded it as one of those intercurrent diseases which occur promis-

* It is subsequently stated in the "Schedula Monitoria" that the intermittents of this constitution began first in the autumn of the preceding year, 1677. The cessation of this class of fevers, in the epidemic form, for a period of nearly fourteen years, is a very remarkable circumstance in their history, and one which, among other reasons, very naturally suggested to our author the idea of some diseases following a sort of regular cycle or revolution in their periods of outbreak, decline, and reappearance.

cuously almost every year, and to be somewhat of the same nature as the *peripneumonia notha*. But finding that it continued to prevail after the beginning of summer—a season which usually puts an end to all peripneumonic complaints—he felt fully persuaded that a new constitution had arisen, and that this fever was but the offspring of it. The chief symptoms were, severe pain in the head and limbs, cough, and other symptoms of a mild peripneumony, sometimes pain in the neck and throat, a tendency to coma or frenzy, but not of that violent kind which is apt to occur in small-pox and some other fevers, the patient being rather calmly than furiously delirious, and talking ramblingly between whiles. Although the fever was of a continued type, so generally was there a decided exacerbation of the symptoms in the evening, that by many it was regarded, and unfortunately treated, as a species of intermittent from the very first. In some of the cases, petechiæ and purple spots, while in others a miliary eruption, appeared upon the surface. These symptoms were most frequent when a hot regimen and the use of cordials were employed. They were considered by our author as "certain signs of a violent inflammation in this and every other kind of acute disease." As to the nature of the fever, he tells us that, taking into consideration its symptoms, on the one hand, and, on the other, the mild temperature of the last year (1685) following upon two very severe winters, and especially of the winter season, (1685-6,) it appeared to him that it was "nothing else but a simple inflammation of the blood, and consequently that the curative indications should be entirely directed to repressing this inflammation by appropriate remedies." In another passage, he terms it "a peripneumonic fever," doubtless from the pulmonic complications which attended it. [Was it not somewhat of the nature of what is now called influenza?]

It seems to have continued more or less generally throughout the year 1685 and the following winter, to the summer of 1686, when it assumed more of an enteric type, indicated by griping, diarrhœa, and vomiting. It still retained, according to our author, its inflammatory character, and required for its subjugation a similar mode of treatment. From an accidental remark in one passage, it would seem that the fever, when its violence had been duly checked by bleeding and purging, sometimes assumed the character of an intermittent, and ultimately required the exhibition of bark for its complete removal.

So much for the historical portion of my subject. In my next I shall proceed to speak of the treatment of those epidemic diseases which have been mentioned in the preceding pages.

Fitzroy-square, Jan. 1847.

## ON INFANTILE PLEURITIS.

By EDWARDS CRISP, Esq., M.R.C.S.E.

*(Read before the South London Medical Society, Dec. 10th, 1846.)*

Inflammation of the pleura has been but slightly noticed by the few authors in this country who have written upon the diseases of children, and those with whose opinions I am acquainted believe that a correct diagnosis of this disease is unattainable. Underwood, in his work "On the Diseases of Children," does not mention it. Evanson and Maunsell* state that "pleuritis is occasionally discovered upon the post-mortem examination of children; but that there are no diagnostic marks which distinguish it from other inflammations of the chest during life." Dr. West, in his "Clinical and Pathological Report on the Pneumonia of Children," in speaking of his table of thirty-seven cases, says:—"In twelve of the thirty-seven cases, no traces of inflammation of the pleura were found; in five there existed old adhesions, more or less extensive; and in twenty there were marks of recent inflammation. In twelve of the twenty cases both pleuræ were affected; in six, adhesions existed only on the right; and in two only on the left side. One of the cases of double pleurisy might be characterized as slight; in five others the disease, though slight on one side, was extensive on the other; and in the remaining six extensive pleurisy existed on both sides. In seventeen cases adhesions between the costal and pulmonary pleura, and the presence of more or less lymph on the surface of the lung, were the only signs of pleurisy; but in eight cases there was also effusion of a notable quantity of fluid. In three instances this effusion was serous; in the remaining five it consisted of a turbid, sero-purulent, or purulent fluid."

It should be observed that eighteen of these children were between one and two years of age, and only two of them below the age of twelve months, so that the term infantile will scarcely apply to these cases. They serve, however, to show the very frequent combination of pleurisy with the pneumonia of children. Dr. West further observes:—"It appears probable, indeed, from the researches of M. Ch. Baron,* that the liability to pleurisy is much greater among children above two years of age, than among those who are younger, since of 3392 autopsies of children from one to two years old, pleurisy was found only in 205; and in seventy-nine the pleura was otherwise unhealthy from some non-inflammatory cause; or, in other words, inflammation of the pleura was found only in six per cent., while in 181 autopsies of children from two to fifteen years old, the pleura of 158, or eighty-seven per cent., presented signs of inflammation."

Billard† says:—"Pleurisy is more common among young infants than is generally believed; it often appears without the lungs participating in the inflammation. I have seen several infants die immediately after birth of this affection." He relates three cases. "The first occurred to an infant two days after its birth; the cavities of the chest contained yellow serosity, with albuminous flakes; the lungs floated in water. The second case took place in an infant ten days old, and terminated fatally in six days. The lungs were red, and contained much frothy serosity; the posterior border of the right was affected with red hepatization. Two spoonfuls of serum in each cavity of the chest; the pleuræ spotted red, and the lungs adherent to the diaphragm by tender albuminous filaments. The third example was one of chronic pleurisy in an infant, three months old, affected with marasmus and uncertain symptoms. The costal and pulmonary pleuræ were covered with plastic lymph, and when this was removed, the membrane beneath was seen rugous and injected. When the lungs were cut transversely, a well-marked red line could be seen at the circumference of these organs, indicating the separation between the inflamed pleura and the healthy pulmonary tissue."

Billard likewise observes:—"As a general rule, it is not easy to make a diagnosis of pleurisy in young infants; still its existence may be suspected when we observe much anxiety, restlessness, difficulty of breathing, painful dilatation of the thorax, quick and more marked contractions of the diaphragm and abdominal muscles; and in the midst of these symptoms, if the cry should preserve its integrity, and present no other alteration than that which arises from fatigue and exhaustion. Percussion and auscultation give but very uncertain signs in this disease; yet if the respiration be not heard at any part of the thorax while the cry is complete and free, and when it would appear as if there existed effusion without hepatization, the infant, in all probability, is affected with pleurisy: this conclusion will, however, be still uncertain. I must, on this account, consider the diagnosis of pleurisy in sucking children as very difficult, and that it is very easy to confound it with pneumonia. Happily, this mistake cannot be very prejudicial to the patient, because the treatment of one will be the best that can be adopted for the other."

I have no means of forming a correct estimate of the comparative frequency of this disease in infants; but on referring to notes which I have taken of forty-one post-mortem examinations made by myself of children under two years of age, (the greater number under twelve months,) inflammation of the pleura has been found in six instances: in five of these it was combined with a certain amount of inflammation of the lungs; in one case it was complicated with pericarditis; and in another with peritonitis and hydrocephalus; in the sixth case, the pleura alone appeared to be inflamed.

It will naturally be asked, why I have used the term infantile? and how this complaint, when occurring in infants, differs from the same disease in the adult?

Pleuritis in the adult is generally recognised without much difficulty, and the patient's description of the character of the pain, the state of the pulse, heat and dryness of the skin, nature of the cough, quickness of breathing, will for the most part afford sufficient indications to enable us to arrive at a correct diagnosis, without the assistance of auscultory signs. The last, however, combined with percussion, will afford, in many cases, very valuable information, and by their means we can often point out the boundaries of the disease, and make many nice points of diagnosis which the use of the ear will alone enable us to attain. Although in the generality of cases inflammation of this membrane is easily recognised, it must be admitted, that in some instances, especially when the inflammation is seated in that part of the membrane in con-

* Evanson and Maunsell on the Diseases of Children, p. 374.

* De la Pleurisie dans l'Enfance. Paris: 1841. Quarto, p. 52

† On the Diseases of Infants. Translated by Stewart.

tact with the pericardium, or in that portion of it covering the lower part of the right lung and diaphragm, that the diagnosis is more difficult. If this disease is sometimes undetected in the adult, how much more likely is it to escape observation in infantile life, where many of the valuable signs we obtain from patients more advanced in age are wanting.

The symptoms which I have observed in infantile pleuritis are, great restlessness, violent screaming at the onset, very quick pulse, hot and dry skin, glassy eye, dry cough, (this not frequent,) the head thrown back, and great apparent pain when the child is placed in the erect position. On the application of the ear or stethoscope, a dry, rubbing sound is heard, and the lungs appear to move up and down like the piston of a steam-engine, ("frottement ascendant et descendant.") This may appear to be a very inapt comparison, but such was the impression produced on my mind in the fifth and sixth cases.

I am aware, that many of the signs I have described may be present in other diseases, especially in inflammation of the lungs; and that when pleuritis is complicated, as it generally is, with pneumonia, the difficulty of the diagnosis is greatly increased. I believe, however, that when the dry, rubbing sound is heard, with frequent screaming, and apparent increase of pain on elevating the head, that the existence of pleuritis is pretty clearly indicated. If the mucous and crepitating râles are likewise heard, and a small portion of the serous membrane only is inflamed, the diagnosis is more obscure; but even with these combinations, I think that a careful investigation will enable us to recognise the disease. I believe that I have an infant now under my care with pneumonia, combined with pleuritis, to a small extent, in the right lung. I shall now proceed to describe the examples of this affection which I have met with. In the first four, the pleuritic inflammation was not suspected, my attention not having been directed to the subject. The combination of this disease with pneumonia likewise rendered it less easy of detection. In the last two cases, where the inflammation was chiefly limited to the pleura, I had no doubt about the existence of the disease.

Case 1.—Dec. 9th, 1833.—I was called to Mr. H——'s infant, a very fine child, aged six months. I attended it during an attack of inflammation of the lungs two months since, from which it perfectly recovered. It is now labouring under symptoms of pneumonia, which made their appearance yesterday; the respiration is hurried and difficult, cough frequent, skin hot and dry, pulse quick, bowels regular. Ordered, a warm bath, one leech to the chest, and a blister. I lanced the gums, and gave a dose of ant. potass. tart. to produce vomiting: this was followed by small doses of tartarized antimony at intervals of two or three hours.

10th.—The symptoms were rather more favourable this morning; the râle crepitant very distinct at the inferior portions of both lungs.

20th.—The child died this morning. Since the last report, the symptoms have at intervals been more favourable: the child has always taken the breast-milk without difficulty, and retained it upon the stomach; the cough, during the last three or four days, has been nearly absent; there has been dropping of the upper eyelids, rolling of the eyeballs, and twenty-four hours before death, frequent tossing of the head. The treatment since the last report consisted in the administration of calomel and tartarized antimony for three or four days, and afterwards small doses of ipecacuanha wine.

*Post-mortem examination.*—The inferior portions of both lungs hepatized; and on pressure a quantity of pus oozed from the bronchial cells; a portion of the lung sunk when put into water; recent adhesions between the pleura costalis and pleura pulmonalis on the left side. I was only allowed to examine the chest.

Case 2.—March 6th, 1835. Mrs. B——'s child, Walworth, aged eleven months, now cutting the incisor teeth, has been indisposed for four or five days. This morning, the mother first observed a rolling motion of the tongue, which has continued for three or four hours; the papillæ raised, and scarlet; the child sensible; pupils natural.

10th.—This peculiar motion of the tongue continued for three days, and the child died this morning. The pupils had contracted readily on exposure to light; the abdomen was tense; and the child was observed, a short time before death, to draw its legs up frequently towards the abdomen.

*Post-mortem examination.*—Vessels of the brain turgid, and about two teaspoonfuls of water in the lateral ventricles; left pleura costalis adherent to the pleura pulmonalis with deposit of lymph; the intestines filled with air, and glued together in several places by soft lymph; the cavity of the abdomen contained about an ounce of sero-purulent fluid.

Case 3.—January 3rd, 1838, I visited Mrs. B——'s infant, Walworth, aged fourteen months. The child had been unwell for several days, with cough and difficulty of breathing, and on the 2nd had been taken to a gentleman practising as a physician, who had ordered a mixture of syrup of poppies, oxymel of squills, with tincture of hyoscyamus and digitalis, five doses only of which had been taken. The countenance is now very anxious, face pallid; skin hot and dry; pulse about 130 or 140; breathing very frequent, and no respiratory murmur is heard below the upper lobes of both lungs; slight cough and inability to cry, (three molar teeth nearly through the gums.) I lanced the gums, ordered a warm bath, and a grain of calomel every three hours.

4th.—Much the same as yesterday. Repeat the powders.

5th.—Not quite so well.

6th.—Died at two P.M.

*Post-mortem examination, forty-nine hours after death.*—On removing the sternum, the pericardium was seen much distended, and on cutting into it, about two ounces of yellow serum was found. A layer of coagulable lymph, about the thickness of a shilling, lined the interior of the pericardium, and extended over the heart; which organ was otherwise in a healthy state; the left lung was hepatized throughout, with the exception of a very small portion at the apex; the pleura adherent, and the lower half of the right lung hepatized, and the pleura pulmonalis covered with coagulable lymph. Abdominal viscera healthy. Brain not examined.

Case 4.—December 24th, 1839. On the 6th of this month, Mrs. W——'s infant, Walworth, was attacked with cough and difficulty of breathing, and the child died on the 23rd. The symptoms under which it had laboured were, frequent cough, quick pulse, hot skin, anxious countenance, respiration puerile at the upper part of both lungs, indistinct at the lower part. The child took the breast-milk well from the commencement of its illness, and retained it on the stomach. The treatment consisted in the administration of calomel and tartarized antimony, with a blister to the chest, and warm baths.

*Post-mortem examination, twenty-nine hours after death.*—On removing the sternum, the pleuræ and pericardium were seen coated with soft yellow lymph, about two lines in thickness; this extended over the costal and pulmonary pleuræ. The left cavity of the chest contained about four drachms of sero-purulent fluid; the upper portions of both lungs were healthy; the lower portions were in a state of grey hepatization, and on pressure a quantity of pus escaped from various parts. The heart and abdominal viscera healthy. Head not examined.

As I have before stated, pleuritis, in the above cases, was not recognised during life.

Case 5.—Nov. 18th, 1845, I was called to Mrs. F——'s infant, Walworth, aged ten months; about five weeks since, I attended it for an attack of infantile erysipelas of the nates and thighs, from which it recovered in ten days. The child has been indisposed for several days, and now labours under quickness of breathing, short cough, hot and dry skin, great restlessness, quick pulse, and inability to cry loud, (although, two days prior to this, the mother states that it screamed violently at intervals, and appeared to suffer great pain.) A rubbing sound is heard on both sides of the chest, especially the right; the head is thrown back, and when brought into the erect position, the pain appears to be much increased. The symptoms gradually became more unfavourable, and death took place on the 22nd. The treatment had been as follows:—Warm baths, lancing the gums, leeches to the chest, followed by a blister, with calomel and tartarized antimony, every four hours, for the first two days; then small doses of ipecacuanha wine, with calomel and tartarized antimony at night.

*Post-mortem examination, twenty-six hours after death.*—I examined the body with my brother, Mr. F. Crisp.—Chest: A large deposit of straw-coloured lymph on the right pulmonary pleura; on the anterior and lower part it was one-sixth of an inch in thickness; and posteriorly and laterally, the costal and pulmonary pleuræ were slightly adherent; no fluid in the pleural cavities.—Left side: The lymph less abundant on this side, but the upper and posterior part of the lung was in a state of red hepatization. The remaining portions of the lungs healthy; abdominal viscera normal. Brain not examined.

Case 6.—January 6th, 1846, four P.M., I saw Mrs. W——'s infant, Vauxhall-road, aged four months. The child had been strong and healthy from its birth, and no appearance of indisposition was observed until last evening, when, whilst lying on its mother's lap, it suddenly uttered a shrill scream. "Mrs. W—— compared it to the whistle of a steam-engine." After this the child began to cry, and then again screamed violently, with short intervals of quietude, for nearly twenty hours. I was not sent for before, as the pain was supposed to arise from flatulence. The symptoms are now, hot skin, quick pulse, short dry cough, breathing very quick, eyes glassy, bowels confined, head thrown back, and the pain apparently much increased when the head was moved forwards, and a dry rubbing sound is indistinctly heard over both sides of the chest. I lanced the gums, and gave a teaspoonful of tartarized antimony wine, ordering it to be repeated in half an hour, if the symptoms were not relieved. One grain of calomel, with one-twentieth of a grain of potassio-tartrate of antimony, every five hours; one leech to the chest. (A warm bath had been resorted to before my arrival.)

7th.—The child has been much quieter since last evening, and slept two hours during the night. The countenance, however, has an unpromising appearance, eyes sunk and dull; pulse rather feeble.

8th.—The symptoms gradually became more unfavourable, and death took place this evening.

*Post-mortem examination, ten hours after death.*—I examined the body, and found both pulmonary pleuræ covered with soft straw-coloured lymph, uniting these to the costal pleuræ. The external surface of the pericardium was also coated with lymph; no fluid in this or the pleural cavities. The posterior portions of the lungs congested, but their structure healthy, as were also the abdominal viscera. Heart normal; brain not examined.

*Treatment.* — Fortunately, the only diseases with which pleuritis in the infant is likely to be confounded—viz., pneumonia and pericarditis—are of an inflammatory nature, and will demand nearly the same treatment. I would, however, in pleuritis, if seen in the first stage, have recourse to more active measures than in pneumonia; but this disease is, unfortunately, so rapid in its progress, that medical aid is seldom sought for, until such an amount of mischief has taken place that all treatment is unavailable. If, however, the case is seen early, there is no reason why the disease may not be arrested and the little patient cured. I have attended an infant, recently, in which I had reason to suspect, from the symptoms, the existence of pleuritis. The child was seen at the commencement of the disease, the gums were lanced, the warm bath used, leeches applied to the chest, and calomel and tartarized antimony given at short intervals, and the child is now convalescent. The subjoined case I also believe to have been one of pleuritis arrested in its first stage:—April 3rd, 1842, I was called to Mrs. P——'s child, Walworth, aged two years and a half. The child yesterday was in good health; it, however, fell down stairs, but did not appear injured by the fall; early this morning, the mother first observed its breathing to be hurried and difficult.—Nine A.M.: The child is restless, breathing quick, with dry cough; pulse rapid; skin hot and dry; countenance anxious. Two-fifths of a grain of potassio-tartrate of antimony directly; two leeches to the chest, and a powder, consisting of a grain of calomel and three-fourths of a grain of ipecacuanha, every four hours.—Six P.M.: Much the same as in the morning, breathing still very rapid; pulse quick, with bruit de frottement very distinct in both sides of the chest; no crepitating râle present. The antimonial powder did not act as an emetic. The gums to be lanced, and powders containing half a grain of calomel and one-tenth of a grain of antimonial powder to be given every three hours.

4th.—Breathing very quick, but the child is altogether better; bruit de frottement still very distinct. Continue the medicine.

5th.—Better; the rubbing sound less audible.

8th.—Convalescent.

20th.—The child appears to be tolerably well.

My object in this communication has been, 1st, to show that pleuritis in infants is not so rare a disease as is generally believed; 2ndly, that when the inflammation is confined chiefly to the pleura, it may be easily recognised, and that even when complicated with pneumonia, attention to the auscultory signs may enable us to detect its existence; 3rdly, that whether accompanied by pneumonic inflammation, or occurring alone, it is a disease of great danger, and that unless remedies are early applied, it is but little, if at all, amenable to medical treatment.

## ON THE EFFICACY OF PYRO-ACETIC SPIRIT IN GOUT AND RHEUMATISM.

By JOHN HASTINGS, M.D., London.

It is nearly four years since I called the attention of the profession to the remedial powers of pyro-acetic spirit, or medicinal naphtha, in phthisis. It occasioned a great deal of discussion at that period, and many who questioned its value then have since acknowledged the truth of my views; and I believe many more would have done so, but unfortunately the symptoms of early phthisis are not sufficiently precise to satisfy the minds of those disposed to be sceptical. The opinions I then advanced I have had frequent opportunities of confirming.

However, it is gratifying to perceive that it is attracting attention on the other side of the Channel; and I also find that a book has been recently published by Renshaw,* written by an M.R.C.S., on the treatment of this disease, in which pyro-acetic spirit is put forth as the great curative agent; but this is without a single mention of my name in its pages.

I have now to deal with another class of diseases, about the diagnosis of which there is no room for either cavil or doubt: I mean, gout, acute and chronic rheumatism. For upwards of twelve months I have employed pyro-acetic spirit in these affections, and my treatment has been attended with a success quite extraordinary, far exceeding the results usually obtained by colchicum &c. I have not yet seen a case of gout or acute rheumatism which has not rapidly disappeared under its use, at the same time that it brings about a very improved condition of the general health. Chronic rheumatism requires a more lengthened treatment for its removal; indeed, it has less power over this affection than the two preceding.

I should have forwarded a report of cases, with further observations on this treatment, but from my conviction of its value, I thought it better to make this general statement, and also to assert my claim to having been the first to employ this agent in a class of diseases hitherto so intractable, and defer the other for a future occasion.

Albemarle-street, Dec. 1846.

CASE OF

## GUNSHOT WOUND OF THE LUNG,

WHERE THE BALL LODGED FIFTY YEARS.

By EDWARD MOORE, M.D., F.L.S., Plymouth.

The generally fatal character of wounds of the lungs renders an exception to that rule a matter of interest to the medical profession, and especially so where, as in the present instance, the individual survived for a period of nearly fifty years; and the case also being otherwise attended with some very singular circumstances, may be considered as peculiarly worthy of record.

The subject of this communication, Mr. John Lennon, was celebrated, during the last war, for his bravery and energy during many eventful periods of its continuance. Originally a midshipman in the Royal navy, he quitted the service in 1796, and took the command, at Martinique, of an armed schooner, "The Favourite," letter of marque, of six guns and twenty men. On his first cruise, in December of that year, he fell in with three privateers, two Spanish and one French, the latter having eight guns and sixty-five men, when, after an engagement of one hour and a quarter, he was wounded in the back by a musket-shot, which entered about the right fifth rib, midway between the spine and scapula. He fell, and his crew made no further resistance to so superior a force. He was taken into Carthagena, whence he was conveyed in the Spanish frigate "Helena" to the hospital at the Havannah, and after four months he was exchanged by cartel to Bermuda. Mr. Lennon detailed, that on receiving the shot, he fell, and presently became faint, and experienced a sensation of suffocation, accompanied with bloody expectoration. The French captain examined the wound, and finding blood issuing from it in large quantities, he stuffed some cloth into it, and bound a sash round the chest. This gave instant relief, particularly to the faintness and difficulty of breathing—probably by restraining hæmorrhage from the intercostal artery. He further related, that on arriving at the Havannah, he was tormented with a sensation as if the ball was lodged in the diaphragm, about the anterior end of the osseous portion of

* La Phthisie et les autres Maladies de la Poitrine traitées par les Fumigations de Goudron et le Medicinal Naphtha. Par le Dr. Sales-Girons. Paris: Labi, Libraire de la Faculté de Médecine, 4, Place de l'Ecole de Médecine, 1846.

the seventh rib, on the right side. The Spanish surgeons were desirous of making an opening at this part, with a view to extract the ball; but to this he objected. They told him, however, that as his life depended on it, they insisted on its performance, and preparations were made to enforce this determination; but an energetic appeal to the priest was successful in obtaining an exemption from this proceeding, which will afterwards be seen to have been a fortunate circumstance. The external wound having at length got well, he proceeded, in March, 1798, to Kingston, in Jamaica, where he was invited to a public dinner by the St. Patrick's Society, on the 17th of that month. On this occasion, the conviviality of the meeting induced him to forego that cautious manner of living which he had hitherto adopted, and the first glass of wine brought on a violent cough, during which he felt something had been coughed up, on getting hold of which, he slipped it into a letter, and placed in his pocket. On afterwards examining this, it proved to be a portion of his shirt and of a nankeen jacket, which he had worn in the action fifteen months before. Each piece was about one inch and three-quarters round, with ragged edges.

After this period he continued in command of various armed vessels in the merchant service. In one voyage his ship was upset in a white squall, and himself and five men were exposed for seven days at sea in a small boat. On two occasions he was captured by the enemy; he also twice beat off American privateers of superior force, for which he received numerous valuable presents from his owners, and from the merchants of St. Thomas's; he was also thanked by the merchants at Lloyd's. I mention these circumstances in order to show the active nature of his life; but his exploits will be found more fully detailed in the 14th, 15th, and 16th numbers of the *Colonial Magazine* for 1841; and especial mention is made of one of them, where his gallantry was very conspicuous, in "Brenton's Naval History," vol. v. p. 179.

After leaving the sea, he went to London, and being still affected with uneasy feelings from the apparent lodgment of the ball at the lower part of the chest, he consulted Mr. Gaitskell, with a view to having it removed. This gentleman took him to most of the principal surgeons in town, and, among others, to Sir Astley Cooper, who, after a careful examination, advised him not to risk the danger of an operation.

Since 1829, Mr. L—— has resided in Plymouth, during which time the writer of this notice has been his medical attendant. He has not suffered from want of general health, but has been liable to frequent attacks of bronchitis, which induced an habitual cough, and he was observed to have contracted an increasing disposition to bend the head forwards and towards the left side: this was contrary to the usual result of contraction arising from shrinking of the lung, where the stooping position is generally towards the side affected.*

Latterly he has had one or two attacks of gout. On one occasion he missed a step on coming down stairs, which, in his opinion, displaced the ball, as hæmoptysis resulted for a few days. The sensation of this displacement was felt at the usual place, the end of the seventh rib, and he always thought, that by placing himself in a particular attitude, and making pressure on the part, he had succeeded in restoring it to its original position; this however, on examination post-mortem, turned out to be erroneous.

During April, 1845, he had a severe pleuritic attack, and the bronchitis became of a chronic character, and he was scarcely ever free from cough and expectoration. In July, 1846, after severe mental excitement, owing to a false accusation, operating on a highly sensitive mind, he came home on the 22nd, complaining of chilliness; and having used a pediluvium and gone to bed, he was found during the night to have been attacked with paralysis of the left hand and arm, which by the 25th had extended to the entire left side of the body. He complained of pain in the right temple, aggravated by his cough; his speech was also thick, and almost inarticulate. Abstraction of blood, purging, &c., rendered him more sensible, and better able to make himself understood. From this time he became more tranquil, but never regained sensation on the left side; the cough also continued to harass him; the dyspnœa gradually increased; expectoration became more difficult; the sputa extremely tenacious, so as to need removal mechanically from the fauces; the mucus was succeeded by gurgling râles; and at length the powers of life gradually sunk on the night of the 27th August, 1846.

*Post-mortem examination.*—On examining the chest, the left lung was found adherent to great part of the costal pleura; a serous effusion occupied the lower part of the remaining cavity; the air-cells were distended with sero-mucous fluid, and the lung altogether appeared to occupy an enlarged space, the mediastinum bulging into the right cavity of the chest. The heart was natural in size, but loaded with fat. The right lung was contracted to one-third of its natural size, and adherent to the upper part of the chest; its consistence was flaccid, and entirely wanting the resilience and mottled appearance of a healthy lung: indeed, although portions of it floated in water, it may be questioned whether during life it was of much use as a respiratory organ; any trace of the track of the ball seemed to have been obliterated in it, unlike the case related by Sir E. Home,* where, after a lapse of thirty-two years, an induration could be traced. The shot, which had entered between the fourth and fifth ribs, fracturing the former, was found imbedded in the substance of the lung, and firmly attached by a pedicle half an inch long, condensed lung, and cellular membrane, to the inner surface of the third rib, just at the junction of the osseous and cartilaginous portions; although the fingers could be passed under it, it could only be separated by the knife. A doubt was expressed by a gentleman present, whether the ball had not been situate exterior to the lungs; but on removing the lung itself out of the body, before exposing the ball, it was satisfactorily shown, by dissection, to my medical friends, Dr. Soltan, Mr. Square, and Mr. Eccles, that it was completely surrounded by the substance of the lung, being contained in a sac so closely in contact with it, that it was difficult to remove the ball when half exposed by incision. There was no serous effusion in this cavity of the chest, the lower two-thirds of which were occupied by the diaphragm, which rose as high as the fifth rib, (in the inclined position of the body,) pressed upwards to such an extent, that on making an incision from above into the convex part of the diaphragm, the knife, instead of exposing the posterior edge of the liver, disclosed the large intestines: thus we were enabled to account for the inclination of the head towards the left side of the body, instead of the right, as in ordinary cases.

Reflecting on the sensation produced during life, of the ball being situated low down in the chest, search was now made for any other foreign body† that might, by possibility, have lodged there; but every part of this locality was found of a healthy character,—consequently an operation on this part, with a view to extract the ball, would have been utterly fruitless, and probably attended with a fatal result. The fact may, perhaps, be accounted for, on the supposition of some reflex nervous action, or from irritation of the phrenic nerve in its course over the lung, which, at the upper part of the chest, was firmly adherent to the mediastinum.

Reference to various writers on the subject of wounds of the chest does not furnish many parallel cases. Escape from death frequently occurs from various causes; either the foreign body does not enter the lung,‡ or in other instances it passes through without lodging, whereby a chance of coagulation exists after syncope, and from collapse of the lung.§ Similar cases are very rare. Instances of tents being coughed up, after a certain period, are mentioned by Baron Percy, ("Manuel du Chirurgien d'Armée," Paris, 1792, p. 125,) and two by Larrey, ("Relation Chirurgicale des Evénements de Juillet, 1830,") where balls lodged in the lungs. A case is also given by M. Boyer, in which a ball was found in the lung twenty years after the wound, (quoted by Dr. Hennen and Sir G. Ballingall;) but these cases do not appear to have been so complicated as the present, where, in addition to the ball, portions of the dress were also forced into the lung, to be coughed up after being fifteen months a source of irritation. It is probable that here the immediately fatal result was prevented by the ball &c. acting as an impediment to the flow of blood, aided by the collapse of the lung, which dissection proved to have taken place.

* When the function of one lung has been long suspended, the intercostal spaces become diminished, the ribs anchylosed, and the cavity on the affected side adapts itself to the diminished bulk of the collapsed lung.—(Sir George Ballingall's "Military Surgery.")

* Transactions of a Society for the Improvement of Medical and Surgical Knowledge, vol. ii. p. 169.

† "In a case of duel at Exeter, some years ago, in which a promising young physician lost his life, it was found that a pebble-stone had been carried into the same wound, together with the ball, the latter having first struck the ground. Dr. Hennen mentions an instance, where, in the action at Burgos, a serjeant was wounded by a ball in the temple, which had also carried with it, into the same wound, a tooth belonging to a soldier who stood before him."—*Military Surgery*, p. 86.

‡ "Il arrive qu'une balle traverse la poitrine de part en part, sans blesser les poumons." (Dupuytren, *Leçons Orales*, tom. ii. p. 537.) See also Mr. Maiden's case, where the shaft of a gig passed between the sternum and lungs, without wounding the latter.—(*London Medical and Physical Journal*, vol. xxix. p. 68.)

§ "If a bullet passes fairly through and through," says Mr. John Bell, ("Discourses on Wounds," p. 52,) "the patient is safer; he is in great danger if it stops, whether within the thorax or in the lungs."

Fortunately, says Hennen, (p. 377,) speaking of wounds of the chest, "the lung lies, for the most part, sunk, and always quiescent." I am aware that this is not always the case; but the reason of the different results of admitting air into the chest is, I believe, no better explained now than in the time of Mr. Abernethy, who says ("Surgical Works," vol. ii. p. 179) "that the circumstances on which either of these effects depends are not perhaps well understood."

Under all circumstances, I think that when it is considered that after such an accident the individual, with a ball lodged in the lung, survived nearly fifty years, (great part of which was employed in active bodily exertion,) the case cannot fail to be esteemed as one of the most singular instances of recovery from gunshot wound of the chest which has hitherto been recorded.

January, 1847.

## Reviews.

*Dr. Underwood's Treatise on the Diseases of Children. With Directions for the Management of Infants.* Tenth Edition, with Additions. By Henry Davies, M.D., Fellow of the Royal College of Physicians, &c. London, 1846.

Between this edition of Dr. Underwood's work on Diseases of Children, and one which we see was published in 1799,—between, in fact, the fourth edition, revised by the author, and the tenth, revised by Dr. Davies, there is, in many respects, the satisfactory difference which the progress of medical science during half a century would obviously lead us to anticipate.

The object of our editor is stated in the advertisement to be,—"to render this edition of Dr. Underwood's Treatise on the Diseases of Children worthy of the reputation which the work has heretofore sustained, by bringing up the original doctrines to the standard of those of the present day, and by the addition of much new matter." To effect this, whilst adhering to the original arrangement, language, and opinions, "he has embodied Dr. Underwood's notes in the text, and also those of Dr. Merriman and Dr. Marshall Hall, wherever they could well be admitted." In addition, he has furnished copious annotations from the two latter writers, as well as from his own experienced pen, distinguishing them by their respective initials. Such, therefore, is the amount of information here collected; and certainly Dr. Davies does not overrate the value of his labours, when he hopes that the work will be found "a good practical treatise." Considered in respect to the value of its contents, it certainly is so, if arrangement and congruity are held as of a secondary consequence only. But we are bound to express our opinion, that although composed of excellent materials, in many respects it is most unfit for reference in practice, or as a text-book in the diagnosis of infantile diseases. The addition of one man's opinions and practice to those of another produces much incongruity. Dr. Underwood's treatise contains in itself a vast amount of useful information, combined with much which is totally opposed to more modern views. On the value of the remarks of Drs. Merriman, Hall, and Davies, there can be but one opinion; but excellent as each authority may be, "*per se*," they form but an indifferent alloy. Indeed, the latter word is hardly applicable, as no attempt is made to reconcile even the most discrepant opinions. Thus, with respect to porrigo scutulata, Dr. Underwood says,—

"From considerable experience, I may venture to say, that this, being usually a mere complaint of the skin, is most successfully treated by topical applications. . . . . It may be safely healed up, as I have found in many other affections of the skin, where the system has, often over-scrupulously, been conceived to be concerned."—p. 482.

This is plainly contradicted by Dr. Davies at the end of the chapter, (p. 485.) Again: Dr. Underwood recommends, that in this complaint the head should be washed twice in the day with a strong decoction of tobacco, whilst in a foot-note, with the initials of Samuel Merriman, it is stated, that "a case of stupor, ending in death, occurred a few years ago at Shoreditch, from the incautious manner in which a father washed the head of his child with a strong decoction of tobacco, for the cure of tinea."

Now this is calculated to puzzle rather than guide. Whatever may be the intrinsic value of the individual observations, if a practical treatise be deficient in general unison and congruity, its loses half its value to the practitioner.

As an instance of the gross and almost inextricable confusion induced, in a great degree, by this cause, we may refer our readers to a particular point in the diagnosis of hydrocephalus, as here given. With respect to the pulse of hydrocephalic patients, it is observed:—"The pulse and capillary circulation are constantly varying, without any assignable cause. At first, the pulse is natural, then morbidly slow, latterly unaccountably quick; the respiration is unequal, and is easily disturbed, &c.," (p. 354.) But in the next page it is stated, that "from remittent fever it is distinguished by the uniform quickness of the pulse, and the absence of vomiting, except as an occasional occurrence." Now great doubt remains as to which disease is distinguished by the uniform quickness of the pulse, especially as, in the previous page, vomiting is stated to be only an occasional symptom of hydrocephalus. In Underwood's original work there is at least clearness and consistency of statement.

"Though it is sometimes a very short disease, and at others of many months' standing, it seems always to be divided into three stages, which are best distinguished by the state of the pulse. In the first, the pulse is always quick, as in other complaints attended with fever; in the second, it is slow, irregular, and often intermitting; and in the third, again, it becomes very quick, and usually regular."—Vol. i. p. 277.

These remarks were first made by Dr. Robert Whytt, in a work he published on the subject in 1768. They are generally correct; but if employed as diagnostic of the disease, they will only tend to confirm the observation of the Roman author, who considered the pulse as "res fallacissima." Goelis, Bouchut, and others, very properly prefer a consideration of general symptoms; the state of the pupil is, however, regarded by them as especially valuable. It affords a much more accurate index than the pulse, if it be examined from the commencement of the disease, not only of the presence of fluid, but of the stages preceding that of effusion. In two cases, published by Dr. Loir in the *Revue Medicale* for 1844, not only was the sensorium undisturbed, but the general health continued good up to a late period. But the pupil was strikingly indicative of the disease throughout.

Besides the want of congruity, which is lamentably exhibited in the present volume, there are certain portions of Dr. Underwood's treatise here resuscitated, which should find no place in any modern compilation; for instance, the chapter in which he groups together gutta serena and cataract, for the absurd reason, "because some of the remedies are accommodated to both." (p. 498.) Yet no contradiction is given to this in the present work; but the advice to drop a solution of capsicum or cayenne pepper into the eyes of amaurotic infants is permitted to go forth unnoticed by editorial care.

Leaving out of the question these obvious omissions and mistakes, we still regret that as a practical treatise we cannot recommend the work. If we may be permitted a comparison, we may say that it resembles an antique edifice, to which additions of varied dates and different styles have been successively appended. There may be much utility and beauty in each addition, but what can we say of the whole?

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"Talking yesterday with Dr. Heberden, I was surprised to hear him say he thought nothing of Hippocrates' worth knowing, and nothing could be learnt from him. He quoted Sir John Pringle, 'that he would rather know what will be known two thousand years hence, than what was known two thousand years past.'"—*Letter of Dr. Lettsom.*

# Medical Societies.

## MEDICAL SOCIETY OF LONDON.

MONDAY, DECEMBER 21, 1846.—MR. DENDY, PRESIDENT.

### CHRONIC BRONCHITIS AND BRONCHIAL ASTHMA.

DR. THEOPHILUS THOMPSON commenced his communication on this subject by remarking that, the ultimate object of all our discussions being the successful treatment of disease, the present season is especially appropriate for considering the affections of a membrane peculiarly exposed to disturbing causes. It was not his intention to dwell on acute bronchitis, attended with hurried breathing, pain, and fever, in favourable cases subsiding within a week; or in those which do not yield to treatment, soon manifesting the anxious countenance, brown tongue, partial sweats, disturbed sensorium, and inducing death by asphyxia,—since the suitable treatment of this disease is scarcely open to question; neither to expatiate on another variety of bronchitis, (however interesting, from its liability to be mistaken for pulmonary consumption,) in which the expectoration is profuse, purulent, perhaps fœtid; the patient becomes emaciated; hectic is established; and after death we find extensive dilatations or pouchings of the bronchial tubes, or a villous condition of their investing membrane; but he especially invited the attention of the Society to a class of cases, having neither the urgency of the first, nor the hopelessness of the second, yet claiming our careful study, in consequence of their frequent occurrence, and their injurious influence on the constitution, often occasioning disease of the heart, or, especially when extending throughout the ultimate pulmonary ramifications, tending to the production of dropsy. Amongst the applicants for relief at the Hospital for Consumption and Diseases of the Lungs, a very large proportion are affected with chronic bronchitis, in the form which Dr. Thompson proceeded to describe. They present themselves with respiration a little wheezing, and somewhat hurried by exertion; their complexion in some degree affected by partial deficiency of oxygen, often without pain of chest, or acceleration of pulse, but with inspiration rather laborious, and expiration prolonged. On listening to the chest, the respiratory murmur is found to be more or less extensively superseded by mucous rhonchus, commonly intermixed with the sonorous and sibilant. The sleep of such patients is usually disturbed. Those possessing much peculiar nervous susceptibility are liable to distinct paroxysms of asthma, often occurring an hour or two after retiring to rest. If you inquire how long the complaint has lasted, some will tell you many winters, others, that they have never been quite right for many years. They have tried various treatment with temporary effect; but on the whole lose ground, and are unfit for active duty. The heart becomes oppressed and dilated, and they die eventually either from the supervention of acute bronchitis, or from dropsy; or if beyond the meridian of life, not unfrequently, in a few years, they become consumptive. Dr. Thompson proceeded to notice the remedial treatment recommended by authors, and to show that the results were too often unsatisfactory. Antimony given alone is not altogether useless; but it is inadequate, and may be carried to such an extent as to injure the constitution, without permanently improving the condition of the tubes. Counter-irritation, although strongly recommended, produces only temporary advantage, and superadds to a trying malady a painful annoyance. Acids check expectoration, and often occasion tightness of chest. Opiates, so often given to allay the incidental cough, not infrequently induce severe pleurodyne. The plan which Dr. Thompson first adopted, some years ago, he has, with certain modifications, very extensively employed at the Hospital for Consumption and Diseases of the Lungs, as well as in private practice, and the results have been so gratifying, as to make him anxious to communicate them to the Society. It consisted mainly in establishing on the bronchial tubes, gently, but rather rapidly, the influence of mercury. Calomel is undesirable, since if given freely it will frequently salivate, and its discontinuance be required before the bronchial condition is materially modified; but a single grain of blue pill, given thrice a day for a short period, and subsequently twice or even once daily, accomplishes the object often without producing soreness of the gums. Antimony proves a valuable auxiliary, and enables us to effect our purpose with a smaller quantity of mercury than would otherwise be requisite, and the addition of an anodyne is useful both in moderating the cough and making the stomach more tolerant of the treatment. The formula which Dr. Thompson is accustomed to employ consists of blue pill, half a scruple; antimonio-tartrate of potass, one grain; extract of conium, one scruple, divided into eight pills. The duration of treatment varies with the severity of the disease, and the susceptibility of the patient; but it is often sufficient to administer one pill thrice daily for four days, then twice daily for four days, and afterwards every night for a week. Under this treatment, the sonorous rhonchus usually disappears in a few days, or becomes audible only when the patient takes a deep inspiration, and the expectoration is rendered less tenacious and more opaque. When the breathing becomes comparatively easy, and the only rhonchus heard is the mucous, the mercurial pill may be given less frequently, and ipecacuanha, or, in debilitated subjects, compound squill pill, substituted for antimony. When all rhonchus has disappeared, some roughness of respiratory murmur is often observable, and till this is removed the mercury must not be suspended, or a relapse would be probable. An occasional purgative may be advantageously employed, and when the mercury is discontinued, iodide of potassium is often of value in establishing a healthy condition of the bronchial membrane. Dr. Thompson gave several instances of the successful employment of his plan of treatment. One, in a gentleman between seventy and eighty years of age, in whom the heart was involved, and dropsy threatened; another, in a young man, who, in consequence of chronic bronchitis, associated with peculiar nervous susceptibility, suffered from distressing paroxysms of asthma, night after night, an hour or two after retiring to rest. He did not attempt to specify all the variations of treatment which the modifications of individual cases might require, but urged that the principle of management was of wide application, aiming to substitute a curative for a palliative plan, and suggested that by changing the condition of the bronchial tubes, and rendering them tolerant even of our variable climate, it might save many individuals, now subject to bronchial attacks, every winter from the evil of annual expatriation.

MR. LINNECAR alluded to a case in which there was a frequent recurrence of asthmatic paroxysms. Ipecacuanha seemed to increase the tendency to these attacks.

MR. HIRD, as long as he recollected, had been in the habit of employing similar remedies to those mentioned by Dr. Thompson in a like class of diseases. In chronic cases he abstained from the use of antimony, and commenced the use of blue pill, in half or one grain doses, and two grains of conium. In young subjects he gave one grain of conium for a dose; and when there was a tendency to dropsical effusion, two to three grains of squill pill were added to each dose. Latterly, in addition to these remedies, he had employed dry cupping with the greatest possible advantage. In old persons, where the expectoration was free, but the body debilitated, he used a decoction of senega with ammonia. He thought, that when we exhibited mercury in the class of cases described by Dr. Thompson, it was desirable to procure tenderness of the gums, and to keep it up for a few days.

MR. DENDY remarked, that poor people seemed to bear the vicissitudes of temperature, when ill, with more impunity than the rich.

MR. BISHOP inquired what adjuvants in respect to temperature &c. were employed in these cases. Patients often recovered from these attacks by confinement to bed and regulated temperature. Mercury was doubtless of powerful and decided advantage in many of these cases. He had noticed in influenza, that persons who could be easily placed under the influence of this medicine, had their chances of escape much augmented.

DR. THOMPSON was still wedded, in those cases of depression and much expectoration alluded to by Mr. Hird, to the old ammoniacal mixture. The lobelia inflata was also useful when there was profuse secretion. He had not often employed dry cupping, but it seemed to be of more advantage in cases where the lungs become congested, than when the affection was confined to the bronchial tubes. With respect to the auxiliary means, he enforced, when able, an equable and rather warm temperature of the room; but many of the cases he had to attend were those of out-patients of the Hospital for Consumption, in whom, from their necessities, it was often impossible to carry out such auxiliaries; indeed, many of the patients were obliged, whilst under treatment, to go on with their regular employment. In spite of all these disadvantages, the remedies had the desired effect.

MR. STEDMAN had employed the lobelia inflata, in doses of twenty minims of the common tincture, as an antispasmodic in cases in which there was but little expectoration. He

found, that if there was much expectoration, it was checked by the lobelia.

The Society adjourned until the 12th, when Mr. Dendy will read, "Some Remarks on the Treatment of Abscess, with Cases."

MONDAY, JANUARY 11TH, 1847.

Mr. W. B. KELLOCK related a case of

OVARIAN DROPSY,

which had been attended by himself and Dr. Golding Bird. The patient was a robust lady, of sallow complexion, aged sixty-three. She was married at the age of twenty, and became the mother of eleven children; her last child was born at thirty-seven years of age. She menstruated regularly up to fifty-two. She had always led a quiet life, lived very abstemiously, and enjoyed tolerably good health up to the summer of 1844, when she first complained of shooting lancinating pains in the legs, with sense of irritation in the primæ viæ, intense itching of external genitals, and scanty urine; the bowels also were obstinately costive, and never relieved without the aid of purgatives. These symptoms lasted up to August, 1845, when the abdomen began to swell uniformly, accompanied by œdema of both legs, particularly the left; the general health also became much impaired. Iron was administered freely and the health improved. She now commenced to menstruate again, that functional discharge having ceased ten years before. The swelling of the legs diminished, but the belly increased in size gradually, up to February, 1846, when it fluctuated most distinctly. It was now evidently a case of encysted dropsy. She was tapped in the mesial line, and twelve ounces of port-wine-coloured fluid withdrawn. Diuretics, mercurials, and other medicines suited to her case were employed, but in August it became again necessary to tap her, and seventeen quarts of similar fluid were drawn off. The tapping was repeated on the 27th of December, and the patient sunk on the 8th of the present month. In addition to the curious circumstance of menstruation being regular and natural as to quality, this poor patient suffered from the most intolerable sexual excitement, and great pain in the course of the right sciatic nerve.

*The body was examined forty-eight hours after death.*—The integuments below the umbilicus, which hung between the legs like an apron, were three inches thick. All the abdominal viscera appeared healthy. The uterus was small and exceedingly soft. The cyst, which was adherent anteriorly, had two compartments, they contained seven or eight quarts of fluid mixed with pus, with deposits of albuminous matter, the result of recent inflammation in their interior. There were two or three smaller cysts developed in the walls of the sac. The base of the sac was occupied by a large encysted tumour, the size of a human head, completely filled with cells containing what is termed colloid matter. The right ovary, about the size of an egg, was remarkably soft, with a central cavity, like an enormously enlarged relic of a corpus luteum.

In the discussion which ensued on this case, it was thought, that the post-mortem explained that the intense sexual excitement was the result of the condition of the ovary, which contained appearances similar to a large corpus luteum. It was remarkable that menstruation should have occurred at so late a period of life, and after its cessation for ten years previously: such a circumstance was undoubtedly rare. The discussion then had reference to the nature of encysted ovarian disease; an opinion having been hazarded by one of the speakers that it was invariably malignant. As, however, this point, connected with some recent discoveries on the subject, will shortly come before the Society in a more definite form, we postpone our report.

## WESTMINSTER MEDICAL SOCIETY.

SATURDAY, JANUARY 4TH, 1847.—MR. HANCOCK, PRESIDENT.

Mr. YOUL related the following case of

ABSCESS OF THE BRAIN IN A CHILD.

The little patient was eight months of age, and he was called up to attend him on the night of the 27th of December last. He found the child convulsed, though not violently so; the pupils were contracted, but acted on the application of the light of a candle; the pulse 96. There was no paralysis. The child had six teeth; one had been cut the day previously. The gums were not swollen, nor did there appear to be a tooth near the surface. The child had vomited freely the bread-and-milk taken that evening. He appeared perfectly sensible. The remedies employed were of no avail, and the child sank one hour after the first convulsion. The history of the case gave no evidence of previous disease; but there was a mark on the temple, the result of a wound received accidentally, a fortnight before, from a cutting instrument, but which appeared to have given him no inconvenience whatever, not a single symptom even of irritation having been since observed. He had commenced teething early, vomiting attending the cutting of each tooth. The body was examined thirty-six hours after death. The child was considerably above the average size, and well-proportioned. The limbs were not stiffened; the coverings of the brain were natural. On slicing away the superior left hemisphere, an abscess was discovered, of a triangular shape, the apex corresponding to the external wound. It extended to the lateral ventricle, and contained at least two ounces of pus. The surrounding medullary matter was softened and disorganized.

The case was related first as a remarkable instance of extensive disorganization of the brain, without previous symptoms; and secondly, as a rare example of such extensive disease in so young a patient.

Mr. GREENHALGH read a paper on

THE OCCURRENCE OF FLOODING AFTER DELIVERY.

He detailed the results of twenty cases which had fallen under his notice. Three cases of unavoidable hæmorrhage were treated by turning, out of which, one mother died from the effects of loss of blood previous to the operation: all the children were still-born. Three cases of accidental hæmorrhage were treated by rupturing the membranes: all the mothers recovered; the children were still-born. Eight cases occurred after the birth of the child, and before the expulsion of the placenta; for which, in two cases, the extraction of the placenta and pressure over the uterus were sufficient for its arrest. In four cases, the introduction of the hand into the uterus was found necessary, followed, in three cases, by firm pressure over the uterus, cold, and an infusion of ergot-and-brandy. In four cases, cold water was applied to the abdomen. Brandy alone was given in three cases; and in four, with the infusion of ergot.

As to the causes of hæmorrhage in his cases: three resulted from placenta prævia; three from a separation of the placenta from some part of the uterus, except its mouth; three from hour-glass contraction; one from morbid adhesion of the placenta to the fundus uteri; in ten cases, from inertia uteri, produced, in two cases, by too sudden expulsion of the child, in three cases, from naturally feeble constitutions, and in the remaining five cases, without any discoverable cause. He then stated that the imprudent administration of ergot, and too early rupturing of the membranes, were common causes of hæmorrhages.

With reference to the treatment, he remarked that the recumbent posture, quietude, the admission of cool air, cold, acidulated drinks, light covering, depressed head, and elevated hips, were means about which none would feel disposed to cavil. Turning in unavoidable, and rupturing the membranes in accidental hæmorrhage, he looked upon as established practices. The introduction of the hand for the removal of the placenta and coagula, where pressure failed, he strongly advocated. He had not much confidence in the use of cold. Brandy he considered was too indiscriminately resorted to. Of opium, galvanism, compression of the abdominal aorta, and tickling the fauces, he had had no experience. Pressure over the uterus with the hand should in no case be omitted.

He objected strongly to plugging, in the later months of utero-gestation, after the expulsion of the fœtus, upon these grounds: that the uterus would contain sufficient blood for the extinction of life; that the coagula contained in its cavity would rather retard than hasten uterine contraction; and lastly, that it converted an external into an internal hæmorrhage.

The discussion which ensued turned mainly upon the new mode of treating placenta prævia by the removal of the placenta.

Dr. SIMPSON, who was a visitor this evening, at the request of the president made some remarks on the practice which is so intimately connected with his name. He first referred to the statistics of the mortality of the old practice by turning, as exemplified in the paper before the Society, in which it was one in three. He then referred to twelve cases recorded by Dr. Collins, in five of which turning was resorted to; in two the placenta was expelled by the natural efforts of the uterus; and in five cases nothing was done. Dr. Conquest had said, that in all cases of placenta prævia it was necessary to interfere. Now he (Dr. Simpson) was by no means of this

opinion. When interference was required, then came the question, what kind of interference was desirable? In many cases simple puncturing of the membranes was sufficient. Dr. Nagalé had succeeded by this proceeding in thirteen cases out of forty. When this plan did not prove effectual, then we should turn or bring away the placenta. No doubt, turning should be sometimes resorted to, but only in those cases in which the mother had previously borne children, and the os uteri was relaxed, for there was serious and imminent danger of version, sometimes, even under most favourable circumstances, of lacerating the cervix uteri. As this was the portion of the os uteri to which the placenta was attached, it was very vascular, and there were consequently two sources of danger, one from hæmorrhage, and one from uterine phlebitis, consequent upon the lochia irritating and inflaming the lacerated cervix. We should therefore select our cases for turning. It was wrong to dilate the os uteri early. Dr. Collins turned in five cases; two died, the cervix uteri being ruptured. In one, the midwife, and in the other, Nature, removed the placenta, and the patients did well. We should turn when the birth was cross, and under the favourable circumstances before mentioned; but laceration was still imminent. He related a case in which a practitioner in Edinburgh had turned, hæmorrhage continued after delivery, but was arrested eventually by Dr. Simpson, who employed pressure with a breakfast-cup, which prevented the uterus relaxing. The patient made an imperfect recovery, and died at the end of six weeks. Examination revealed laceration of the anterior lip of the cervix, to which the placenta had been attached. The far better practice, in most cases, was the separation of the placenta. Dr. Simpson then entered at considerable length into his views regarding the anatomy of the placenta, and answered the objections of Drs. Lee and Ashwell on these points. He contended that the hæmorrhage was from the placenta, and gave his reasons, founded on anatomical demonstrations of the truth of the assertion.

Several gentlemen spoke on the subject.

SATURDAY, JANUARY 11TH.

Dr. AYRES exhibited a specimen of

ANEURISM OF THE ARCH OF THE AORTA.

This case was remarkable only, first, from the circumstance of its having pressed upon the trachea and œsophagus, and the patient eventually sinking, without hectic or other severe constitutional symptoms, and simply from inanition; secondly, from the circumstance of one lung (the left) consisting almost entirely of one mass of miliary tubercles, and two or three small vomicæ near the apex, the other lung having only a few tubercles scattered about it. The aneurism had exerted pressure on both bronchi.

A discussion of some length ensued on the nature and causes of tubercle.

## PATHOLOGICAL SOCIETY OF LONDON.

JANUARY 4TH, 1846.—DR. WILLIAMS IN THE CHAIR.

Dr. LLOYD exhibited

A FŒTUS SEVEN MONTHS AND A HALF OLD, HAVING A DEFICIENCY OF EITHER EXTERNAL AUDITORY MEATUS.

A prolongation of delicate cuticle was observed in the normal situation of the orifice. On dissecting away this flap of skin, the bone beneath presented a similar deficiency of an external opening. The infant, which had come under the notice of a friend of Dr. Lloyd's, was born alive, and died from hæmorrhage, owing to the midwife forgetting to tie the umbilical cord. It was the fourth child of the same parents; no hereditary disposition to the malformation could be traced.

Mr. TOYNBEE remarked, that he had at present under his care a case of similar malformation of the cutaneous opening in the external ear. From various experiments, it had been proved by the parents of the child that it had the faculty of hearing. In reference to the present case, Mr. Toynbee, with the permission of Dr. Lloyd, undertook to make a careful dissection of the brain and internal ear, the result of which would be communicated to the Society.

Mr. WILLIAM ADAMS exhibited a specimen of

A PECULIAR FORM OF TUMOUR OF THE UTERUS,

taken from a woman aged forty-six, of intemperate habits, who had died after amputation of the hand, which had been affected with dry gangrene from arteritis.

In the examination after death, the heart was observed large, flabby, and thin; the valves healthy; slight atheromatous deposit in the thoracic and abdominal aorta. The left axillary artery was filled with a fibrinous plug three inches in length; below this, the vessel was pervious and healthy for two inches and a half, where a large branch was given off, immediately after which it diminished to nearly half the size of the healthy portion, and continued so to the bend of the elbow. On being laid open, this portion presented a deep blood-red colour, with small flakes of lymph on its surface; the coats were unusually soft, and the vessel broke just above the bifurcation, though removed with care. Radial artery very small. Liver in an advanced stage of fatty degeneration. The cavity of the pelvis was occupied by a tumour which rose into the abdomen, and which consisted of the distended uterus, inclosing a tumour of a circular form, measuring five inches in diameter. It had been developed in the muscular structure of the posterior wall of the uterus, nearer to its internal than external surface; a very thin layer of muscular fibre separated it from the cavity of the uterus, which was enlarged, though its sides were approximated by the pressure of the tumour, which on its outer surface was covered by a muscular layer half an inch in thickness. The substance of the tumour presented an opaque, milk-white appearance, of the consistence of the mammary gland. In some lobes, when the anatomical arrangement was most evident, it seemed composed of separate bodies, of various form, contained in and connected with the parietes of cysts. The section presented none of the ordinary appearance of the hard fibrous tumour of the uterus, and under the microscope but a small amount of fibrous matter could be shown. It seemed made up of minute granular matter, with a small amount of wavy, filamentous structure. No distinct nucleated cells were discoverable. The tumour appeared much to resemble the sero-cystic tumours of the breast in a late stage, as described by Sir Benjamin Brodie, and was, in the opinion of Mr. Adams, a good illustration of that class of adventitious morbid growths described by Dr. Hodgkin, in the fifteenth and twenty-sixth volumes of the *Med. Chir. Trans.*, as developed in the type of compound serous cysts.

The preparation is in St. Thomas's Hospital.

Dr. ROBERT BARNES exhibited a specimen of

VALVULAR DISEASE OF LEFT SIDE OF THE HEART, WHICH HAD OCCASIONED SUDDEN DEATH.

The following are the particulars of the case:—

A woman, aged sixty, died suddenly; was not seen during life. All that was known of the symptoms was, that she had had œdematous feet.

Dr. Barnes assisted Dr. Waggett to perform the post-mortem examination for the inquest. General condition of the body emaciated. The brain and membranes presented nothing remarkable, with the exception of some old adhesions of the arachnoid, on either side of the longitudinal sinus, to the convolutions of the brain. There was no congestion. The lungs presented nothing remarkable, with the exception of slight tubercular deposit in the apices, and slight parenchymatous emphysema. There was no congestion, and very little hypostatic congestion in the depending portions. The liver was granular, not congested. The remaining organs of the abdomen were in the natural condition. All the cavities of the heart were filled with blood, a part of which, on both sides, was contracted into polypoid concretions. The large vessels near the heart, both venous and arterial, also contained blood. The mitral and aortic valves exhibited ossific deposits, and closed imperfectly, and hypertrophy of the left ventricle showed that there was regurgitant disease. There are also ossific deposits in the aorta. The right side of the heart presented nothing abnormal. The weight of the heart, after macerating five days in water, was thirteen ounces.

The chief point of interest to which Dr. Barnes wished to call the attention of the Society, was the repletion of the cavities of both sides of the heart with blood, considered as a proof of death by the heart. This is the condition described both by Bichât and Devergie as being the result of death by the whole heart. Dr. Barnes had examined three other cases of sudden death in which the heart was diseased, and similar accumulation of blood was found.

"A trifler sometimes, by the visitation of death, is made watchful, as the sleeper wakes up when the night-lamp goes out.

"To a careless physician, whom one would not trust with a bank cheque for ten minutes together, a man will trust his body for years."—PROFESSOR MARX.

## PHARMACEUTICAL SOCIETY.

JANUARY 13TH, 1847.—MR. MORSON IN THE CHAIR.

### APPARATUS FOR INHALING THE VAPOUR OF ETHER.

THE lecture-room of the Society was crowded this evening with members of the Society and medical men, to hear a paper on Mr. Squire's instrument for the inhalation of the vapour of ether, and to see and to hear descriptions of other instruments for the same purpose.

Mr. SQUIRE observed, this is now the all engrossing subject, and public attention is daily called to the several operations which have been performed without the accompaniment of severe pain, heretofore experienced: some failures are also recorded, without stating the particulars as to their cause. For instance, the temporary apparatus which I put hastily together for Mr. Liston, when he performed the first capital operation in this country, without a sign even of pain, was afterwards much improved, and employed in subsequent operations, two of which are reported in one of the medical prints to have entirely failed, without even alluding to the cause of failure. Now I think it would be useful to the profession to have, in each case of success or failure, the circumstances also reported. In the two failures alluded to, the noses of the patients were not held. Practice, however, teaches us that this is necessary, and I find, on inquiry, that this precaution was taken with the first capital operation. After the complete success just mentioned, we cannot be surprised at the painless extraction of teeth, and minor operations of surgery. It remains, therefore, to collect the various causes of non-success from parties who have the opportunity of frequently witnessing the inhalation of ether and its effects, in order to make this boon most useful to suffering humanity by instructing those who have hereafter to employ it. I am informed that the patients differ much in the amount of courage they exhibit in the anticipation of an operation, and this of course will vary with the magnitude and danger of such operation; they therefore require encouragement, as well as a good deal of tuition in inhaling the vapour of ether from a tube; and it has been remarked, that in various stages of the process of inhalation they have desisted, and even when close on the point of insensibility, have stopped short, and refused to inhale further. These circumstances militate against its uniform success, let the apparatus employed be ever so perfect; and until the process becomes more familiar, and the public are satisfied that no unpleasant effects are produced by its use in patients of all ages, the confidence of the public will not be entirely secured, and we shall have occasional failures from the causes I have mentioned. Persons in health, desirous of trying its effects for pleasure, are affected in one minute to the full extent; and in the cases I have witnessed, the different dreams induced are very amusing: they, however, all agree in not being able to reckon the time they have lost during the minute or two they have been asleep. I may mention the marked difference in the effect produced on the same person in the same evening, by first inhaling the washed ether, and producing pleasurable sensations—next, the ordinary rectified ether, those of an unpleasant character—and shortly after, the pleasant sensations being recovered by inhaling the washed ether. In constructing the apparatus, I have taken into the account the weight of the vapour of ether, and have placed the tube near the bottom part; considering, also, that its stimulating effects on the air passages causes coughing, I have regulated the supply of air to dilute it at the commencement of inhalation, with means to increase its strength until the patient is able to bear its full force. To secure a full supply, I have filled the upper vessel with sponge, and have also a collar of sponge around its descending tube at the bottom of the lower vessel, which imbibes any liquid ether in excess, and also serves further to impregnate the air in its passage to the tube for inhalation. The apparatus is supplied with ether at the top by a funnel, and falls in a shower on the sponge; a valve is placed in this part to admit air, and closes to prevent the escape of ether. In the other parts, Reed's patent valves (for the improvement of which he has recently taken out a patent) are, by his permission, used in this apparatus, and I trust it may serve the very useful purpose, that its original was so successful in.

After Mr. Squire had exhibited and explained his instrument, Mr. HOOPER gave an account of his apparatus, or rather, of improvements which he had made in the instrument, suggested by Dr. Boott and Mr. Robinson, and which had received their sanction. It would be unprofitable to follow the various remaining describers of instruments which were exhibited, many of which had not been tested in practice; they were really so numerous, that it would appear that the whole scientific portion of the members of the Society, as well as that of many others, had been employed in inventing and contriving means for administering the vapour of ether. The modifications attempted were from the most elaborate and complicated pieces of machinery to mere bladders with an elastic tube and stop-cock, the latter having the advantage of not being protected by either "caveats" or "patents." Whatever the form of instrument, however, exhibited, it was remarkable that each and every one had answered the purpose for which it was intended; and in this respect, the mere bladder and pipe had been as efficacious as the patented and more expensive articles.

The object of the exhibition at least was answered, for each had an opportunity of exhibiting his "adopted," and, like a fond parent, saw advantages in his own offspring which he failed to find in that of others.

We may fairly sum up the results of the evening's "exhibition," in observing, with the President, that each form of apparatus exhibited had appeared to answer the purpose for which it was intended; that the simplest apparatus, if effective, must eventually be the most useful, and that time and experience only could demonstrate, amongst the many competitors, which form of instrument was the most likely to be generally useful.

In the course of the evening it was stated, that the vapour of ether had been many years since employed with the same intention, and the same effects, as the nitrous oxide. One gentleman stated that he had known instances in which the ether had been inhaled from a bladder, with the effect of producing intoxication, by boys in the street, and that the proceeding was only checked by a coroner's inquest. Another speaker had witnessed, in New York, the intoxicating effects of ether when inhaled from a pocket-handkerchief, on which it had been sprinkled so long ago as eighteen years.

## PLACENTA PRÆVIA.

*To the Editor of* THE LANCET.

SIR,—All the particulars of the case of placenta prævia under the care of Mr. Tallan and Dr. Doyle have not been mentioned by these gentlemen in your number of the 14th ult. Strictures are given on it in the number of the 5th of this month. Without attempting to side in any way with the course pursued previously to the attendance of Mr. Tallan and Dr. Doyle, or vindicating all the means used by them, I should say, that from the advanced stage of the case, the loss of blood, and exhaustion, the os uteri was sufficiently dilated to admit the hand; with the greatest caution, care, and gentleness, it was then to be insinuated through the detached portion of the placenta, and between the membranes and uterus; if the liquor amnii had not come away, to lay hold of the feet of the child, and the membranes being broken, the delivery might have been carried on; or if the liquor amnii had come off, the hand was to be passed through the ruptured membranes, and the labour carefully conducted according to the art of turning. In the case of partial placenta prævia, before the os uteri is sufficiently dilated, no one doubts the efficacy of the common plug, with the other remedial resources used against hæmorrhage. But in the advanced stage, as in the case under notice, when the os uteri is sufficiently dilated, the hand passed up through it, as well as the membranes, if the liquor amnii remain, will act, in the first instance, as a plug, to lessen or prevent hæmorrhage to any alarming extent, and afterwards the passage of the child will be a security against it. With respect to hæmorrhage after the delivery of the child, if the state of the uterus and its contractions, as well as the general condition of the patient, be duly observed during the process alluded to, there is every hope of the placenta being expelled, and the contraction of the uterus guarding against any further loss of blood. Several high authorities in midwifery have arrived at this conclusion. The atony of the uterus might be met by pouring cold water on the abdomen, and the use of the ordinary remedies where action is requisite. But as to galvanism, the profession will have to examine its applicability for special and general effects. The total separation of the placenta, where it partially presents, would only be increasing an alarming hæmorrhage, which it is requisite to stop, for a larger surface of bleeding vessels would be exposed. Additional observations might be made on this practice, but particulars and any exception to a general rule need not now be entered on.—I have the honour to remain, Sir, yours most respectfully,

J. P., M.D.

Manchester, Dec. 1846.

# THE LANCET.

LONDON, SATURDAY, JANUARY 16, 1847.


We beg to call the attention of the profession to the requisition for a Special General Meeting of the Royal Society, to consider the legality of the proceedings of the Council and the Physiological Committee in 1845. We suppose, that with this document actually in print, the most stolid will allow that the recent exposures and discussions have begun to bear fruit. The matter is interesting to the entire profession. Wherever there is hollow pretence, wherever there is reward or honour unduly conferred, there is quackery, and it is the topmost bough of quackery that we have attacked, in the physiological section of the Royal Society. There is not a man in the profession who is not interested in the honour of physiological science. We have entertained the profound conviction, that if all faith should be lost in the distribution of honours and rewards for the cultivation of physiology in this country,—the peculiar and illustrious home of physiology,—incalculable mischief would follow. In this belief we have laboured, and we are content about the ultimate result. By a reference to the requisitionists, it will be seen that they include some of the most distinguished in the profession, and they are a guarantee, we trust, of the manner in which the subject of the requisition will be pursued. We congratulate Dr. Lee on the present aspect of affairs. Great credit is due to every gentleman who has signed it; and especial praise belongs to Mr. Wharton Jones, as the active worker in the matter; for it requires no little moral courage to come forward even in a just cause in such an arena.

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Some hundreds of operations without pain have been performed in America. Capital and minor surgical operations have also been performed in this country, at University College Hospital, King's College Hospital, Guy's Hospital, St. George's Hospital, the Westminster Hospital, Addenbrooke's Hospital, Cambridge, Richmond Hospital, Dublin, the Bristol General Hospital, Birmingham, and Wolverhampton, and by many individuals in private practice, and the operations are increasing in number daily, so that there can be no reasonable doubt of the reality of the new mode of producing temporary insensibility to pain. Medical men have always been seeking for this priceless treasure to surgery—the greatest members of our profession, in ancient and modern times, have sought, and hitherto sought in vain, for any practicable and safe method of conquering the horrors of the operating-room. Up to this time there were no means of alleviation, except the administration of narcotics and intoxicating drinks, the compression of the nerves, celerity in operating, and the division of the nerves at the first stroke of the knife. It at once stands confessed, that the inhalation of sulphuric ether vapour for a few minutes, which is found to produce a transient but total suspension of sensation, without any ill results, is vastly superior to all measures previously devised for this purpose.

As to the possibility of fallacy. There can be no doubt that the most terrible operations are much less painful, in reality, than they are imagined to be; that, in fact, the emotion of fear supplies a great part of the pain suffered under the operating-knife. Hence men and women with strong power of will have often had the most formidable operations performed upon them without a murmur. In such cases, it is not merely the heroic endurance of pain, but the emotion of fear being absent, less pain is actually felt. With timid people, an assurance, or perfect faith, that no pain would be felt, would have much the same effect; but in the case of the operations upon etherized persons, they have been too numerous, and the effects have been too uniform, to admit of any valid doubt respecting the reality of our acquisition, in the inhalation of sulphuric ether vapour, of a new anodyne of great and remarkable power.

The respiration of gases and vapours is by no means a new idea. At the end of the last century, it is well known that what was called pneumatic medicine, or the treatment of disease by the inhalation of gases and vapours, attracted great attention. Beddoes, James Watt, and Humphry Davy, devoted themselves to the matter with the utmost enthusiasm: it was in the pneumatic institution founded by Dr. Beddoes, at Bristol, that Davy laid the foundation of his subsequent fame. Again and again the young chemist risked his life, and on some occasions was barely rescued from death, in his reckless inhalation of gases which we now know to be poisonous. Davy's investigation of the gases led to some of the most brilliant discoveries in modern chemistry, and gave the world the safety-lamp as a preservative against the inflammable gases, but it fell short of the present acquisition. Since the time of Davy and Beddoes, the inhalation of vapours and gases has been little practised, except by empirics. Thus it has frequently happened in science: when a few eminent men have, with a kind of æstrum, given their attention, at a particular time, to special subjects, they come to be neglected for awhile, from the apparent hopelessness of making out anything fresh, or of finding a harvest in fields newly reaped.

An eminent philosopher gave it as an axiom—"Always examine what others reject as worthless;" and it has certainly been in what seems the most inconsiderable sources, that the greatest discoveries have been made. Galileo made his great discovery of the uses of the pendulum by watching the swaying of a chandelier; Columbus saw the new world in the floating of a sea-weed; Newton drew some of his splendid discoveries in optics from a soap-bubble; Bell's discovery glanced into his mind from a diagram. But simple as all important discoveries seem in their elements, and when they are known, it is undoubtedly one of the highest qualities of the human mind, to strike out from the observation of common things latent truths never before discerned, and to perceive uses and applications in things previously trifling or hurtful. And though this quality of the mind may be exercised for the meanest or the noblest ends, there being a kind of chance or fortune in the results, the world has always measured the fame and reward of such achievements by their utility to the human race. The discovery of Dr. Morton, the hitherto unknown dentist of Boston,—more striking to the general than to the scientific mind,—will, undoubtedly, be placed high among the blessings of human knowledge and discovery. Sulphuric ether has long been used as an anti-hysterical remedy of ordinary power; the inhalation of the weak vapour of ether was known as a toy, and sometimes used by chemical youths for mere frolic; and it was known also, in a concentrated state, as one of the

narcotic poisons. By a new and happy application and generalization, this drug, or toy, or poison, has been invested with fresh powers, which almost realize the fabled Lethe. From being one of the playthings of knowledge, it has been metamorphosed to one of its greatest triumphs; it has been, at one leap, transferred from the pages of toxicology to the latest, and almost the fairest, page of the healing art. That its discoverer should be an American is a high honour to our Transatlantic brethren; next to the discovery of FRANKLIN, it is the second and greatest contribution of the New World to science, and it is the first great addition to the medical art.

There can be no doubt of its peculiar applicability to surgery. Some have thought of its extension to medicine, and tetanus and hydrophobia have been mentioned as diseases likely to be benefited by its use. Any such trials will assuredly end in disappointment; these diseases being diseases of motion, not of sensation, and remaining with an intensity as perfect during insensibility as in complete consciousness. It may possibly be used hereafter in some cases of operative midwifery; but here it would have to be tried with the utmost care and caution, owing to the tendency to convulsions belonging to the puerperal state. Etherization, as far as we yet understand it, simply obviates pain. In all operations, pain is one, and the principal, and perhaps the only, source of *shock* to the system. We say, perhaps, because it is possible that shock may affect the spinal and ganglionic systems after the influence of the cerebrum has been entirely withdrawn. This is a point which must be made out: if it is found that operations produce some amount of *shock*, even when sensation is withdrawn, it will then come to be an important question, whether an operation performed with great rapidity produces a lesser or greater shock than one performed with some deliberation. It is by no means impossible but that it may prove that a sudden operation—a sudden shock—performed even during a state of insensibility, produces more injury than a less hasty one. It must be confessed that this question has been in some measure lost sight of, and that celerity has been the prime and great object with operative surgeons. We have said, that in surgical operations the great object is to escape the pain; but in some diseases and states of the economy, the presence of pain may produce beneficial results; the existence of physical pain may excite some physiological action beneficial to the patient. We may take an instance of this from parturition. Where there is danger of laceration, the pain excites the patient to cry out, and when the cry opens the glottis and emits the air of the chest, the thorax is no longer a fixed point for the muscular actions, so that a sudden removal of the pressure, threatening laceration, occurs. This instance is sufficient to show that even pain is not in all cases an unmitigated curse.

The insensibility produced by etherization appears to be of a peculiar kind, and to vary considerably in different individuals. In some cases, there is perfect insensibility to pain, and entire loss of consciousness; in others, the operation is felt, and the patient is aware of the different steps of the proceeding, but the pain is extremely slight, merely a sensation of scratching; while some describe the etherized condition as one of partial consciousness of the most exhilarating and agreeable kind; and a few describe their sensations as almost similar to those produced by the inhalation of the nitrous oxide gas; and there are cases in which it appears to act as a violent stimulant, or else it does not act at all. The form of insensibility will have to be examined hereafter by therapeutists, and the etherous inhalation will take its proper place amongst anodyne or narcotic remedies. Probably, the variations observed in different persons may depend, in some measure, on the amount of etherous vapour inhaled, rather than on differences of constitution, just as opium or alcohol may be made to act as exhilarants, or as causes of profound coma. In its effects, it is more comparable to opium or alcohol than other medicines; as regards the celerity and short duration of its effects, it strikingly resembles the laughing gas. Its great feature—that which commends it as an alleviator of pain in operations—is the rapidity with which a great degree of insensibility may be produced, and the celerity with which the coma, or unconsciousness, disappears, leaving no mischievous traces of its presence behind. As a measure of insensibility to pain, we must be entirely guided by the credibility of the patient, and his own subsequent account of the matter: some have argued pain from the presence of twitchings of the limbs and features during operations; others, from noises and cries uttered by the patient. It is, however, strictly physiological to believe that contortions of the face and limbs may take place during operations, as purely reflex acts, without any volition or emotion of pain. There may even be a cry, apparently of pain, without consciousness, in the same way that epileptics frequently cry out before falling into convulsion, without any subsequent recollection whatever of pain or fear.

A patent has been taken out for the discovery, the American patent standing in the names of Dr. C. F. JACKSON, of Boston, one of the most celebrated physicians in the United States, and Dr. MORTON, the discoverer. This question of patent is a stain upon the whole matter. We trust it will speedily be relinquished; and we are assured, that for the patentees to attempt to maintain it by law would be most preposterous, and impossible. If it should realize all the present anticipations of temperate and calm-judging men, the thing is far too noble to be clogged with a mere commercial transaction. Not that Dr. MORTON should pass unrewarded; he deserves, if his discovery stand the test of time, the gratitude and reward of every civilized people and government upon the face of the earth: he will have, we should hope, too strong a claim on their spontaneous gratitude, to need to resort to compulsory reward. How much more imperative would his claim be than the demands of those who have merely invented some new engine of destruction!

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LAST week we printed the Memorial of the College of Physicians, because it exhibits the element of reform which the College is anxious to contribute. It may be considered as the fruits which the discussions of the present generation have produced in this institution, and it deserves attention, as it contains views which have been matured during the correspondence of the College with the governments of Lord MELBOURNE, Sir ROBERT PEEL, and Lord JOHN RUSSELL. We need not now speak of the ill grace with which the College imbibed the idea of reform in the first instance, but rather take the present intentions to which the College stands committed.

First, then, if a registration existed for the whole profession, we should cordially approve of the election of Fellows by examination, instead of their selection as hitherto prac-

tised. We approve of the admission into the College of "all graduates of British universities:" there is, it is true, a qualification, by the addition of the words, "of a certain standing," but we presume the concession to be a *bonâ fide* concession on the part of the College. We applaud the desire of the College to possess power "to expel unworthy members," and we could point to some who might very properly be made the subjects of such discipline. We give our hearty sanction to the doctrine always propounded in the pages of THE LANCET, and now adopted by the College—"*That in a practical profession like that of medicine, it is always right that those who, by superior talents and industry, have raised themselves in public estimation, should have the power of rising from a lower even to the highest rank of the profession.*" This is a premiss to the wish of the College to possess the power of granting the legal title of doctor to persons not graduates of any university, but having attained the age of forty years, and being willing to submit to the examinations of the College. If carried out in a right spirit, this would be a real boon to general practitioners; it would tend to place the highest prizes of the profession within the reach of all. So much, then, we can heartily say *for* the Memorial of the College of Physicians.

But, unfortunately, the medal has an obverse side; the picture, a background. The College plumes itself upon having "extended and greatly improved the examinations of those whom it licenses to practise as physicians." The authorities must move still further in the same direction. We grant them raised from what they formerly were; but even now they are considerably below the examinations required for the degree of M.D. of the University of London. While this is the case,—while there is a body in the metropolis whose medical degrees confer a higher scientific status than the licence of the College, the College must content itself with the second place. This is a source of collegiate weakness which it should not fail to remedy. Nothing, either, is said in the memorial about equalizing the examinations for the licence and the extra-licence. It is most absurd that the Censors should require their examinations for the licence to practise in London, while the Elects only require one examination for the licence to practise in the country. Both examinations should be improved and placed on a perfect level, or rather, they should be merged into one; there ought no longer to be the tacit admission, that human life in the country is of less worth than the same human life in towns. Then, again, the machinery of the examinations requires a thorough change. The examination for the licence is conducted by the censors; the censors should therefore be a body to whom the whole profession might look with the greatest respect. It should be within certain limits, numerous, and it should contain men distinguished in the science and practice of medicine. As it is, the examining board is the same now the profession numbers its thousands as when qualified men could be reckoned by tens. New sciences have sprung up either within medicine, or as collateral supports, with which the primitive examining machinery of the College is not competent to deal. Look at the present censors; we have no wish to speak to their disparagement, but they do not constitute an efficient examining body for an institution of such pretensions as the College of Physicians. This is not the fault of the censors, but of the system. They claim to be the head and centre of the body of physicians in this country, and their examiners of candidates are, Drs. LEITH ROUPELL, ROBERT BENTLEY TODD, FREDERICK JOHN FARRE, and ROBERT NAIRNE! We repeat it, we mean no disparagement to these gentlemen. Such a state of things is hugely incongruous. It must be confessed that the machinery for testing the medical qualifications of candidates at the College of Physicians is even below that of the College of Surgeons or the Apothecaries' Society. We maintain, then, that this department of the College is one which imperatively requires to be remodelled, and should form a part of its reform.

At another part of the Memorial, the old cloven foot of the College peeps forth. It still cherishes its predilections for the old Universities. The classical halls of Oxford and Cambridge, with their medical students mingling at the rate of about one a year with the mass of collegians, have greater charms than the teeming hospitals, the anatomical museums, and the crowded lecture-rooms of London. Though they have doffed the wig and gown, and locked up the gold-headed cane in a corner, they still sigh for the groves of Isis and Cam. We wish, as they have ostensibly given up their exclusivism, they could have done it with a good grace. The College is forced to admit that education is not now limited to the two ancient Universities, and it proceeds to say,—

"Wherefore the College, although still retaining a conviction of the superior advantages to be derived from an education in those universities with which it had been so long connected, has nevertheless rescinded its exclusive by-laws."

There is nothing very dignified in this, if the College believe in the superiority of a classical over a medical education; for no man can take a truly *medical* degree at Oxford or Cambridge —the College is traitorous to truth and right to give in and surrender the honour of that which it believes to be "superior." If a degree from the Universities of Oxford or Cambridge really entitle its possessor to a higher medical rank than the owner of a degree of the University of London, let the higher rank be accorded. But there is no such superior qualification; and we cannot but think there is a certain meanness in a mode of acting which, while it proclaims the superiority of an article, relinquishes all its advantages.

Such are some of the points on which we should decide *against* the College Memorial.

## PROCEEDINGS OF THE ROYAL SOCIETY.

*January 7th*, 1847.

SIR GEORGE RENNIE, Vice-President, in the Chair.

AT the evening meeting of the Society, after the transaction of other business, Mr. WHARTON JONES addressed the meeting as follows:—

"Mr. Vice-President,—I have a requisition for a Special General Meeting of the Society to present, but as the proceeding is one of rather unusual occurrence, it would be well if you, Sir, would first direct the statutes on the subject to be read."

The Vice-President then rose, and read as follows from the statute book, chap. xii. Of special general meetings of the society.

"1. The president or council may, at any time, call a special general meeting of the Society, when it may appear to them to be necessary.

"2. Any six fellows may, by notice in writing, signed by them, and delivered to one of the secretaries at an ordinary meeting of the Society, require a special general meeting of the Society to be convened for the purpose of considering and determining on the matters specified in such requisition.

"3. The council shall, within one week after such requisition shall have been so delivered, appoint a day for a special general meeting accordingly, and give one week's notice thereof to each fellow residing within the limits of the three-penny post, stating in the notice the object of the meeting. At such meeting, no business shall be brought forward, except what shall have been so notified."

These statutes having been read by the President, Mr. Wharton Jones continued:—

The special general meeting of the Society, the requisition for which, drawn up in conformity with these statutes, I am about to place in the hands of the secretary, is for the purpose of considering and determining on the legality of the circumstances under which the award of the Royal Medal in Physiology for 1845 was first recommended by the Physiological Committee, and under which it was actually made by the President and Council.

COPY OF THE REQUISITION.

We the undersigned, Fellows of the Royal Society of London for improving natural knowledge, do hereby, in conformity with the Statute, chap. xii. § 2, require a Special General Meeting of the Society to be convened, for the purpose of considering and determining on the legality of the circumstances under which the award of the Royal Medal in Physiology for 1845 was first recommended by the Physiological Committee, and under which it was actually made by the President and Council.

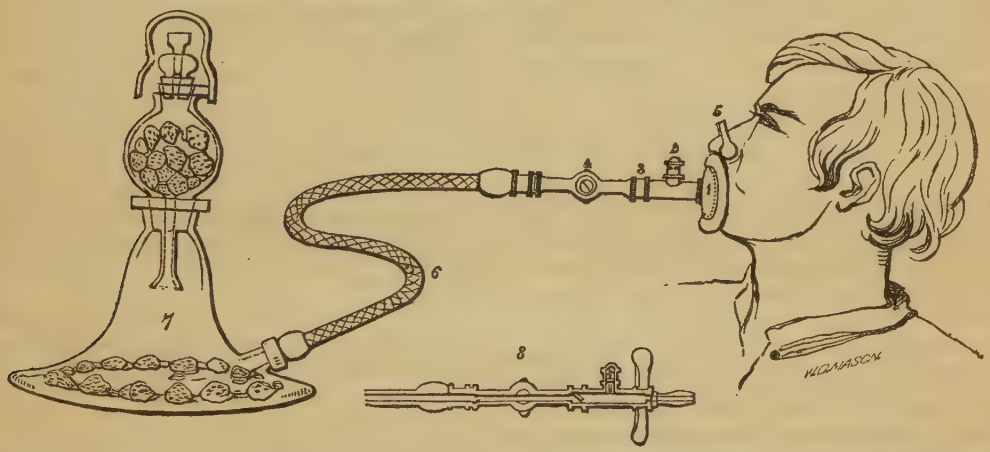
| | |
|---|---|
| T. Wharton Jones. | A. F. Chambers. |
| James Copland. | John Webster. |
| Robert Lee. | James Clark. |
| Richard Bright. | Marshall Hall. |
| James R. Martin. | Robert E. Grant. |

George Gulliver.

Jan. 7th, 1847.

## MR. HOOPER'S ETHER INHALER.

*Constructed according to Dr. Boott and Mr. Robinson's Instructions.*




Five requisites are necessary to complete success and to avoid danger—viz.:—

First.—The air taken into the lungs should be exclusively that which has passed through the vessel of ether, and thus saturated with its vapour.

Second.—The pad to be held over the mouth, to prevent any breathing of free atmosphere.

Third.—The expired air to escape freely.

Fourth.—The stop-cock may be used to regulate the volume of the vapour of the ether at the commencement of the inhalation, and also to cut off the access of vapour to the mouth in cases of protracted operations, when it may be desirable to give the patient (in the state of insensibility) atmospheric air; and again to open the stop-cock and let him breathe the vapour—thus lightening and deepening the degree of the sopor.

Fifth.—The nasal spring is for compressing the nostrils during exhalation, and is to be taken off when the stop-cock is closed for the breathing of atmospheric air, and again to be replaced when the vapour is inhaled.

The following explanation of the diagram will distinctly show, that in the construction of this apparatus these important requisites have been effected:—

1. Pad for the mouth, which is held on by the operator or his attendant.
2. Horizontal valve for the escape of expired air, with a cap to be removed during inhalation.
3. Vertical flap valve.
4. Stop-cock.
5. Nasal spring.
6. Elastic tube.
7. Glass vessels, stoppered and capped, containing small pieces of sponge saturated with ether.
8. Sectional view of the pad, showing the mouth-piece and pad.

A strong patient may require the larger glass stopper to be removed, but in ordinary cases the small stopper will be found sufficient.

The full effect of the vapour is generally produced in two or three minutes. Care should be taken that the mouth-piece during inhalation is perfectly horizontal, keeping the stop-cock to the right hand, and the capped valve perpendicular.

# Operations Without Pain.

## KING'S COLLEGE HOSPITAL.

OPERATIONS BY MR. FERGUSSON, AFTER THE INHALATION OF THE VAPOUR OF ETHER.

Case 1.—M. G——, aged forty-three, a stout, healthy, able-bodied man, has had phymosis for the last eleven years, in consequence of contraction of the orifice of the prepuce, resulting from a chancre. Has chronic discharge from the part, and been advised to undergo an operation, to which, however, he is very averse, for fear of pain. Being told that the operation might be done without giving him any pain, he consented to its performance. On Dec. 31st, 1846, at the usual hour for operations, he was laid on the operating table in the theatre and desired to breathe by means of an apparatus constructed by Mr. Hooper, Chemist, of Pall-mall, Mr. Robinson, who had devised it, superintending the process. In about three minutes he became quite insensible, and the muscles, which had been in energetic movements during the inhalation, became quite relaxed. The prepuce was then slit open in front, with a bistoury, to the extent of three quarters of an inch; and on the skin being drawn upwards, the mucous membrane was cut with scissors about half an inch further. The skin and mucous membrane were then fastened to each other by four stitches of interrupted suture; and so the operation was finished in less than a couple of minutes. Before the last stitch was introduced, the patient awoke, but showed no indication of pain when the needle was applied. On being

asked if he was aware of what had happened whilst he was asleep, he said that he was not conscious of anything having occurred, and expressed astonishment when told that the operation had been performed. He seemed confused for a minute, but then got up and walked out of the apartment.

Case 2.—E. H——, aged twenty-six, a timid, delicate-looking woman, admitted Dec. 31, 1846. Has a large abscess in the left buttock, pointing near the anus. Has suffered great pain and restlessness for the last four days and nights, and now feels weak and exhausted. The abscess is surrounded by great induration, and there is an erysipelatous blush on the skin. The slightest touch causes great agony, and she will willingly submit to any plan of relief. The same apparatus as was used in the last case was had recourse to, and after breathing about a minute and a half she became insensible. The abscess was then opened by an incision an inch in length, and the condition of the interior of the rectum was also examined, while the matter was escaping from the wound. More than an ounce of fœtid pus was discharged, and all manipulation was over before the patient awoke. Was not aware that anything particular had been done. Said she felt a pain like that of a leech-bite.

Case 3.—E. H——, (same patient,) 9th January, 1847. Progress of the case been favourable since abscess was opened. Was made to inhale to-day, as formerly; was longer in becoming affected. The operation for fistula in ano was then performed. The sinus passed close upon the rectum, and its upper extremity in this direction was about an inch from the anus. There was not any opening into the gut. Besides laying open the sinus, a free incision was required through the skin so as to expose the interior of the abscess fully. It was remarked, before the knife was applied, that there was still some voluntary spasm in the muscles of the forearm, and during the operation the patient moaned a little, and seemed as if in pain; yet, when questioned afterwards, she declared that she had felt none, although she was aware of the movements of the instrument in the surgeon's hands.

Case 4.—M. S——, aged twenty-three. Laceration in perinæum during childbirth; has already had an operation performed, which has succeeded, though not entirely.

Jan. 5th, 1847.—Has to undergo another to-day, and having been told that it might be done without causing her any pain, was very desirous to have it so. After breathing the vapour for about a minute, she became restless and unwilling to continue it, declaring that she would rather submit to the pain she had formerly experienced. The use of the vapour was given up, and the operation was done in the usual manner. She afterwards stated that she was alarmed about the effects of the vapour, and dreaded being put into a stupor.

Case 5.—G. S——, aged thirty-two. Has a tight, permanent stricture in the bulbous portion of the urethra, for which he is undergoing the ordinary treatment with bougies; has always had considerable pain on the introduction of an instrument.

Dec. 31st, 1846.—To-day was put under the influence of the vapour of ether, and a catheter was introduced without difficulty. When the patient became conscious again, he declared that he had not felt anything whatever. When made aware that an operation similar to that with which he was familiar had been done, he expressed his astonishment and gratitude.

Case 6.—Jan. 9th, 1846.—To-day this patient again breathed the ether, which, however, had but a partial effect, although its use was longer continued than on the first occasion. A catheter was introduced, certainly with less pain than under ordinary circumstances, but the patient declared that he was quite aware of what was going forward.

Case 7.—E. E——, aged twenty-one, has a crop of warts on the glans and lining membrane of the prepuce; has been told that they may be speedily got rid of without pain.

Jan. 9th, 1847.—To-day breathed the vapour of ether, and within three minutes became insensible, when the warts were clipped off by means of scissors, without his consciousness. He was observed to writhe a little during the operation, and also to push his hand against the operator, as if to cause him to desist. On being questioned about this, he declared that he was not aware of having done so, and that it could not have given pain, as he had not felt any: he had been dreaming all the time, but what his dream was he would not tell.

## GUY'S HOSPITAL.

Jan. 12th.—Two patients were operated on to-day whilst under the influence of ether, inhaled: one, a case of lithotomy, by Mr. Morgan; the other, a case of strangulated inguinal hernia, by Mr. Key. There were present, Mr. Callaway, Mr. Cock, Mr. Hilton, and other officers of the hospital, in the densely-crowded theatre by students and professional men.

The subject of the stone case—a boy about fourteen years old—had, a few days before, been put under the influence of the ether very satisfactorily, for the purpose of avoiding the intense pain he had on a previous occasion suffered by the introduction of the sound. He was rendered quite insensible to the pain—indeed, had not felt the sounding. To-day, alarmed by the number of persons present, he for some time refused, when on the operation table, "to take his pipe," as he termed it; but ultimately, yielding to the solicitations of those about him, he inhaled, somewhat irregularly, from an apparatus, under the direction of Mr. Robinson, for about three or four minutes, when he became perfectly unconscious, breathing slowly, and the face much congested. During the persistence of that condition, Mr. Morgan began and completed the operation in about two minutes, without the slightest manifestation of pain by the patient. Vapour of ammonia and other stimulants were used as soon as the operation was finished. The patient was taken from the theatre in an insensible state. In a few minutes he recovered from insensibility, after being in his bed, but continued confused for some time. On being told that the operation was concluded, he did not believe it, as he had not felt anything; still persisting in his doubts, the stone was shown to him, yet he disbelieved, saying, "No, no, that wont do! that stone never comed from I, I know!"

The other patient, a young man, had a strangulated inguinal hernia, of three days' duration. The same inhaling apparatus was employed: ten or twelve minutes elapsed before the patient manifested complete stupor. The first incision was then made; there was an appearance of sensibility in his immediate struggles, but no other expression of it. The inhalation was continued, and the operation also, and in a minute, or thereabouts, all evidence of sensibility had vanished, nor was there the slightest return of it during the fifteen or twenty minutes required for the completion of the operation. This patient's face never presented the same interference, as did the boy's, with the respiratory function, for he breathed the ether more calmly, and had, altogether, much less appearance of distress. He required the aid of the ammonia and some wine for his recovery, and then gave the most positive assurance that he was not, nor had been, at all conscious of any pain; indeed, he had not felt anything of the operation.

## WESTMINSTER HOSPITAL.

### OPERATIONS UNDER THE INFLUENCE OF ETHER.

Jan. 11th.—A number of surgeons assembled this day in the operating theatre of the above hospital to witness certain operations performed by Mr. Hale Thomson on patients rendered previously insensible to pain by the inhalation of ether. The vapour was administered by Mr. Robinson, dentist, of Gower-street, to whom society is much indebted for the invention of an apparatus by which the ether may be employed with security and certainty. The first patient was a woman of middle age, suffering under condylomatous growths from the labia. After an inhalation of about four minutes, the patient was pronounced in a state fit for the operation. The morbid growths were then dexterously shaved away by Mr. Thomson, without any expression of pain on the part of the patient, and without any signs of suffering apparent on her countenance. The only indication of the nervous system being awake to the operation was the spasmodic action of the lower limbs, which took place at the moment of excision; but it was quite obvious that this was an excito-motory phenomenon, and had no connexion with sensation.

On the completion of the operation, some wine-and-water was given to the patient, who seemed awakening from a dream, and appeared for some minutes uncertain of her own identity, and of the reality of the new world which was opening gradually to her senses. Her manner was that of a delirious person communing with herself, and exhibited a strong manifestation of Dr. Wigan's theory of the duality of the mind. After sundry ejaculations of wonder and surprise, she turned her head on her pillow, and recognised one of the physicians as a "real man," and discovered, to her infinite delight, that she was still a denizen of earth, although her next exclamation, that she thought herself in a "beautiful heaven," exhibited little gratitude for her temporary transition to a celestial abode. Upon being told that she was to submit to an operation, she said she knew it, and was ready; and when informed that the operation was over, seemed unable to believe it. A little hysterical crying, the combined

result of apprehension, wonder, and delight, followed, and she was taken back to her bed. Before we left the hospital, we learnt that she was fast asleep.

The second patient, a young man, was operated on for phymosis. He was ready in about four minutes from the commencement of inhalation, and the operation produced no evidence of the presence of sensation. Indeed, in his case, there was an absence of the excito-motory movements exhibited by the female patient. Some little time elapsed before the ligatures were completed, and the last was passed after he had to all appearance recovered from the stupor caused by the operation. He evinced the return of sensation by an ejaculation of pain, but relapsed immediately into a forgetfulness of the operation, being more intent upon the "delightful dream" which he had just experienced than upon the dull realities around him. On being asked if he had suffered pain, he said that he had felt nothing; and upon being further interrogated as to his sensations, replied that he would answer the question to-morrow. Like the female patient, there was a little hysterical sobbing after the operation; apparently occasioned by the recollection of previous illness and suffering: so that, in point of fact, a surgical operation has now come to be a source of regret, as an enjoyment too quickly passed away.

The impression made by these operations on the minds of the gentlemen present, among whom we noticed, Mr. White, Mr. Guthrie, Mr. Ferguson, Mr. Erasmus Wilson, and Mr. Fisher, appeared to be one of perfect satisfaction, and Mr. Robinson was deservedly congratulated on the success of his mechanical contrivance for the administration of the vapour.

## ST. THOMAS'S HOSPITAL.

Jan. 9.—1. The ether was first inhaled by a patient, a strong man, of full habit, with disease of the hand, requiring operation. The inhalation was performed by means of Mr. Hooper's apparatus, as devised by Dr. Boott and Mr. Robinson, and perfect insensibility was produced. There were, however, so much coughing, turgidity of the face, quickened circulation, with dilatation of the pupils, threatening congestion of the brain and lungs, that it was not thought proper by Dr. Leeson and Mr. Mackmurdo to continue the inhalation, or to operate upon the patient.

2. A child, aged six years, inhaled the ether in the operating room, and became perfectly insensible for the space of two minutes and a half, during which the index finger of the right hand was taken off by Mr. Mackmurdo. No pain was felt during the operation, and even when the hand was held before him, the child would not believe that the finger had been removed.

## BRISTOL GENERAL HOSPITAL.

*To the Editor of* The Lancet.

Sir,—I find, from Dr. Fairbrother, that he has sent you a letter respecting the operation I performed on the 30th ult., whilst the patient was under the influence of ether. I suppose he has described the exhibition of the ether, and its results. The operation was the double, at the middle of the thigh. On Saturday last I removed a testicle; the ether was again tried with a common bladder and mouth-piece. Upon this occasion it was a failure; nothing passed from or into the bladder during the time the patient held it to his mouth. In the evening, there was so much general oozing, that I requested Mr. Mason, our house-surgeon, to remove the sutures, and keep the part open. Yesterday, having to apply the sutures, I determined upon trying the ether a second time with him; we then found, that the day previous it was most probable the inner end of the mouth-piece had been covered by the bladder. At this second trial, the man became quite insensible to pain; although, when talked to, he readily answered any question. I have used it once since with success, while dressing a boy's stump; this boy also replied to questions while asleep. To-day I removed the right leg of a woman, aged sixty-two; the operation the double flap, anterior and posterior. This time, Dr. Fairbrother used an apparatus constructed, under the direction of Dr. Boott, by Mr. Hooper and Mr. Robinson. The time occupied before the ether had taken effect was much longer than upon the previous occasions; when it was produced, it was most perfect. After the leg was removed, and the stump completely dressed, we could not convince the old lady that she had lost her leg, because she had not felt the slightest pain. The gentlemen present, to the number of about twenty-five, were perfectly astonished, not only at the removal of the limb without any pain, but also at her disbelief that she had lost her leg, even after she had been removed from the table, and was placed upon a bed to be carried to her ward. Neither of these patients have felt any ill consequences arising from the ether vapour, either during the time of the inhalation of the vapour, or since.—I remain, Sir, yours respectfully,

St. James's-sq. Bristol,
Jan. 1847.

J. G. Lansdown.,
Surgeon to the Bristol General Hospital

*To the Editor of* The Lancet.

Sir,—Yesterday, a second operation was performed, at the Bristol General Hospital, upon a female aged sixty-three years. Her leg was amputated by Mr. J. G. Lansdown, the operating-surgeon, and completed in less than five minutes.

In this case, I administered the ether, by means of Robinson's apparatus, with the most complete success. It took about eight or ten minutes to procure a state of insensibility. During the time she was perfectly quiet; and on being interrogated afterwards, said she had not suffered any pain; nor could she believe her leg was removed, until the nurse had turned down the bed-clothes, and showed her she had undergone the operation. During the operation, alternately brandy was given with the inhalation of the ether. The patient, though aged, is going on well.—I am, Sir, your obedient servant,

Park-street, Bristol,
Jan. 1847.

A. Fairbrother, M.D.,
Senior Physician to the Bristol General Hospital.

## AMPUTATION OF THE THIGH.

*To the Editor of* The Lancet.

Sir,—As the medical profession at this moment must feel deeply interested in the late discovery made by our Transatlantic friends, of the inhalation of ether producing that state of narcotism which renders persons insensible to the pain arising from surgical operations, I offer no apology for sending you the following brief account of an experiment, as to its effect, which came under my own observation yesterday. My partner, Mr. Coleman, having occasion to perform amputation of the thigh upon a young woman of a highly nervous temperament, and who dreaded the pain of the operation exceedingly, we deemed it a favourable opportunity to test the efficacy of this new discovery. By the kind assistance of Mr. Julion, a talented young chemist, we prepared the necessary apparatus to conduct the experiment. The patient being brought to the edge of the bed, the tourniquet applied, and everything prepared to commence amputation, she began to inhale the ether, which produced a good deal of coughing, and it was with some difficulty we prevailed upon her to persevere, which she at length did,—not, however, in a very satisfactory manner, drawing only short inspirations, and then removing the tube from her mouth. After using it for the space of three or four minutes, her teeth became fixed, her eyes closed, and she sank back into the arms of an attendant, as if in a state of complete intoxication. Mr. Coleman now seized this favourable moment, and very adroitly and expeditiously performed the flap operation. The patient struggled with her hands, and cried out for her mother, (who had been dead some years.) The sound limb was not held, nor did she move it, but frequently said "she would not have her leg cut off then;" indeed, it was quite evident she was not aware of the operation having been performed; for after the stump was dressed, and she was comfortably placed in bed, she said "it was not off, for her foot was asleep," and begged of some of us to rub it. On inquiring of her, some hours after the operation, what she had felt, she said "she thought she had been in a dream, and that we had hurt her leg, to see if she could bear the operation, which was to be performed the next day." She had no recollection of any cutting pain, nor could she tell the kind of pain she had suffered, but thought she remembered "hearing the bone sawed."

The narcotic effect of the ether soon subsided; for in putting in some sutures, to bring the edges of the stump together, the passing of the needle through the skin produced cries of the most agonizing pain, though her mind was not sufficiently restored to consciousness to be aware of what was going on.

The result of this trial I cannot but think highly encouraging, and fully believe, that if the inhalation had been more perfectly accomplished, the state of insensibility would have been most complete. So satisfied am I that we now possess a means of narcotizing pain, that I shall not hesitate to adopt it in any case where a painful surgical operation has to be undergone, taking care, in future, to render my patient

thoroughly conversant with the mechanical process of inhalation, previously to the use of the ether.—I remain, Sir, your obedient servant, GEORGE EDWARDS.

Wolverhampton, Jan. 1847.

P.S. Jan. 3rd.—Our patient is going on very favourably, and still persists she had a dream during the operation.

## OPERATIONS ON THE EYE.

By F. H. BRETT, M.D., F.R.C.S.E., &c.

No. 1 was the case of a female, aged sixty-five. The apparatus of Mr. Hooper, the talented chemist, of Pall Mall, was used by Dr. Brett, late Superintendent of the Government Ophthalmic Hospital, Calcutta, and now surgeon of the Western Institution for Diseases of the Eye, in the presence of several gentlemen. Some tact and perseverance are requisite, to render the patient perfectly insensible. This occurred in about four minutes. The operation was performed and the cataract extracted in about a minute. The patient remained insensible for two minutes longer, then revived: knew nothing of what had happened. Was your eye cut? No. Had you any pain? No. Was anything done to your eye? Not that I know of.

No. 2 was a case of squint, in a boy, aged twelve. He became insensible in two or three minutes; the operation was performed in less than a minute. The patient, on reviving, was quite unconscious of what had taken place.

No. 3 was a case of amaurosis and ptosis, (dropping of the lid.) The former affection had yielded to medical treatment under Dr. Brett, but though sight was restored, the dropping of the lid, or palsy of the muscle which raised the lid, remained, for which Dr. Brett proposed removing a large portion of the skin, with some fibres of the subjacent orbicular muscle. The patient remained in a state of utter insensibility during the incision of the skin and the application of three ligatures to unite the divided edges. On recovering, "she had felt nothing," and was not aware that the operation had been performed. On presenting her a mirror, she perceived that the lid was now open as that of the opposite eye.

As these are the first operations performed on the eye since the introduction of this valuable discovery, they call for some special notice as to the great tranquillity of the organ—a most important object, especially in so delicate an operation as that of extracting the cataract. Reasoning *à priori*, it might have been presumed that the eyeball would have turned upwards, so as to embarrass the operator, but this was not the case.

Dr. Brett is not aware that Mr. Hooper's apparatus failed in any instance to produce the desired effect.

Curzon-street, May-fair.

## OPERATIONS ON THE TEETH.

By Mr. CLENDON.

*To the Editor of* THE LANCET.

SIR,—Since the date of my last communication, which you did me the favour to publish, I have tried my new inhaler in half a dozen cases. In four of them, the results were, by all present, considered perfectly satisfactory: stupefaction was induced—difficult teeth extracted—and stumps, which under ordinary circumstances were exquisitely sensitive to the touch, prized out of their sockets by the elevator,—without the parties operated on affording any evidence of pain, or consciousness of their removal. As they were performed at the hospital, of course spectators were not wanting. Presenting the usual features of cases heretofore published as successful, I will not trouble you with the details; the two unsuccessful cases, the particulars of which I subjoin, I think will prove more interesting and more instructive to your readers.

A tall, athletic Irishman, a stone-mason, after inhaling the vapour for the space of two or three minutes, his countenance became suffused with an extreme wildness in the eye—he started up with a determined effort—declared I had lost my chance—clenched his fist, and seemed so bent on doing me an injury, that I seized the earliest opportunity of beating a retreat. The paroxysm, however, soon passed off, and he then quietly allowed the tooth to be removed.

H——, porter at the Westminster Hospital School, a little man, of spare habit, inhaled the vapour most vigorously for the space of a quarter of an hour; the expiratory valve acted freely, and every room in the house was filled with the vapour. Still, he retained his consciousness. Thinking there might be some error in the principle of my apparatus, Mr. Liston, who was present, suggested that the inhaler Mr. Squires had supplied him with should be tried, to which I assented. The tube was placed in his mouth, fresh ether poured on the sponge, and from this he inhaled diligently for another quarter of an hour, but without effecting the desired object. He subsequently remarked that "he felt completely blown out with ether; he did once think he was going, but it passed away. When out in company his friends had sometimes tried to make him drunk, but they could not succeed; he never felt the worse for what he took." Yet, in general, I have reason to believe he is an abstemious and a steady man. A day or two after, he told me "he should not like the experiment to be repeated; he felt queer all the next day; that it had affected his memory." He explained this by saying he was continually looking for an object which he had in his hand all the time; going to fetch an article, and coming back without it; and in the evening, after calling to visit a friend, he went back to the house, thinking he had left his clogs, which were all the time on his feet. From this dreamy state he recovered the next day; and I have reason to hope I shall not be held responsible for any dereliction of duty of which he may be guilty. Wine, spirits, tobacco, opium, &c., produce various, and sometimes opposite, effects on different individuals. We cannot, therefore, be surprised that intoxicating vapour should be attended with similar results. Still, from recent observation, I believe that the exhilarating and exciting effects of ether—producing a condition so unfavourable for operations—may be effectually counteracted. There are other improvements in the mode of its exhibition which occur to me; but of these I will not speak until I can do so more confidently.—I am, Sir, your obedient servant, J. CHITTY CLENDON.

Conduit-street, Jan. 1847.

## DR. MORTON'S & DR. C. F. JACKSON'S PATENT FOR "THE LETHEON."

*To the Editor of* THE LANCET.

SIR,—You have published, in THE LANCET of the 9th inst., a communication from a physician, reinforced by an opinion upon a supposed case, given by one of the Queen's Counsel, tending to diminish the value of the patent for the Letheon, which I represent; you will doubtless, therefore, do me the favour, or rather, the justice, to give equal publicity, in your next number, to the following short answer to that communication.—I am, Sir, your obedient servant,

Duke-street, St. James's, Jan. 1847. JAMES A. DORR.

*Reply to "the opinion" of Queen's Counsel, published in* THE LANCET *of Jan. 9th.*

1st. No counsel can give a client valuable, *or even safe*, advice, as to the validity of a patent, and danger of infringement, who has not read the specification, and does not know the claim of the patent.

The patent for the Letheon has been duly sealed; but the specification is not yet made public.

2nd. So far as the general principles of law, enunciated in the opinion, go, they confirm the views of the patentees.

JAMES A. DORR.

# Correspondence.

## FORGED GERMAN DIPLOMAS.

*To the Editor of* THE LANCET.

SIR,—I now endeavour to redeem my promise of "unfolding a tale:" business has been such with me, that I could not possibly find time before to do so,—I am (in confidence) yours truly, W. T——, L.S.A.,

London, Jan. 1847. *alias* "Romeo's Apothecary."

In May, 1843, curiosity induced me to reply to an advertise- in the *Times* similar to Bond's, which I sent you the other day; and the following is a copy of a letter I received in reply:—

(COPY.)

"SIR,—In answer to your letter, I beg leave to state that the expense of obtaining you the degree of doctor of medicine will be £40. It is procured through the first continental banking-house in the City, and your diploma will be signed by the celebrated Liebig. I am constantly in the habit of obtaining degrees for regularly educated medical men, and I shall be happy to show you a duplicate, if you will favour me with a call, any time after three o'clock.—I am, Sir, your obedient servant, JOHN M. GALBRAITH, M.R.C.S.L."

Parliament-street, May, 1843.

I thought this to be regular humbug, and took no notice of the fellow, or his offer to show me the duplicate, which I

rather regret—but no matter. In the commencement of your last volume,—I mean the one but now finished,—I saw, in a leading article of yours, the assertion, which you have since frequently repeated, that German diplomas were marketable. I thought it remarkable, and wrote a letter to Professor Liebig, asking him whether Galbraith (a copy of whose letter I enclosed) was entitled to do as he stated. The following is the Professor's reply, in German, as you see:—

(COPY.)

"Giessen, 4 Nov. 1846.

"WERTHER HERR,—Ich beeile mich Sie zu unterrichten, dass ich den Herrn John M. Galbraith nicht kenne sind ihn für einen Betrüger halte. Ich bin nicht Mitglied der hiesigen medicinischen Fakultät, und bin deshalb niemals in der Lage, ein Diplom derselben zu signiren. Die hiesige medicinische Fakultät verkauft keine Doctordiplome, und ertheilt die Würde eines Doctors der Medicin nur denen, welche sich persönlich in Giessen dem vorgeschriebenen Examen unterworfen und genügende Kenntnisse bethätigt haben.

"Sie würden mich verbinden, wenn Sie die Güte haben wollten, mir eine Abschrift des Diploms zu senden, welches Herr John M. Galbraith zu zeigen sich erbietet. Wir haben Grund zu glauben, dass unsere Diplome in England gefälscht werden, und es ist wichtig die Quelle zu entdecken, von der diese falschen Diplome ausgehen.

"Ich verbleibe, Thnen aufrichtig ergeben,

"DR. JUSTUS LIEBIG."

My knowledge of German is but limited; but what little I know I use, by translating as follows:—

(TRANSLATION.)

"Giessen, Nov. 4, 1846.

"DEAR SIR,—I hasten to inform you that I have no knowledge of Mr. John M. Galbraith, whom I consider to be an impostor. I am not a member of the Faculty of Medicine at this place, and am, consequently, *never in the position to sign a diploma.*

"The Medical Faculty here do not sell diplomas; they confer the degree of Doctor of Medicine on those only who have *personally* undergone, in Giessen, the regular examination, and proved themselves to have a satisfactory amount of knowledge.

"You would much oblige me by forwarding hither a copy of the diploma which Mr. John M. Galbraith offers to show. We have reason to believe that our diplomas are forged in England, and it is desirable to know the source whence *these spurious diplomas have emanated.*—I am, Sir, &c.,

"JUSTUS LIEBIG.

"——, Esq."

When I saw the Bond advertisement the other day, I tried very hard to draw the fox from his hole; but did not take the precaution to write by proxy, so that I did not get a reply. I feel sure, from the form of the advertisement, it emanated from the same party. I wish you to make any use you please of the above without committing me in any way; and if you publish, please preserve my incognito. W. T.

P.S.—Galbraith is really a member of the College.

## East India Medical Intelligence.

APPOINTMENTS, &c.—BENGAL AND AGRA PRESIDENCY.—Assist.-surg. J. G. Kemp, M.D., is doing duty at Dum-Dum.—Surg. H. Sill is employed in examining cotton growing in Jullundur Doab.—Assist.-surgs. R. D. D. Allan, M.D., ordered to do duty with 8th N. I. at Phillour, during employ. of Sill; St. George W. Tucker, M.D., app. to med. charge of remount depôt.—Veterinary-surg. J. Ford allowed to visit presidency prepar. to applying for a furlough to Europe on private affairs.—Surgs.: J. Smyth, M.D., has leave to visit presidency preparatory to applying for permission to retire from service; W. S. Dicken leave to visit presidency on private affairs; H. J. Thornton removed to 4th N. I.; J. Davenport, M.D., posted to 48th at Jaunpore; J. Smyth, M.D., removed to 63rd N. I.; C. Macintyre posted to 61st N.I., ordered to Barrackpore.—Assist.-surgs.: J. S. C. Symons ordered to proceed on duty to Punjaub; R. J. Atkinson and J. M. Hay, M.D., have passed colloq. exam.—Surgs.: J. Barber leave to Calcutta till Feb. next, prepar. to applying for furlough to Europe on med. cert.; J. Barber removed to 51st reg.; W. S. Dicken removed to 14th reg.—Assist.-surgs.: J. M. Hay, M.D., accompanies lieut.-governor North-West. Provinces during tour; C. Palmer app. to civil station of Hooghly.—Surg. B. W. Macleod, M.D., removed to 69th N.I.—Assist.-surgs.: G. B. Seely removed to 36th N.I.; C. M. Smith has passed colloq. exam.—Surg. A. Colquhoun removed from 33rd N.I. to 3rd L.C. ord. to Jullinder Doab.—Assist.-surg. D. Scott, M.D., to do duty in Sirhind div.—Surg. M. Richardson, M.D., to visit Agra on private affairs, with leave, till Jan.—Assist.-surg. C. Hathway, M.D., posted to 12th reg. N. I.

MADRAS PRESIDENCY.—Assist.-surgs.: J. FitzPatrick to the 1st Light Cav.; A. J. Scott, M.D., to 6th Light Cav.; G. Smith, M.D., is on leave at presidency till end of January; E. Smith to be surg., *v.* McLeod, dec.—Surgs.: D. Falconer to act as garrison-surg. at Bellary, and removed from 7th Light Cav. to 37th Grenadiers; W. Poole removed to 7th Light Cav.; W. K. Hay removed to 4th N. I.; W. Butler removed to horse brigade; W. K. Hay to be superintending surg. of Mysore Div., *v.* Boyd; W. G. Maxwell, M.D., removed from 2nd N.I. to 3rd Light Cav.; E. Smith posted to 30th N.I.—Assist.-surg. W. Rawes to do duty with Hyderabad subsidiary force.—Surgs.: T. L. Geddes from 2nd Eur. reg. to 44th N. I.; W. Burnell from 44th N.I. to 2nd Eur. reg. Light Inf.—Assist.-surg. W. J. Van Somerew, M.D., to do duty with H.M.'s 15th Hussars.—Surg. E. Finnerty, M.D., has leave to remain at Madras prepar. to resigning service.—Assist.-surgs. W. W. Hude and A. Wilkinson passed a colloquial exam.—Surg. G. O. Cumming, M.D., removed from 12th to 2nd reg. N.I.—Assist.-surgs.: D. D. Foulis, M.D., posted to 12th reg. N.I.; J. A. Reynolds removed to 49th N.I.; W. Moorhead rem. to 37th Grenadiers; J. Welsh, M.D., to do duty in Malabar and Canara; J. C. Campbell, allowed leave to Madras and sea-coast, and, if necessary, to proceed to sea for benefit of health.

BOMBAY PRESIDENCY.—Assist.-surgs.: J. M. Knapp has qual. as interp. in Hindostanee lang.; Turner has proc. to join the 2nd troop Horse Artil. at Deesa; R. S. Jackson has relieved Assist.-surg. Moore from duty in Indian Navy; Mosgrove to join 22nd reg. N.I. at Beroda.—Superintending-surg. J. Burns, M.D., K.H., to proceed to Bombay during the month of Jan.—Assist.-surg. Carr is on duty at Ahmedabad.

## Medical News.

MORTALITY OF THE METROPOLIS.—The deaths registered within the bills of mortality in the week ending Dec. 26th, amounted to 1268, or 268 above the weekly average of the five previous autumns. Of these 508 were from diseases of the organs of respiration, (comprising 154 from bronchitis, 146 from pneumonia, and 116 from phthisis;) 182 from diseases of the nervous system, (75 being reported due to apoplexy and paralysis, and 26 to hydrocephalus;) 63 from diseases of the organs of circulation; 95 from diseases of the digestive organs; and 150 from zymotic causes, (including 2 from small-pox, 12 from measles, 13 from scarlatina, 35 from hooping-cough, and 43 from typhus.) No deaths were reported as occurring from either intemperance or privation, (!) but 40 appeared to have been consequent on violence. Electricity mostly positive throughout the week. Average height of barometer, 29.1 inches. Total of births in the week, 1192.

A POOR-LAW SURGEON.—*In re Matthew Cooper.*—This insolvent, who had been a surgeon at Hingham, in Norfolk, was opposed by Mr. Dowse, on behalf of a tailor named Crisp; he was supported by Mr. Cooke, who asked a few questions of the insolvent, and amongst them, whether he had had the good fortune to enjoy an appointment of surgeon to a country union? The insolvent said he had.—Mr. Cooke: Did you gain anything by that? I lost, certainly.—Mr. Cooke: You had to keep a horse, and the payment was very small, was it not? Very small indeed.—Mr. Cooke: Besides the remuneration being small, did the employment not take up much of your time? A great deal.—Mr. Commissioner Phillips: Of course; but these gentlemen are expected to keep others alive, while they can hardly live themselves. (A laugh.) The Court ordered the insolvent to be discharged.—*Times.*

COLLEGE OF PHYSICIANS.—On Tuesday afternoon, there was a very strong muster of the fellows, consequent upon the late extraordinary proceedings respecting Dr. Hastings. The meeting was addressed by Dr. Burrows, Dr. Latham, and others, who energetically condemned the proceedings of the former meeting. Eventually, on examining the ballot, there were found upwards of two to one in favour of the admission of Dr. Hastings.

OPERATION EXTRAORDINARY.—Mr. Lucas, a veterinary surgeon of Liverpool, has removed a large tumour from a

Newfoundland dog, while the animal was under the influence of ether vapour. The head of the dog was introduced into a jar containing sulphuric ether, and the operation was performed without any sign of pain.

Practice in Lunacy.—A paltry mode of extorting money, which should be put an end to, obtains amongst some of those physicians who devote themselves chiefly to the treatment of insanity. They send a keeper to take the onerous and laborious charge of the patient, who is to have, say, twenty-eight shillings a week, with board and lodging. Of this twenty-eight shillings, fourteen are wrested from him, and pocketed by his professional patron. If the simple notice of this fact be not sufficient, it will become necessary to resort to harsher measures, to drive so discreditable a practice from the profession.

Philosophy.—Dr. Searle, who wished the other day to pugilize The Lancet reviewer, for having ventured to complain of his philosophy of life, health, and disease, "according to the laws of nature and common sense," is about to produce a work on the philosophy of temper; he has also made an essay on the philosophy of wit, in the shape of the following *very* humorous forgery, appended to his advertisements of his popular medical work:—

"'A work abounding in valuable information, and much that is new, deserving the attention of the public and of the profession, and well calculated to put an extinguisher on the quack; but as it levels a shaft at the guinea fee, and Latin prescription of the regular also, we, as champions of the craft, are bound to condemn it as an infamous publication.'—*Lancet.*"

A Barber-Surgeon.—The Scotch newspapers contain advertisements, setting forth the unrivalled powers of "Ponting's Shaving Cream:" the operation of shaving is to be rendered a pleasure, and hot or cold water are alike indifferent, in the use of this "economy and luxury combined." The agent for the sale of this shaving-cream, in Scotland, is set forth as Mr. John Mather, Surgeon, Haddington Laboratory, Haddington. A correspondent inquires, whether this surgeon mounts the barber's pole at his laboratory, and how frequently and cheaply this "wholesale agent for Scotland," a medical man, shaves his patients and customers by its application and sale.

Quack Advertisements.—Two highly respectable journals, the *Tyrone Constitution* and the *Liverpool Express*, have just signified their intention not to admit lying or obscene quack advertisements into their columns. The first publishes an energetic condemnation of quackery, and the second, in its address to its readers at the commencement of the year, promises that "all immoral and indecent advertisements will be at once rejected."

A Medical Handbill.—Discovery in Medicine.—It should be known and understood that Mr. Wilkinson, Surgeon, Edinburgh, (late teacher of medical sciences, &c.,) discovered, about twelve years since, the means of controlling inordinate diseased action of the heart and whole system of the blood-vessels and blood; and thus, in modifying the severity of disease, and the effects of other remedies, many affections of the heart, febrile, inflammatory, nervous, and other diseases, have been and can be cured, or alleviated, with a certainty and safety never before obtained in medicine.

Homœopathic Prescriptions.—The following is a traced copy of a case, with prescriptions, taken from a female patient of the Birkenhead Homœopathic Dispensary:—

*Margt Balfe. Lumbago.*

Oct. 31st.—Pain in hip. bad could. without stays worse. bad at night. always cold. 1 Rhus 3 2 Bry 3 4 hours.

Nov. 4.—Stitch in side—chills constantly. Acon 3 20

9.—Pain in back still—cough; dry cough. 1 Phos 3 4 hours.

12th.—Flooding 3 weeks. clotted. 2 Arsen 6 12 4 hours. Crocus. 3

14th.—Dark flooding stopt; whites vertigo pain in loins; Bs open. 1 w ago Opium 3

16th.—Pain in loins. vertigo. Puls le 12 3 a day.

19th.—Feverish; Bs costive. Nux 3 12 4 hours.

21.—Griping pains—bearing down—metrorrhagia. 1 Crocus 3 2 ——— 3

24th.—Belladonna 3 20 3 hours.

An Operation performed by the College of Surgeons upon the Westminster Medical School.—*To the Editor.*—Sir: A deputation of the Council of the College of Surgeons having twice visited this rickety school, whose tottering condition had been long apparent, an operation was recommended, which the Court of Examiners unanimously agreed to. It consisted in lopping off the whole branch of the anatomical department of the school from their recognised list. By this procedure, the pupils are likely to find themselves gainers, having claimed to be transferred to King's College, while their *ci-devant* lecturers have been wonderfully soothed by the marvellous effects of the vapour of ether. Dr. Basham, who writhed most under the operation, and who described it as the most cruel cut, (the cut direct,) was speedily tranquillized, and with his confrères, Messrs. Phillips, Erichsen, and Brooke, has settled down into a sort of green and yellow melancholy, more diverting than dangerous.—A Pupil.

Medical Appointments.—In consequence of the death of Dr. Foley, late consulting physician to the British Lying-in-Hospital, Brownlow-street, Dr. Henry Davies, physician to the hospital, will probably be elected consulting physician; Dr. Robert Lee becomes senior physician; and Mr. Benjamin Brookes, (long connected with the hospital,) and Mr. F. Pettigrew, are candidates for the posts of surgeon and assistant-surgeon.

## CORRESPONDENTS.

The number of communications which we have received respecting, and strongly approving, the Medical Bill, is so great, as to preclude the possibility of publishing them.

The profession is respectfully informed, that the Bill will be immediately printed in the form adopted by Parliament, and that it will be delivered at the cost of paper and print. It is hoped that the Bill will be distributed throughout all ranks and classes of the profession. Several errors, which escaped notice in the first print of the Bill, will be corrected in the future impressions.

*Mr. John Thomson*, (Aberfeldy.)—The quack in question has not escaped our attention, and his time for castigation shall come. We are obliged for the pamphlet.

*J. O.* (Liverpool) would not be likely to gain the appointment if opposed by any one possessing the double qualification. We believe the St. Andrew's diploma would stand equivalent to the apothecaries' licence.

*Anon.* writes to complain of a boasting letter from Mr. Langston Parker, addressed to the *Birmingham Journal*, and inserted in that paper, respecting the performance of painless operations, his experiments, and his perfect instrument.

*Dr. Glover.*—The paragraph is, indeed, a specimen of the laxity of morals which prevails among the public in all that relates to medicine. We thank Dr. Glover for his good wishes, and shall not fail to notice the tribute to swindling which has been put in circulation.

*A Country Practitioner.*—We are of opinion, that when secrets have been entrusted to medical men in the way of their profession, they should not be revealed in any case. Certainly this is the rule in the law and the church.

*A. C. F.*—We believe Dr. Wilson Philip is living in retirement in France. Dr. Dick, we have no doubt, would be happy to answer the second query.

*Amator Justiciæ.*—We have received all the papers referred to; one of these shall, if possible, appear next week.

*A Constant Subscriber.*—The surgeon could recover, and would also be legally competent for election to the office named.

*X. Y. Z.*—We shall always be glad to hear from our correspondent.

*M.R.C.S.E.*—The College might interfere if it had the will to do so. Our correspondent should address the College. On all occasions, when letters are addressed to us respecting infringements upon the rights of members of the College by unqualified persons, duplicates of the letters should be sent to the College. As it is, the College dozes on in the belief that the profession is quite indifferent to the encroachments of quacks.

*Mr. William Hay* writes, to state, in contradiction to a paragraph inserted in The Lancet, that his name is Hay, and not Hayes. The paragraph was sent us from Leeds, cut from a Leeds newspaper, with the addition respecting the name. We are sorry that Mr. Hay should think it right to advertise at all. We regret the error respecting the name.

*F. L. H.* can recover for attendance, but not for medicines.

Court-Medical.—We are again obliged, from press of matter, to omit the document relating to Dr. Gregory and Mr. Wigan; but having carefully perused it, it is but due to the latter gentleman to state, that the delay in settling the points at issue has arisen chiefly from the vacillating conduct of Dr. Gregory, and that Dr. Gregory has offered the most ample apology to Mr. Wigan.

Communications have been received from—Mr. J. Thomson, (Aberfeldy;) Dr. John Dwyer, (Great Yarmouth;) J. O.; Mr. Hoskins, (Birmingham;) Dr. Alfred Hall; Anonymous; Dr. Glover, (Newcastle;) Dr. Marshall Hall; Mr. J. G. Lansdown; Mr. Clendon; Dr. Brett; Mr. Nathaniel Ward; Alpha, (Maidstone;) A Country Practitioner; A Subscriber from the commencement; Mr. R. A. Kidley; A Subscriber, (Bromley;) A Scotch Country Practitioner; X. Y. Z.; Dr. Raper; Dr. Cattell; M.R.C.S E.; Z. O.; Mr. Sparrow; A Yorkshire Surgeon; Mr. Hooper; Mr. W. Hay; F. L. H.; A.; The Boards of Guardians.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

THE two preceding cases illustrate the occasional severity of a relapse in fever. It sometimes happens that patients are admitted in a state of great weakness, suffering inflammation of some internal organ, and referring their illness to cold taken during convalescence from fever. There is no opportunity of ascertaining accurately whether such be the case; whether they really have suffered from fever; but as more than one instance of this sort has occurred during the last year, the following is subjoined as an illustration of the kind of case alluded to, or, if the account be correct, of a relapse, accompanied by severe pulmonary symptoms, occurring at a late period of convalescence from fever.

PNEUMONIA THE PROMINENT SYMPTOM IN A RELAPSE OF FEVER.

CASE 34.—Mary B——, aged seventeen, admitted Oct. 9th, 1846, Faith back ward. Well made; dark complexioned; face dusky and anxious; tongue dry, with a white fur down the sides, and a broad central red streak; pulse 108, small and soft; bowels relaxed; abdomen full and tender; has cough, pain in the right side, and headach, following a rigor six days ago.

*History.*—Generally healthy; lives by selling things in the streets. Nine weeks ago she was in Christ-church workhouse with fever; was discharged three weeks back, and getting wet and cold in her weak state, was seized suddenly with her present symptoms, after a rigor, first occurring six, and repeated four days ago: she is drowsy, but quite conscious.

*Auscultation.*—Right lung behind, small crepitation, with bronchial breathing and dulness on percussion in the lower two-thirds; elsewhere healthy. Ordered, to be cupped to six ounces below the right scapula; to take one grain of chloride of mercury and a quarter of a grain of opium, every six hours; and a draught, with fourteen minims of tincture of squills thrice a day.

Eighth day.—She felt relieved by the cupping, and now breathes easier, (30,) and can lie on either side. Pulse 100, soft, a little fuller; tongue furred and dry; one dark, scanty evacuation; abdomen still tender: she expectorates an adhesive, somewhat tawny mucus.

*Auscultation.*—Right lung, behind, scattered, largish crepitation, with dull percussion about the base; breathing bronchial, with long expiration about the scapula: left, coarse respiration, with long expiration and occasional sibilus. In front, on the right side, respiration coarse, with pain on percussion. Ordered, eight leeches beneath the right breast; to continue the medicines, and to take some beef tea.

Ninth day.—Weak and pale, almost fainting from being raised up for auscultation, which presents abundant largish crepitation throughout the right, and to a less degree in the left lung, with generally coarse respiration. Ordered, four ounces of wine; to continue her draught, and to take one grain of chloride of mercury, without opium, every six hours.

Tenth day.—She feels much refreshed by the wine; she had no sleep; skin warm and moist; tongue dry, and red in the centre, with a moist white fur down the sides; pulse 104, small and soft; three bilious, relaxed motions; abdomen somewhat tender; she still suffers from headach, pain in the chest, and cough; respirations thirty-four; she expectorates a slightly tawny mucus. Ordered, to take five grains of the compound mercury and chalk pill thrice a day; continuing the other treatment.

Eleventh day.—She slept well, but vomited once during the night; three dark, relaxed evacuations; abdomen less tender; pulse 110, soft; tongue clean and dry; still has troublesome cough, with abundant expectoration.

*Auscultation.*—Bronchial respiration about right scapula; still extended dulness on percussion. Ordered, a blister plaster to be applied to the right axillary region; to continue the same treatment.

Twelfth day.—The blister rose well. She looks and expresses herself as much easier; tongue clean, moistish; pulse 120, small and soft; bowels open, abdomen not tender; respirations 40. Ordered, to continue.

Thirteenth day.—Slept well; pulse 108, small, and soft; tongue clean and moist; two dark, bilious evacuations; abdomen hard and tender; mouth just touched by the mercury; her appetite is returning. Ordered to continue the same treatment, and to take an aromatic draught* immediately.

The notes made from time to time record little more, after this period, than the gradual diminution of the frequency of the pulse, and the returning feeling of health and strength. The right lung, as soon as the healing of the blister would allow an examination, was found restored to health, only admitting air a little less freely than the left, and she was discharged as convalescent from the hospital on the thirty-first day.

It would be almost idle to discuss the question of whether this were a case of fever or no, if the answer led to no further results; but as the treatment had always relation to the possibility of the disease being such, that treatment will repay a little consideration. When she came in, the disease was treated simply as pneumonia, occurring in a very weakly person, of which form of disease the preceding winter had supplied so many instances. But the debility was so very great, and the pain in her abdomen so constant, and the apparent irritation produced by calomel, when given unguarded by opium, so great, that the suspicion which had prevailed from the beginning, of the pneumonia being secondary, became the recognised view of the case. But how could this modify the treatment? Simply thus. The drowsiness and constitutional disturbance were not all owing to hindrance of the functions of, and the presence of disease in, the lungs, and could not therefore be rightly treated merely by attempts to repair that local disease. The abdominal affection was probably, though less obvious, equally dangerous to life, and was not therefore to be neglected, for the purpose of attacking what was possibly only half of the disease, and which, indeed, might get well without any assistance from remedies addressed specially to it. But did these considerations much matter when they led only to the substitution of fifteen grains of compound mercury and chalk pill for four grains of chloride of mercury daily? Possibly not, as the case turned out; for the fact of so slight a substitution having been sufficient arose from the suspicion having been constantly present, and thus having kept awake the attention to notice the earliest disagreement of the plan of treatment first adopted.

In the cases as yet narrated, the stress of the disease has been most evident during the relapse, falling chiefly on the lungs, as far as the symptoms observed during life were concerned. We proceed to cases where the stress of the fever occurred during the first or only attack, the lungs, in the following case, also, being chiefly affected.

FEVER, WITH MOTTLED RASH; AFFECTION OF THE LUNGS; RECOVERY.

CASE 35.—Mary Ann B——, aged nineteen, admitted April 1st, 1846, Faith back ward. Face and eyes flushed; skin hot and dry, with a mottled rash, not elevated, fading on pressure; pulse 132, readily influenced by posture; bowels much relaxed from medicine; abdomen full, tolerant; respirations 28, laboured; has cough, and pain in the abdomen of three days' duration.

*History.*—She is rather deaf, and not collected; but it appears from what she says, that she is a servant; always healthy till a fortnight ago, when she felt generally unwell, and had pains in the throat and limbs; her sleep was broken, and her appetite impaired; but all these symptoms were much aggravated after a rigor three days back. The rigor was followed by heat, and she feels hot now. Her fauces are rather vascular.

*Auscultation.*—Rhonchus and sibilus, with good resonance on percussion posteriorly. Ordered to be cupped to six ounces, below the scapulæ. To take five grains of compound mercury and chalk pill thrice a day, and a saline draught every four hours.

Fifth day.—No sleep; delirious during the night. She vomited once this morning, and passed an evacuation unconsciously. Pulse 144, small and soft; respiration 40, irregular; tongue moist, dusky, with a thick fur. Ordered to continue the medicines; to take four ounces of wine, and two pounds of beef, for tea, daily.

Sixth day.—Quiet during the night. Tongue clean and moist; pulse 132, small and soft; one pale, solid evacuation; respiration 40, still irregular; she has a little pain in her

* A mixture of half a drachm of aromatic confection, to one ounce and a half of cinnamon water, is much used, with apparent good effect, in the diarrhœa occasionally accompanying fever or disease of internal organs, under the above name, in St. Bartholomew's Hospital.

abdomen, more severe in her head and limbs. Ordered to take two grains and a half of mercury with chalk thrice a day, instead of the pill; continue the rest.

Seventh day.—Slept quietly and well; lies on her side with frequent wheezing respiration, complaining of cold. Tongue clean, chapped, and dry in the centre; pulse 120, small and soft; skin hot and dry, mottling still distinct; two healthy, solid evacuations from the bowels. Ordered, a saline draught, with camphor mixture, and ten minims of compound spirits of sulphuric ether, every four hours. To continue the rest of the treatment, except the draught, and to have a blister plaster applied to the chest.

Eighth day.—Good, quiet sleep. The blister has risen well. Skin hot, slightly moist; two dark green semifluid evacuations; pulse 132, sharp, with more power; she has difficult cough, with somewhat glairy expectoration. Ordered to continue as before, but to change the compound spirits of sulphuric ether for twenty minims of spirits of nitric ether.

Ninth day.—Little sleep, owing to her cough; no delirium. Five liquid ochry evacuations; abdomen tender; pulse 132 to 144, with less power, irregular; tongue clean and moist. Ordered to substitute five grains of compound mercury and chalk pill, thrice a day, for the other pill, and to have a blister plaster applied to the abdomen; to continue the rest.

Tenth day.—The blister rose well. She slept well; is now lying low down in the bed, but quite sensible; the breathing (42) scarcely more hurried than before; cough still troublesome, with frequent mucous expectoration; bowels not open; tongue moist, with a dark streak down the dorsum; pulse 120, soft, surface warmer. Ordered to continue.

Eleventh day.—Always sleeping. Tongue moist, with a thick, creamy fur; pulse 120, small and soft; skin warm and moist; one dark, loose evacuation from the bowels; she is restless when disturbed, and complains much of cough. Ordered a saline draught, with forty minims of oxymel of squill, and two minims of tincture of opium, every six hours; to continue the wine and beef-tea; omit the rest.

Twelfth day.—Slept well; lies easily in bed. Expectoration free; pulse 120, small and soft, soon hurried; tongue with a moist, white fur. Ordered to add twenty minims of spirits of nitric ether to her draught.

Thirteenth day.—Slept well. Pulse 132, small and soft; tongue moist and furred; skin warm, with copious alkaline perspiration.

The note of the sixteenth day speaks of vomiting, with slight diarrhœa, explained, perhaps, by the note of an improved appetite on the previous day, the only incident requiring notice during the rapid convalescence which followed that return of appetite.

The revising a case for publication detects many omissions that cannot be supplied; in the present case, chiefly as concerns the effects of some of the remedies employed—*e. g.*, of the cupping on the fourth day, which probably formed an important part of the indications on which the wine and beef-tea were then ordered. But so many other instances illustrative of the practice of local depletion, while the system at large requires powerful stimulants, will occur in considering other cases, that we pass on to the review of some of the symptoms which this case presents in common with the others contained in this paper.

It will be seen, that in this as well as the last case the number of respirations became accelerated as the patient got better. Considering the disease simply as a pulmonary affection in either case, it would have taken some time to assure oneself that with this symptom the patient really was getting better; but considering the pulmonary affections as only part of the disease, it seemed more rational to look for the cause of the hurried breathing in the returning consciousness, which now made the patient liable to be excited by the visit, which before she had hardly taken notice of.

We would call attention to the note of the tenth day, as recording the investigation into the meaning of one of those symptoms, which are more interesting when supplying the motive for that investigation than any subsequent description can render them. The point seems simple enough: the patient lay low in the bed; but there did not appear any reason for her doing so, on a careful inquiry, and so this circumstance gave no indication for altering the treatment. Nor should a circumstance so trivial in itself do so. Perhaps to those not conversant with fever as seen in the London hospitals, it may seem too trifling to deserve mention; and, indeed, in this case it probably meant nothing. But this indication of the failure of the bodily strength too often denotes failure of the powers of life for it ever to be passed lightly over in a case where death by exhaustion is the danger most to be apprehended.

The next case is put out of the order in which it would stand according to the classification by the more prominent symptoms of the disease here adopted, as illustrating some points in common with the case just narrated.

### FEVER, WITH SPOTTED RASH; DIARRHŒA AND VOMITING; RECOVERY.

Case 36.—Mary S——, aged thirty-eight, admitted April 17th, 1846, Mary back ward. Of a spare but strong make; face flushed and anxious; tongue moist, with a thick yellow fur; bowels confined; pulse 84, small, and soft; skin warm and moist, without rash; has pain in the head and limbs, with nausea and watchfulness of five days' duration.

*History.*—A nurse in Mary ward; was always healthy before an attack of hæmatemesis nine years ago; since then, she has had frequent recurrence of the catamenia at fortnightly intervals. Three weeks ago, while laying out a patient who died in this ward of fever, she had nausea, and has had constant loss of appetite since that time. The present symptoms came on suddenly five days ago, with a rigor, followed by vomiting. Her bowels have been obstinately confined, for which she has taken active purgative medicine. She had yesterday pain in the epigastrium, which was relieved by the application of leeches. She is quite coherent at present, but delirious at night. Ordered, a saline draught, with a drachm of sulphate of magnesia, every eight hours.

Seventh day.—Little sleep; wandering at night. She vomited this morning. Five relaxed motions; abdomen flat and soft, not tender. She has no pain in the head; tongue and pulse as yesterday. Ordered, to continue the saline; to take four ounces of wine and a pound of beef for tea daily.

Eighth day.—No sleep; delirious; getting out of bed during the night; tongue with a thick moist yellow fur; bowels very much relaxed, with frequent vomiting; skin soft, slightly moist, with a distinct mottled rash on the forearms, less evident on the chest; she feels cold, but is free from pain, and quite coherent. Ordered an effervescing draught thrice daily; continue the wine and beef-tea.

Ninth day.—Little sleep; restless and wandering during the night, now moaning and anxious; bowels profusely relaxed, with still frequent vomiting; tongue moist, tremulous, cleaner; pulse 96 and upwards, like a thread, soft; skin cool, dry, and harsh, with a more extended, very vivid, rash. She has pain in the epigastrium and right iliac fossa. Ordered, compound mercury and chalk pill, five grains, thrice a day; continue the wine and beef-tea.

Tenth day.—Good sleep; she has nausea, but no vomiting; the diarrhœa (judging from the note) has apparently ceased; skin warm and dry; rash less vivid, but visible on the face, papular; tongue dry and chapped, with a brown fur; pulse 96, small and soft. Ordered to continue the same medicines.

Eleventh day.—Rambling and starting in her sleep; pulse 108, small and soft; tongue dryer. Several dark evacuations from the bowels, and great tenderness of the right iliac fossa. She feels cold and hungry. Ordered to continue.

Twelfth day.—Quiet sleep; tongue with a clammy fur; bowels once open; pulse 108, small and soft; skin hot, a little moist; rash less distinct. She has pain on pressure of the hypogastrium, and is rather deaf. Ordered to continue.

Thirteenth day.—Good sleep; tongue with a moist, chapped fur; pulse 96, small and soft; bowels still slightly relaxed, but without pain. Ordered to continue; to have a blister plaster applied to the abdomen.

Fourteenth day.—Noisy and restless during the night; eight liquid evacuations; tongue dry and chapped; pulse 120, small and soft; skin moist; the rash almost faded. She lies on her back, with an anxious face and flushed eyes, irritable and incoherent, complaining of pain in the chest and head. Ordered to continue the wine and beef-tea; to take an aromatic draught thrice a day.

Fifteenth day.—Bowels less relaxed; pulse 108, small and soft; otherwise as yesterday, but free from pain. Ordered to continue, the wine to be increased to six ounces.

Sixteenth day.—Slept well: sensible when spoken to; but when left to herself, she lies muttering incoherently; bowels not opened since the last note. Ordered to continue.

Seventeenth day.—Very heavy sleep all yesterday evening, and during part of the night; tongue dry, glazed, and tremulous; pulse 96, small and soft; bowels relaxed; the evacuations passed unconsciously; flat, soft abdomen, tender. She is very anxious and restless, asks for food, but is unable to eat it. Ordered to continue the wine and beef-tea; to take ten minims of dilute hydrochloric acid thrice a day.

The next day her pulse had risen in power. On the following it is noted that her tongue was clean and moist; pulse 84, small and soft. She has had two natural evacuations from the bowels. The rash has quite disappeared.

Twentieth day.—She does little but sleep; tongue clean, pale, and dry; pulse 96, small and soft.

There is nothing to remark in the gradual return of the feelings and appearance of health which the few remaining notes record.

It will be observed, that in all these three cases the symptom of vomiting occurred, referrible, apparently, in Case 35, to some indiscretion in diet; in Case 34, not very clearly to be explained; and in Case 36, occurring under different circumstances at two periods. On the first occasion, the vomiting appears to have been an initiatory symptom of fever, possibly the rejection from the stomach of the food which the stomach could no longer digest—a symptom occurring in about one-sixth of the patients.

On the second occasion, the vomiting did not occur once only, as if to relieve the stomach, but repeatedly, and accompanied by profuse purging. There are few more important complications than this to be met with in the treatment of fever, where the stomach at once rejects all the means we employ for its own relief, or for that of the diarrhœa, which is exhausting the strength of the patient positively, as much as the irritability of the stomach is doing negatively, by precluding any nutrition of the body. Nor can we point out any way in which this vomiting has been always successfully treated. The coincidence of the diarrhœa would naturally make one refer the vomiting to an organic, rather than a mere functional, disturbance, and so exclude mere sedatives from the treatment. Perfect rest for the stomach, as far as that can be obtained for a short while with safety to the patient, and remedies addressed to the diarrhœa in the smallest and least nauseating forms, is that plan which has best claims to attention, and which, in the present case, was followed by success.

But with regard to the diarrhœa;—there is every reason to think that it was caused by the use of sulphate of magnesia, in the early part of the case. Calling diseases by their generic names, it may seem somewhat contradictory if, turning to Case 34, we there find that the suspicion that the disease was fever, was constantly sought to be confirmed in the state of the bowels, while here purgatives were prescribed from the outset. But looking beyond the name, and inferring from the symptoms of the cases before us, and not from the morbid anatomy of other cases, the discordance disappears. A red streak down the tongue, with a tender abdomen, would make any one very cautious of using purgative medicine, even did other symptoms demand it; and were the case named "fever," the expletive would be "with affection of the bowels." But let the tongue be covered with a moist yellow fur, and there be no pain in the bowels, with a soft pulse of 84, and above all, no irritation be traced in the effect of active purgatives previously given,—and now there are other indications for treatment than existed in the former case. This form of fever was common in the winter of 1840-41. On such indications a little purgative medicine used to be given, cautiously, (for this was not the only form of fever,) and its effects watched till a fair dose of purgative medicine could be borne, and a healthy evacuation procured, and from that full action of the purgative apparently convalescence dated. Or the purgative might be given in small frequent doses, as in the above case. But in this, the plan of treatment prescribed from the experience of other cases, as well as from its own earlier indications, its own later indications as clearly forbade to be continued; for fever is to be treated by its own indications from day to day, and as little is each case to be treated throughout by the rule of the class in which its earlier symptoms may have placed it, as is one general undeviating plan of treatment to be laid down for fever for each year.

In connexion with the two previous cases, it is of interest to remark, the greater or less activity of the nervous centres during the period of convalescence, as shown in the irritability arising from the better perception of her painful sensations, and the subsequent drowsiness. In this case also, as in Case 32, the rash was noticed on the face.

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"Death, like the apothecary, gathers roots in the spring; flowers, when they are fully blown; and fruits, after they are fully ripe.

"The physician needs a chart rather than a map: it is more important to him to know what to avoid, than where to tarry."—*Professor Marx.*

# Original Papers.

NOTES OF

## THE WEATHER, AND THE MORE PREVALENT DISEASES OF THE SUMMER OF 1846.

By WILLIAM MACINTYRE, M.D., Physician to the Western General Dispensary, Marylebone.

(*Read at a meeting of the Harveian Society, November 21st*, 1846.)

That the salubrity or unhealthiness of a season mainly depends on the degree which its distinctive characters attain, is a fact sufficiently familiar to medical men, but hardly yet held as an article of popular belief. Out of the profession, a long, hot summer, and a cold, bracing winter, are still considered, not only seasonable, but likewise conducive to health. Opposed to this erroneous belief, we have, however, the experience of all those observers who have made this part of medicine the subject of special study and investigation. In their writings, the most ample proof is afforded of the comparative healthiness of a mild, though damp winter, and the superior salubrity of a cool summer, although moist. Dr. Bateman very well explains this apparently paradoxical fact on the principle that each season of the year has its particular diseases, determined by its peculiar characters of temperature, moisture, atmospheric pressure, &c.; and that these particular diseases prevail more or less extensively and severely, according as the characteristic features of the season are more or less marked. Hence it will follow that the diseases of summer are multiplied and aggravated by the excess and duration of its heat; and those of winter, by the unusual depression and continuance of its low temperature; while, on the other hand, when an opposite state of these respective seasons obtains, the train of diseases which usually attends them is, in the absence of any accidental epidemic, proportionally diminished in number and intensity.* The correctness of these observations is strikingly illustrated by the history of the weather and prevailing diseases of the last summer and autumn in this country.

The summer of 1846 will be long remembered for its continuous heat, splendid sun, and cloudless sky; and it will be no less memorable for the prevalence and fatality of the diseases which more peculiarly belong to that season of the year.

According to the valuable tables of the registrar-general, the three months ending with June exhibited, at Greenwich, a mean temperature of 2° above the average of twenty-five years, and 3° above the average of the corresponding quarter of 1845; the succeeding three months, ending with September, a mean of 6° above that of the corresponding season of the preceding year, and 2° above the mean temperature of the same quarter, on an average of twenty-five years. In June, the first hot month, the thermometer gave a diurnal average for London of 60° at night, 80° in the shade, and 99° in the sun. July was not less remarkable for its steady high temperature; and August, which opened upon the metropolis in a terrific tempest of wind, hail, and rain, was, throughout, unusually hot and resplendent, the thermometer never falling below 52°; the diurnal average being 60° at night, 73° in the shade, and 86° in the sun. September was, during the first three weeks, of a fine dry character, with a temperature above the average of preceding years; but the diurnal variations were considerable—many of the nights were chilly; the general direction of the wind, which had been S.S.W. and W.S.W. during the preceding months, changed to E.

* Rutty, writing of the year 1763-4, states, that "the spring was mild, the summer wet and cool, the autumn variable, the winter wet, with great floods and storms. Dr. Short, of Yorkshire, a diligent observer of the weather and diseases, remarked concerning this, the seventy-fourth year of his age, that it has been the wettest, and withal the most healthy, that he has known. The wet summer, particularly the month of August, was less productive of diarrhœas, dysenteries, and the cholera, than drier and warmer seasons, which seems to furnish occasion for refuting a vulgar and long-established error and prejudice respecting the cause of these diseases, which have been ordinarily attributed to an obstructed perspiration, and the use of fruits, in the summer and autumn; whereas it is pretty clear to me, that the usual prevalence of these diseases at these seasons is owing to neither of these causes; for as to the first, the disorders are observed to commence in July and August, before an obstructed perspiration takes place, and to prevail more in dry and hot summers than in wet and cold ones, and consequently, in seasons wherein the juices of fruits are less crude, more concocted, and more wholesome, and are indeed a bountiful provision of Nature in these to allay our thirst, and temper the heat and acrimony of the bile and other juices in the summer season, and are undoubtedly very wholesome, except to a few valetudinarians."—*Chronological History of the Weather and Seasons, and of the Prevailing Diseases in Dublin, (from 1725 to 1766.)*

and N.; and, as the month advanced, rapid fluctuations in the weight of the atmosphere ushered in the periodic gales of this season of the year.

Besides the great heat of its summer, the year, though fruitful in grain of all sorts, was calamitously famous for the spread of the blight of the potato plant—an epidemic disease of the vegetable kingdom which visited this country, for the first time, in the autumn of the preceding year, and reappeared this year with redoubled virulence, threatening, not only to destroy the almost exclusive food of millions, but to extend its ravages to other excellent products of the ground.

It has always been considered a subject for interesting inquiry, how far the deterioration of a principal article of food operated in influencing the health of man, and modifying the character of his diseases; but data have hitherto been wanting from which to deduce any satisfactory conclusions; and although the potato disease has been on an extended scale, and has engaged attention commensurate with its magnitude and disastrous results, its origin, nature, and cure, still remain a mystery as puzzling to philosophers as its apparition has been perplexing to statesmen and appalling to nations. Neither can we yet do more than speculate on the relation not unreasonably presumed to subsist between diseases and other influences of a less manifest kind. The chemist has failed to isolate and identify the pestilential principle which gives to malaria its deadly energy; the physician has been unable to note with precision the influence undoubtedly exerted on the functions of life by the amount, concentration, diffusion, and mutations of the electric power universally pervading nature; nor has our introduction to a more familiar acquaintance with the myriads and myriads of living beings which people, unseen but by microscopic eye, the air, land, and water, led to more than a surmise that the havoc caused by cholera, influenza, and other occasional epidemics, may be but the triumph of their countless and invisible armies.

We may, perhaps, allow ourselves to indulge the pleasing hope, that in these and kindred agencies will, one day, be revealed those occult causes—the refined and subtile contrivance which, in the opinion of the sagacious and sober Sydenham, Nature employs in elaborating epidemic diseases. In the present state of our knowledge, however, we can only reason safely on the causes which are manifest and within our comprehension—the obvious and sensible qualities, to wit, which constitute the several varieties of climate, season, and weather. Beyond these we need scarcely go in search of a cause to account for the great mortality which distinguished the last summer in this country. Cholera, diarrhœa, dysentery, and hepatic derangements, may be emphatically termed the sporadic diseases of hot climates and warm seasons; and the accounts of the weather and prevailing sickness of different periods, for a series of years, recorded and transmitted to us by Huxham, Rutty, Willan, and Bateman, testify that this tribe of diseases is multiplied by any excess of the heat which naturally characterizes the summer. In none of the reports of these observers do we find mention of cholera in any but the warm months; and in these, the disease is almost invariably found to be rife in proportion to the heat of the season. For the five years over which Willan's reports extend, the greatest number of cases of cholera in his own practice is stated as occurring in the summer of 1800, and most of them after the rains of the 19th and 20th of August. The following is the vivid account he gives of the season:—

"The present summer has been the hottest of any within my recollection. From the 22nd of June to the 19th of August there were fifty-seven clear sunshine days. The range of the thermometer was, in July, from 54° to 81°; in August, from 55° to 89°. Out of the shade, the heat could not be endured for any length of time, the nights also being close and sultry, the atmosphere always impregnated with dust, habitations in London being scarcely tenable. Mansions at some distance from it were not, however, exempt from inconveniences. The trees and shrubs were withered by the continued action of the sun's rays; gardens, plantations, &c., were whitened by dust from the high roads; and the brown scorched herbage rendered the appearance of the country desolate and joyless. Infinite swarms of insects infested both the sunshine and the shade; some species of them, not usually troublesome, enforced attention from their numbers. Whoever walked out at mid-day in July, had every white article of dress nearly covered with small green aphides, which could not be brushed off without much difficulty. In August these insects were of a dark brown colour, and equally numerous; on the morning of the 20th, after a violent storm, I observed thousands of them lying dead in stables, and other outhouses; nor did any appear afterwards."

Though the most graphic description would fail to raise our last summer to a perfect parallel with that of 1800, the resemblance between the two periods is too close to leave any doubt as to the cause of the extraordinary mortality which marked the two quarters of this year, ending with September. From the Report of the Registrar-General, it appears that, in the first of these quarters, ending with June, the deaths for all England were 43,582, a number greater by 2853 than was registered in the corresponding quarter of 1845. In the second quarter, ending with September, the augmentation in the mortality was still more startling, the deaths from all causes being 51,000, showing an excess over the corresponding quarter of 1845, of 15,000, and in the metropolis, although inflammatory diseases of the lungs and influenza lay in abeyance, and the deaths from the three grand exanthemata—small-pox, measles, and scarlet fever, were by two-thirds fewer than in the preceding year, the excess amounted to 1567, an increase of 14 per cent., and to this excess, diarrhœa, cholera, and dysentery, the proper diseases of warm seasons, contributed not less than 1303.

Facts such as these, deduced from the experience of past observers, and collated with the existing relation between diseases and their known or alleged causes, are not only interesting in a physiological and hygienic point of view, but highly important in a social and political. It will be remembered that the dismay raised in the mind of the community by the sudden increase of deaths from cholera this year, was soon allayed, and public confidence restored; and it is not a little gratifying to us that this reassurance was effected by the heads of our profession, to whom the matter was referred by the Government of the State, and who, after due investigation, pronounced the epidemic to be "the ordinary English cholera," and not the justly dreaded pestilence of the East. The temporary panic, however, will not be without its use if Government redeem the pledge, given when that panic ceased, that sanatory measures would forthwith be adopted for preventing contagious disorders, and for the more speedy removal of nuisances, and those other accessory causes which aggravate and foster all diseases, whatever may be their nature and origin. To this obvious duty of the State, attention is forcibly drawn in each successive report of the Registrar-General, and it is to be hoped that the considerations so reasonably and feelingly urged by this able functionary will not be disregarded by those in authority. It is, at the same time, a subject of regret, that the system over which he presides, was not, at its institution, extended still farther, and means provided for collecting, analyzing, comparing, and arranging the scattered experience of our profession, on the actually prevailing diseases, the causes of their rise and propagation, the ratio of their mortality, and the results of remedial treatment. But until a suitable machinery is set to work, for carrying out such an object, we must be content to draw conclusions from information furnished by limited individual experience. The following remarks are the results chiefly of the observation of the more prevalent forms of disease occurring, during the period we have been reviewing, in the practice of the Western General Dispensary, Marylebone.

The leading diseases which swelled the bills of mortality to the extent they reached this summer, both in the metropolis and in the provinces, were affections of the abdominal organs and of the nervous system.

*Diarrhœa and Cholera.*—At all periods of the year, the proportion of cases headed "Dyspepsia," in every form, is very great at our public institutions, the class of patients we have to treat being specially exposed to causes calculated to derange and impair the digestive functions. Among the most influential of these causes, we note, poor diet, irregular living, and the bad air of dwellings, which, from their location, confined space, and faulty arrangements, are, in too many instances, altogether unsuited for healthy abodes. To these physical influences of an injurious tendency, may be added, the anxiety and mental depression inseparable from precarious dependence on an uncertain supply of labour, the lot, periodically at least, of a large portion of the industrial population. The low tone of health thus engendered, constitutes, as is too well known, a powerful predisposition to disease, and more especially to whatever epidemic may be in the ascendant at any particular season, rendering the labouring poor the earliest subjects of its assault, and its easiest victims. Conformably with this well known pathological law, diarrhœa showed itself first, towards the end of June, among patients previously, and at the time, under treatment for other complaints, particularly gastric and intestinal derangements, phthisis, and other ailments, in which the functions of digestion and assimilation were

faulty.* It was not till the close of the first week in July that diarrhœa attracted attention by its frequency as a primary disease, or any fatality attending it. The subjects chiefly now affected were infants and young children. Of these, several were brought to the dispensary so exhausted and wasted that it was hard to believe they had been ill only twenty-four or thirty hours. Some of them were found to have been in a still shorter time reduced to a degree of prostration, bordering on the condition of collapse seen in severe cholera, the features being sharp and contracted, the eyes sunken, the complexion pale or dusky, and the temperature of the surface below the natural standard. The little patients did not seem to suffer pain or cramps; at least, the ordinary expressions of pain were absent, but the languor, vacant look, and frequent sighing, showed great and rapid depression of the vital powers. The account given by the mothers was, in almost every case, that the child had been suddenly seized with relaxation of the bowels, the evacuations being profuse, watery, and colourless, but not offensive; in very few cases were they represented as either mucous or sanguinolent at the outset of the attack. Such was the character of the complaint in the most severe cases; but besides these, a vast number, presenting the symptoms of ordinary diarrhœa, were daily applying for relief. I am unable to give an exact statistical statement of the whole, for, independently of the cases entered on letters of recommendation, an equal number, at least, were treated as casual emergent cases. In July, fifteen cases were attended at their own homes, being too ill to come, or be carried, to the dispensary; in August, twenty; and in September, fourteen.

During these three months the complaint continued to prevail in the district as an epidemic; but, considering the number affected, the mortality from it, as a primary disease merely, cannot be said to have been great. In July, three deaths from diarrhœa were registered at the Institution, and in August, two, all of which occurred in infants and young children. As an intercurrent affection, however, in complaints of long standing, I have no doubt that not only with us, but throughout the country generally, it was much more extensively fatal than the official returns would indicate. We have always a long and sad list of patients far gone in consumption, who, from the nature of their complaint, are excluded from public hospitals, or have been discharged from them as incurable. Of these, five died in August, their deaths appearing to have been precipitated by a sudden aggravation of the diarrhœa so common and harassing in the closing stage of that fatal malady. The same observation is applicable to protracted cases of abdominal disease, of a chronic nature, in children. In July, four deaths were registered under the headings of tabes and marasmus; in August, four; and in September, when no deaths from diarrhœa are recorded, also four. In every one of these, diarrhœa was, at the last, a prominent symptom. Relapses took place in this month, and the fresh cases that occurred, particularly towards its close, presented the characters of dysentery.

As to the treatment of the complaint, no difficulty was experienced in the great majority of cases, which presented characters differing little from the ordinary summer diarrhœa. Being viewed as a form of muco-enteritis, with checked perspiration and biliary secretion, the disease was, at the outset, treated by mild alteratives, diaphoretics, and salines. As a mercurial, calomel, with or without rhubarb, was occasionally necessary; but, in general, the treatment was conducted successfully with mercury and chalk, small doses of the tartrate of potash in mucilaginous mixture, warmth to the surface, and bland farinaceous food. In the severe cases, however, which I have described as distinguished by sudden prostration, it was found necessary, in my own practice, to have immediate recourse to stimulants, cordials, astringents, and Dover's powders, or tincture of opium. Great benefit was derived from swathing the abdomen with flannel, after the application of warm embrocations. These means served speedily to arrest the tendency to collapse, and when the pressing danger was over, alterative doses of mercury and chalk were introduced, followed, on the improvement of the secretions, by infusion of calumba or cascarilla, which generally completed the cure. Some cases which turned out rather intractable, yielded eventually to the internal use of the acetate of lead, which I employed at the suggestion of my colleague, Dr. Day. This medicine proved very valuable where the evacuations were frequent and watery, the number of motions being, in most cases, reduced, in the space of two or three days, from fifteen or twenty a day, to three or four, with increase of their consistence, and return of their natural fœtor. It was administered to infants in doses of half a grain, in the subjoined form, three or four times a day, and though continued frequently for a week or ten days, it did not cause any griping or colicky pains:—Acetate of lead, four grains; distilled water, six drachms; compound tincture of cardamoms, two drachms; tincture of opium, four minims. A teaspoonful to be given three or four times a day.

All the cases of bowel complaints which occurred at the Institution were entered, and the deaths resulting from them registered, as "diarrhœa" simply. I think, however, that many of them, and particularly those which, at the breaking-out of the epidemic, proved rapidly fatal, ought to have been returned as cholera; for while these cases, exhibiting so much of the characteristic complexion of cholera, were of daily occurrence among infants and young children, examples of the disease in an unequivocal form presented themselves in individuals more advanced in life. Two of the most marked which occurred under my own care, I subjoin, in illustration of the character of the complaint and the treatment pursued.

William B——, a working man, aged forty-three, after going to bed, on the 7th of July, in his usual good health, was awoke at two o'clock in the morning with violent pain in the bowels, vomiting, and looseness, which continued after all the food he had taken the previous day, as well as the contents of the bowels, seemed to have been entirely discharged. The evacuations were described as consisting wholly of watery fluid, and enormous in quantity, without, however, in the slightest degree alleviating the abdominal pains, to which were shortly added severe cramps of the lower extremities, commencing in the calves of the legs, infesting the toes, and ascending upwards to the muscles of the trunk and the region of the heart, reducing the poor man to the utmost debility. He could procure no medical advice till noon, when he was visited by our resident medical officer, who ordered hot bottles to his feet, prescribed an aromatic draught with laudanum, and four grains of calomel with Dover's powder. At the expiration of two hours, when I saw him, no abatement of the symptoms had taken place; the vomiting and purging of watery fluid, mixed with unaltered aromatic confection, continued; and, racked with cramps, he was fast sinking into a state of collapse; his voice was low and husky, the complexion dusky, features sharp, and eyes sunken; the tongue white and dry, with intense thirst; the hands were cold, and exhibited the dark hue of the face; and the fingers had lost their plumpness, appearing sodden and shrivelled. It would seem that the alteration of the voice and features was remarkable, for it was this change that caused the most alarm and consternation to the relatives and attendants. It was satisfactory, however, to find that the pulse, though feeble, could be felt and counted.

Three grains of calomel, with half a grain of pure opium, were now prescribed every two hours, or oftener if rejected; and a strong mustard poultice was directly applied over the whole of the abdomen, as hot as it could be borne. Relief speedily followed the adoption of these measures; the combination of calomel and opium was fortunately retained; the atrocious cramps seemed to fly on the contact of the sinapism; the stools diminished in frequency; and at the evening visit, the diarrhœa was found to have ceased. The voice was at the same time stronger, the countenance improved, and the surface had recovered its natural warmth; but though there were no longer any spasms, the patient complained of excessive tenderness of the muscles, which had been affected. He was ordered to continue the calomel and opium every four hours, and to be supported with beef-tea, arrow-root, and brandy. He passed a tolerable night, without any return of vomiting, diarrhœa, or cramp; but he still complained of tenderness of the abdomen, which yielded eventually to the sudden supervention of salivation, some days after the calomel had been discontinued, and this alone made his convalescence rather tardy.

This man was of sober habits, and had not, previous to this attack, taken fruit or any article of diet calculated to derange the stomach and bowels.*

Phillis H——, a girl, twelve years of age, was supported into the Dispensary on the 13th of July, at two o'clock in the

* My colleague, Dr. Henry Bennet, informs me, that of the many patients under his care at the dispensary, for uterine diseases, very few escaped diarrhœa at this time.

* It was seldom that any of the attacks were attributed to the immoderate use of fruit, ripe or immature. Indeed, one of the peculiarities of the year was the scant yield of fruit; and its consequent scarcity in the market, and enhanced price, kept it beyond the reach of the masses. The fact bears out the opinion of Bateman, and of Rutty, long before him, that neither bilious diarrhœa nor cholera originate in the use of summer fruits, as is popularly supposed. A still stronger confirmation of the opinion is furnished by the circumstance of infants at the breast being, alike with adults, the subjects of those complaints.

afternoon, almost in a state of perfect collapse; her countenance was of a dusky hue; her eyes sunken, and look vacant, and her whole expression was that of the utmost anxiety; her skin was cold, pulse scarcely perceptible, and tongue blanched. The account given by her friends was, that she got up in the morning in her usual state of health, and after breakfast was seized suddenly with violent pain in the stomach, urgent vomiting, and purging of "clear water," which had now continued incessantly for three hours. After taking a cordial draught, she was conveyed home, and placed in a warm bed, with hot bottles to her feet, and a large mustard poultice to the abdomen. Three grains of calomel, and half a grain of pure opium, were given at the same time, and ordered to be repeated every two hours. Almost immediate relief followed the application of the mustard poultice, which the girl prayed might be continued, notwithstanding the pain of its operation. In the evening it was found that reaction was completely restored, and that no vomiting, and but very moderate purging, had taken place from the time she swallowed the first dose of calomel. Next day she was sitting up in bed, looking well, and complaining only of slight headach. In a few days she had regained her usual good health.

Though these cases were of a sufficiently alarming aspect, and seemed to be verging upon the appalling and hopeless condition which marks the stage of collapse in the Asiatic disease, they can only, I think, be regarded as instances of the ordinary autumnal cholera of this country. I am aware that several severe and yet more suspicious cases were, about this time, recorded in the medical journals as examples of the Eastern pestilence, and so designated. Their claim to this distinction, however, may reasonably be questioned. The history of the advent, progress, and departure of the two epidemics, in particular, exhibited a striking difference. Our cholera of 1846, true to the description of Sydenham, was restricted to the months of July and August. The Asiatic disease observed no such limitation; on the contrary, after clearing its native East, it traversed the globe, uncontrolled by clime, season, weather, and every barrier which human foresight or ingenuity could interpose in its route; and this, perhaps, rather than any peculiarity of symptoms, constitutes its best claim to being considered a *nova pestis*. The alarm excited last summer has passed away with the occasion; but there is every reason to believe that the dreaded foe has been again, for some time, hovering on the confines of Europe, gathering strength for a renewed invasion of the western world; and our true wisdom will consist in being prepared for its reappearance on our own shores at any season,—in the depth of winter as well as in the height of summer.

*(To be continued.)*

## ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

# THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

*(Continued from p. 32.)*

*Calumba.*—Calumba is one of the simplest and best of the vegetable bitters employed in practice. It has a slight aromatic property, and an intensely bitter taste, free from astringency. This enables us to give it in cases of biliary derangement, in which bark, from its astringency, would be questionable, although otherwise indicated. In every case requiring a simple tonic, calumba may be safely and advantageously ordered. It does not heat or cause headach; nor does it morbidly quicken the circulation. It is used in a greater variety of cases in France than in this country, such as scrofula and scorbutic disease, in atonic diarrhœa, in anæmia, spasmodic vomiting, and obstinate intermittents.

*Cambogia.*—This substance has no merit but that of a simple purgative, and by no means a very eligible one. Aloes is not merely a purgative; it has also, in no inconsiderable degree, cordial stomachic properties. Not so gamboge. It evacuates the bowels; seldom, however, without some consequent irritation or debility. With many persons it causes nausea and griping. It might, perhaps with advantage, be struck out of the materia medica.

*Cardialgia.*—We shall notice, at the same time, cardialgia, gastralgia, and gastrodynia. Strictly speaking, however, the first of these denotes more particularly heartburn or pyrosis; or, in general, any affection of the stomach which is characterized, at once, by pain and some morbid secretion.

Gastralgia and gastrodynia more particularly signify some perversion of sentient innervation, unattended with any notable derangement of the gastric secretions. Thus, while cardialgia is generally accompanied with a morbidly red or furred tongue; with an ill-taste in the mouth, ill-odoured breath, acid or bitter eructations, &c., gastrodynia and gastralgia may exist without some or any of these symptoms.*

Cardialgia attended with acid eructations is generally due to the excess of lactic acid, though sometimes, no doubt, to that of hydrochloric acid also. Pyrosis, which may be considered a variety of cardialgia, only accompanied, as the name imports, with an acrid or fiery, rather than an acid secretion, has probably a different source, and requires a slightly different treatment from acrid heartburn. While hydrochloric and lactic acids are in all likelihood secreted into the stomach by an exosmotic process, the morbid discharge of pyrosis probably comes from those glands described by Dr. Boyd, in his inaugural essay on the structure of the mucous membrane of the stomach.

According to Dr. Prout, both hydrochloric and lactic acid are normally present in the stomach. He even seems to think that oxalic acid may exist there as a morbid product. Acetic and butyric acid may certainly do so.

*Carminative, Carum Carui, Caryophyllus.*—These three subjects may be considered at once. Carminatives are often useful in functional atony of the stomach and intestines; and caraway and cloves are very useful means in the derangement referred to.

*Cassia.*—This is a mild purgative, to be used in cases of nervous females whose bowels are sluggish, and who may have amenorrhœa, but without chlorosis.

*Cathartics.*—The subject of cathartics is certainly not the least important of those connected with the treatment of dyspeptic derangements. For though it be, indeed, true, that experience and better observation have led to a less use of purgatives than formerly, in this class of complaints, still it cannot but be admitted that in many cases they are useful—in some indispensable—in not a few, they are the principal or sole means.

The old division of cathartics was, into irritating, as croton oil; stimulant, as aloes; refrigerant, as the neutral salts; astringent, as rhubarb; emollient, as castor and olive oil; narcotic, as tobacco, thorn-apple, &c. Nor is this classification unscientific or not practical. However, we propose to consider the subject of purgatives under the three heads of drastics, cathartics, and purgatives, using the last word in a special, as immediately before in a generic sense.

It is not our intention, nor would it be easy, to lay down any general rules for the administration of purgatives. Besides their obvious necessity, when the *prima via* is loaded with indigested or excrementitious matters, purgatives are indicated rather in states of plethora than the contrary—rather in morbid conditions of the fluids than of the nervous system. It is true, indeed, that the morbid condition of the circulation often begets that of the nervous system, and the contrary; and in these mixed cases, every practitioner must decide by his own *ex tempore* tact and penetration; but cases, on the other hand, do occasionally occur, in which, while the one system is particularly, the other is comparatively little deranged. Now, the general law which we would lay down (and we doubt if the subject is susceptible of a more particular one) is, that it is more immediately for plethoric and impure states of the fluids that purgatives are adapted, than for derangements of innervation.

In such impure states of the fluids, we prescribe purgatives on the following assumption—namely, that if we, by artificial means, afford Nature the opportunity, she will, by the emunctories whose action we excite, discharge herself of morbid principles, retaining those that are healthy. This, indeed, is the grand general law, in faith of which we venture, in any case, artificially to meddle with Nature.

* While writing this, a case in which severe cardialgia is a prominent symptom, has presented itself. The patient, thirty years of age, and of the military profession, has, for the last four years, suffered acutely from intense heartburn, pungent heat of stomach, a feeling as of a raw surface in that organ, hot and furred tongue, ill-tasted mouth, confined bowels, turbid urine, sleepless nights. Of late, a number of those anomalous symptoms which so often develope themselves in the course of severe protracted dyspepsia, have annoyed this individual. Epigastric and occipital palpitations, (having their seat, I doubt not, in the cœliac coronary or splenic and in the vertebral or occipital arteries,) a loud buzzing in the left ear, which, despite leechings and blisters, has incessantly continued during two years; migratory pains about the spleen, loins, and various parts of the abdomen, are some of the many inconveniences he is subject to. His heart is quite sound. He has been treated in Edinburgh, Dublin, and Devonshire, and taken largely of alkalies. He has just commenced the system of treatment which I propose, so that, for the present, I cannot state the results.

We may observe that it is not our intention to give a complete list of purgatives, but merely to notice a few of the most remarkable or useful. We shall begin with the more drastic:—

*Veratria*, the alkaline principle which is supposed to give activity to colchicum and white and black hellebore, is a powerful, and it may even be said intractable and dangerous, hydragogue-purgative. In arthritic cases, attended with great plethora and distinct constitutional fever, with torpid and loaded bowels, scanty and high-coloured urine, and tumultuous action of the heart, veratria is indicated.

Veratria, one grain; powder of acacia, two scruples and a half; syrup, a sufficient quantity.

The dose may be carried to three pills daily. This is the formula recommended by Majendie. We have seen no good effect from it in paralysis, for which some recommend it.

Veratria may also be used in tincture and ointment.

*Elaterium* is somewhat analogous in its properties to veratrum. Its action, which is that of a hydragogue-purgative, is extremely violent. It is useful in the inflammatory anasarca of robust or young subjects; but its use is to be deprecated in chronic dropsies, and in the cases of persons feeble or aged. I have seen it powerfully check rheumatic fever, and wonderfully relieve rheumatic metastasis to the heart. I have also seen it rapidly reduce the effusion into the cavity of the large joints, consequent on acute articular rheumatism. Some degree of its febrifuge power no doubt depends on the extreme nausea which it usually induces.

From ten grains of the extract of elaterium, one grain of an alkaline principle called elateria, or elaterin, may be obtained. A tincture of this is more manageable than the extract.

Elaterium, one grain; spirits of wine, eight drachms; nitric acid, two minims.

This dose, I may remark, will, with many persons, act drastically. Where it does not operate sufficiently, it may be repeated, in a full or half dose, after three or four hours.

In suspected scirrhus of the pylorus, neither veratrum nor elaterium should be ordered, unless in very particular exigencies, and then with very particular precaution.

Croton oil is another of our drastic purgatives. In torpid states of the bowels, and when the vena portæ is in a state of congestion and distention, constituting what is called abdominal plethora, which some German writers consider a very important pathological condition, croton oil often brings sudden and marked relief. It also decidedly eases cerebral congestion and plethora, promptly dissipating the most intense and alarming headachs. Unless cautiously administered, however, it is a debilitating cathartic, and its use is not to be thought of in irritable states of the gastric or intestinal mucous membrane.

The half of the following combination will be found to be nearly corresponding in strength to a similar dose of castor oil:—

Castor oil, one minim; oil of almonds, two ounces.

We may here observe that oil of turpentine has almost all the advantages, without any of the disadvantages, of croton oil, while the former possesses some good properties which the latter wants. In sluggish and flatulent states of the bowels, in tumid states of the intestinal mucous membrane, with a congested and distended condition of the rectum, oil of turpentine often gives surprising relief. Its nauseating taste and smell, and its tendency, for some time after it is taken, to rise in eructations from the stomach, are its drawbacks. But this is compensated by the singularly warm and invigorating influence it has on the abdominal organs. In gouty, rheumatic, and paralytic cases, it is a most valuable means. It may be used, with great benefit, in injection as well as in draught.

Scammony and colocynth require, in this place, no particular remark. They are, in moderate doses, and properly combined, safe and useful purgatives.

Rhubarb combines, as is well known, purgative and astringent properties; the former, when the dose has been sufficient, acting first; the latter, afterwards. Hence its utility in old and debilitated subjects, who yet require artificial evacuations.

Jalap is a smart, but safe, though nauseating and griping hydragogue-purgative. Properly combined with other purgatives and with carminatives, it is valuable by its promptness and certainty. Nearly the same remarks will apply to senna. Calomel will be considered under the general head, "hydrargyrum;" and of castor oil it is only necessary to observe, that it is the mildest, safest, and most nauseating of all purgatives.

Bentinck-street, Manchester-square.

ON THE

## NATURE OF CANCER, AND A SIMPLE MODE OF EXAMINING THE STRUCTURE OF TUMOURS.

By T. WILKINSON KING, Esq., F.R.C.S.E.

The present current of opinions concerning cancerous affections, while it adds to and defines the views of our older surgeons, does not seem to me altogether satisfactory, or free from great objections. I am by no means insensible of the great merit of some recent expositions, but I feel a good deal distrustful lest new and minute observations should be allowed to weigh against old and coarser truths. It is indispensable that the two should in the end be made to concur, or I venture to lay the blame at the door of micrography and innovation. The little points which will be referred to here are intended (and it is hoped they are not ill-timed) to lead directly to a simple and fundamental view of the question in hand. I have elsewhere stated "that the general appearances of the organs of those who die sufficiently late of cancer demonstrate, not the absorption and circulation of one kind of (germinant) cancer, but the continual deterioration of one constitutional process—nutritions or growths (successively) less and less normal, and more and more prone to break up."*

Now, if it can be shown that successive gradations of cancer are commonly, and in good variety, discoverable in one tumour, the observer may be said to hold the fair means of estimating the entire conclusion at his immediate command. Taking any primary fungoid mass removed by operation or post-mortem, (and not a few others,) I have to recommend somewhat urgently that it should be dissected with common care, so as to expose its whole surface, leaving, perhaps for landmarks, traces of its most important connexions. After this, it will be easy to slice the tumour rather finely, leaving every leaf (as of a book) attached to a common base. In this manner, a large amount of the mass may be exposed, and I have a confident hope that the inquirer will be speedily gratified by the facility afforded of tracing the order in which different parts have been evolved. A very little experience will establish him in the main inference, that the firmer substance, and more normal living tissues, have the older dates, while the feebler, but often more vascular, growths are the more recent and rapid. He is supposed to be capable of distinguishing what may be called juices, as well as what has died, and the changes which such matters gradually undergo. Here is the explanation of the appearances on the tubers at the surface of the liver; the margin is most raised because it is the most recent and active growth. An older firm mass is found beneath the periosteum, while a recent fungus has burst through at any one point, and the last growth of all perhaps has broken open through the skin—medullary bleeding and sloughing.

The gradations of serous cysts as a broad anatomical fact, established by Dr. Hodgkin in 1829, cannot be questioned. How many of these end with confirmed cancer? No doubt some capsules are formed on solid and growing contents, and it is evident that tension, with specific humoral dispositions to effuse different contents, and construct walls of variously anormal tissue, and gradational solidity, are parts of the essential train of events. Is it not manifest that all the coarser or visible arrangements in fibrous humour of the uterus depend on distention? We see countless capsules developed over new inner growths: we cannot imagine a cyst of regular form, growth, and persistence, without an inner mould.

"Tension† has to do with the growth, excavation, repair, and wasting of bone—with its form, and that of each cancellus. To it I refer the ligamentous reunion of divided muscle, tendon, or ligament, as occasionally of bone. It explains the order of initiative ossifications throughout the fœtal body, and that of the consolidation of the various epiphyses of the bones, (excepting the effects of breadth of union-surface, &c.) It seems equally to affect the tunics of bones, nerves, vessels, ducts, and organs; fasciæ, elastic tissues, and diseases. Varix is undue daily tension, and defective nightly repair. (Med. Gaz., April, 1844. Med. Chir. Rev., Oct. 1844.)

* This refers to what I am accustomed to teach, See, also, *Med. Gaz.*, Aug. 1845, "On the Frequency of Cancer in the two Sexes, and at different ages, as a point of Diagnosis and Practice;" and again, an analysis of my various papers lately published at the museum of Guy's Hospital, with some distinct conclusions by an able friend, Mr. Charles King—namely, "that of females dying about forty-four, nearly one-half have some cancer; of males, one-eighth; late in life, still more. Species of cancer—different stages of constitution."

† Vide "Tension, a fundamental or primary vital agent; physiological, &c.," in an "analysis" of my paper, published at Guy's Museum, as a synopsis of lectures and sections of specimens.

"The decline of tension, or even excessive tension, accounts for isolations of parts of bones. (Prov. Med. Journ., August, 1843.)

"Calvarian Pits, and Dura Matral Ridges, and fossulæ, produce Glandulæ Pacchioni, with peculiar Tensions. Granulation always minus as to tension. (See Physiological and Pathological Tensions, &c., Med. Gaz., July 3, 1846.)"

The proneness of cancerous growths to die, or to ulcerate, seems, in either case, a constitutional and general trait of individual diathesis.

I am not concerned at present to show what is or is not cancer in its commencement. Simple cysts and growths, like natural tissue, may be very remote, in the order of time, from microscopic cancer; but very common hypertrophies which have not a local cause may be found so often the precursors of medullary cancer, and so much of a gradational series of intermediate evolutions be manifest, that a systematic definition of cancer dare not exclude them.

Sir B. Brodie ("Lectures on Pathology and Surgery") describes a case of cauliflower excrescence of the uterus, brawny, scirrhous mamma, and fungus hæmatodes of the liver, all concurrent. He relates, too, that a scirrhous tumour was removed from the abdominal paries of a lady. After this, a growth as of feebly organized fibrin sprung up, and was extirpated, but a third mass left to itself was found, post-mortem, quite brain-like.

Such, in point of fact, is the main course of cancer, as observation cannot, I think, fail to establish; and this truth, I hope, will ultimately have its due weight as to the doctrine of cancer germs, as well as the efficacy of local treatment.

Bedford-square, Jan. 1847.

## PRACTICAL REMARKS ON DISEASES MANIFESTED IN THE HAIR,

WITH COLLATERAL OBSERVATIONS.

By THOMAS CATTELL, M.D., Braunston.

No. III.

Trichology and trichopathy, perhaps, embrace many interesting points familiar to other minds, but which may not have suggested themselves as hitherto to mine. So far, however, as time has permitted me to reflect on the matter, I feel convinced that, viewed in all its aspects, it is much more comprehensive, and encircles a wider domain of experimental inquiry, than on a premature consideration might be supposed.

### ANATOMICAL AND PHYSIOLOGICAL RELATIONS OF THE HAIR.

The hairs are filaments of various lengths, always thin in proportion to their length, about $\frac{1}{600}$ of an inch in diameter, more or less cylindrical, and usually smooth. Where this is not the case, the irregularity is apparently produced by some morbid cause. Their attached extremity is a little thicker and always soft; the other is slightly pointed. In the normal state they are seen only on the external cutaneous system, or the skin, covering all its parts, except the palms of the hands and the soles of the feet, where, by a wise provision of Nature, the epidermis is considerably thicker.

It appears that there are two general principles recognisable in the localization of the hair:—

1. That principally around the points of union, between the external and internal cutaneous systems, we find numerous hairs which assume a peculiar arrangement, as on the edges of the eyelids, in the nostrils, at the entrance of the ears, around the mouth, the anus, the vulva, and the mammæ.

2. That the law of polarity exists between parts on which the hairs grow in abundance, as on the head and the pubes.

The part first formed in relation to the hair is the follicle—a complete ovum, which surrounds the bulb, and exists, completely formed, before the primitive hairs, or those afterwards developed. It is pierced by the hair, which lengthens outwardly, as the capsule of the tooth is by the tooth. Eichhorn and Lauth have described the epidermis to be continued into the hair follicle as far as the point where the hair is attached, and assert that on removing the epidermis from the cutis such sheaths are often visible. Eichhorn also states that the pores through which the hairs pass can be seen in the epidermis, separated from the skin by looking in an oblique direction. It is this fact which has, in all probability, given rise to the current notion, that the follicle is formed by an involution and evolution of the epidermis.

The hair commences at the bottom of the follicle by a swelling, called the bulb, or root, which is softer than the other portion of the hair, and is always distinguished by the absence of colour. It is hollow, and contains within it the pulp of the hair, which is supposed to be a vascular prolongation of the part of the follicle alluded to. Indeed, the injections of Hunter exhibit distinct vessels ramifying in the pulp. The bulb appears club-shaped, and, as we have before observed, thicker than the rest of the hair. The pulp is said to become gradually lost in the medullary substance of the hair.

From these anatomical data we are led to conclude, that the substance of the hair is formed by the secretion of a modified horny matter on the surface of the conical vascular pulp—that the hair grows by the addition of new matter at its root, or point of attachment—and that it grows at no other part. The exterior parts of the hair, consequently, are first formed.

With respect to the destination of the nerves of the hairs, anatomists are not agreed; some have asserted that they enter the root, while others demur to the opinion. If the nervous filaments do not enter the roots of the hairs, what solution can be offered of the horrid sensation so often experienced in the scalp under the influence of extreme fear?

It was a recognition of the fact, and not the mere opinion, that led our immortal bard to say,—

> "I could a tale unfold, whose lightest word
> Would harrow up thy soul; freeze thy young blood;
> Make thy two eyes, like stars, start from their spheres—
> Thy knotted and combined locks to part,
> And each particular hair to stand on end,
> Like quills upon the fretful porcupine."

The recent dissections of the nerves of the uterus by Dr. Robert Lee sufficiently demonstrate to what an extraordinary degree of minuteness the ramifications of nerves may extend.

We revert, however, to other facts. When the hairs make their appearance, a portion of cuticle is disturbed, which is subsequently cast off in fine branny scales. The roots of the hairs, though convertible into the shaft, possess apparently a different composition.

During the continuance of the growth of the hair, the root is soft and pulpy, and nearly colourless, while the shaft is hard and horny, and of some determined colour.

Every hair is said to contain a tube, or is hollow interiorly, and admits the pulp for a greater or lesser distance.

As the pulp is intended for the nutrition of the hair, it is found to extend only to that portion of hair which is in a state of growth; the other portion, to which the pulp does not extend, is filled with a dry pith, or series of cells containing air. Duverney informs us, that when a hair is viewed transversely in a microscope, some of the bubbles of air are often perceived. He supposes that the hair is furnished by the pulp for the nutrition of the hair; there is, however, more reason to believe that it is derived from the atmosphere, in consequence of the vacuum produced by the degeneracy or retreat of the vascular pulp, in the same manner as the air of feathers is attracted from the external element.

The hair ordinarily appears round or cylindrical, but the microscope discovers triangular and square ones, which diversity of figure arises from that of the pores or follicles, to the shape of which the hairs always accommodate themselves. Sometimes their extremities have two or more divisions, especially when deprived of sufficient nutritive supply, or suffered to grow too long; so that what appears only a single hair to the naked eye seems comparatively a bush under the microscope.

Several observers describe two substances in the hair—a solid, uniform cortical, and an internal, more cellular substance.

It is stated that a single hair, viewed through the microscope by Mr. Durham, seemed to be one single transparent tube, with a pith made up of fibrous substances running in dark lines, in some hairs transversely, in others spirally.

Professor Weber, however, finds, that human hair consists of a perfectly homogeneous substance, in which no distinction of cortex and medulla can be perceived. Still, in the hair of the beard, these two substances are most evident and are constant.

We are informed in a certain encyclopædia, that "though the external surface of the body is the natural place for hairs, there are many well-attested instances of their being found also on the internal surface."

Amatus Lusitanus mentions a person who had hair upon his tongue; Pliny and Valerius Maximus, that the heart of Aristomenes, the Messenian, was hairy; Cæsar Rhodoginus and Plutarch, the same of Hermogenes and Leonidas.

These cases may be true so far as the ancients are concerned; but in reference to more modern times, the aspect is

different. I have, however, seen many instances of hairs in the frontal sinuses and the antrum of Highmore.

To contrast the views of modern times, we may observe, that the ancients considered the hair to be a sort of excrement fed only with excrementitious matter, and in proper parts of a human body.

They supposed it generated of the fuliginous parts of the blood, exhaled by the heat of the body to the surface, and there condensed in passing through the pores. But the researches of modern physiologists sufficiently prove that every hair does properly and truly live, and receive nutritive supply for growth and distention like the other parts.

I do not, however, think that the physiology of the hair is better capable of being understood by describing its life and growth as different from the rest of the body; as not being immediately derived therefrom, nor reciprocated therein. Nor is the comparison of the nature of vegetation any degree better. When we speak of the hair, we speak of that in the aggregate which possesses individually a separate life and a distinct economy. A reference to the hair is a reference to that which points to a distinction, and illustrates a difference, between the growth of vascular and non-vascular tissues.

The immediate cause of the mode of growth of vascular and non-vascular tissues being apparently so different, reposes in the formation of new cells from the supply of nutritive matter. In the vascular tissues the nutritive fluid can permeate every part of them, and new cells, which are afterwards transformed into the elements of the tissue, can consequently be formed throughout their substance.

But the non-vascular tissues, as the hair, being accessible to the nutritive fluid only at the surface, where they are in contact with a vascular tissue, the addition to their substance, by the formation of new cells, and conversion of them into their proper tissue, can take place only at this surface. This constitutes the only essential difference between these two classes of tissues.

We spoke of each hair possessing a separate life and a distinct economy, and such is the case. For the hair is not deposited in its proper form by the organized matrix, like so much unorganized lifeless matter; but the nutritive material being furnished by the vascular matrix, the elements of the non-vascular part form themselves by spontaneous assimilation, and by the same process as those of the vascular tissues.

Notwithstanding the character and formation of the hairs, as thus described, they possess a definite structure, or organization, and afford confirmation of our previous remark, that the vessels are merely destined to pour out the materials for nutrition, while the formation of the elementary parts of each hair takes place in the matter effused, independently of any action of the vessels.

Braunston, Northamptonshire, Dec. 1846.

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FURTHER OBSERVATIONS

## ON THE ADMINISTRATION OF ARSENIC,

CHIEFLY IN REPLY TO DR. WINTLE.

By THOMAS HUNT, Esq., M.R.C.S. E., Herne Bay.

In The Lancet for December 19th, No. 25 of last volume, Dr. Wintle charges me with having committed "a most serious error," in limiting the dose of arsenic to five minims; and he produces a single case, "the sequel" of which proves, in his opinion, that "the liquor arsenicalis may be not only safely, but beneficially prescribed, in much larger doses than Mr. Hunt allows." He adds, "I could adduce other cases, and my impression is, that if the medicine had not been so increased, the good effect would not have been produced, or a much longer time would have been required." In reply, I have only to refer Dr. Wintle to the numerous cases which you have done me the favour to publish in The Lancet since January last, nearly all of which tend to prove the efficiency of arsenic in small doses in diseases of the skin. Let me do him the justice, however, to acknowledge that his case is most interesting, and illustrates the readiness with which cases of ecthyma in the head or face, accompanied with a sense of heat in the head, and with some degree of monomania, (the pulse being natural or feeble, and the general health unimpaired,) will yield to arsenic, the medicine appearing to control the cerebral disease, while it cures the skin. I could produce cases in corroboration of this, in which depletion, blistering, and low diet, had aggravated every symptom.

With Dr. Wintle's closing remarks on determining the dose of medicine by its effects, I cordially agree; and, indeed, his observations are little more than the echo of my remarks in The Lancet, (page 77, Jan. 17th, 1846.) I have to thank your correspondent for the opportunity which his paper has afforded me, of introducing some further observations on the conditions requisite for the safe and effectual administration of arsenic in cutaneous diseases.

Than arsenic, there is no article of the materia medica, concerning which there exists in the profession more discrepancy of opinion. Even within the last two years, most contradictory accounts have been published of its effects, its proper doses, and its rightful mode of administration. On the one hand, a very large section of the profession repudiate it altogether, and some few are not sparing in their invectives against the temerity and recklessness of those who are in the habit of prescribing it. On the other hand, Dr. Wintle chides me with imprudence and folly for restricting the dose of this potent mineral within any limits whatsoever, save those suggested by its effects in a given case, of which effects he gives us no intimation, except so far as they appear to have been curative.* This extreme variation of opinion and practice may be accounted for, and I am the more anxious to explain it, inasmuch as I have observed, that while those who are bold in the use of the poison in large and increasing doses, are generally (not always) men of small experience, and limited reading; the better informed members of the profession—i.e., the readers of old and standard works, are frequently to be found taking their stand among the ranks of the repudiators. All sound, practical knowledge, is derived from carefully comparing the experience of former generations with the aggregate of "modern instances."

The ancient therapeutical records of arsenic, while replete with promise, are mingled with details of a startling and terrible character. Passing over the testimony of Hippocrates, Galen, Dioscorides, Otto Tachenius, and others, (who, while they extol the medicinal virtues, speak in admonitory terms of the perils attending the use of the medicine,) our attention is arrested by the reported effects of the poison in the hands of Paracelsus. Crato charges him with "curing leprosies, and causing epilepsies;" and with "curing some into absolute blindness, who before saw tolerably well." Oparinus and Erastus both confirm these accusations; and the latter author adds, that "Paracelsus, arriving at Basle when a malignant fever was raging there, it was observed of *all* his patients, that though they escaped present death by the activity of his *mineral preparations*, yet not a man of them outlived a year; whereas, under the hands of other physicians of the town, many died of the disease, but those who were cured had no after-reckonings to make, but many of them lived to a good old age."†

Hufeland says:—"There is no remedy which cures fevers so quickly, and in so marked a manner, as arsenic; but the speedy suppression is detrimental to the organism; for after a considerable time we find the patient afflicted with marasmus, phthisis, dropsy, and abdominal obstruction. It is more than a hundred years since this treatment was abandoned in Germany; and during the twenty years that Fowler has renewed it in England, I have more than once had occasion to observe its disastrous effects."—(*Journal de Médecine*, 1811.)

It would be easy to multiply quotations from ancient and modern writers in proof of the dangers of arsenic as a medicine; but my present business is to inquire whether these dangers can be averted, or whether, they being inherent in the mineral, it is the duty of every prudent practitioner to abandon the use of a remedy which, I suspect, has no substitute in the pharmacopœia. Now it is well known that arsenic will not cure malarious fevers in small or decreasing doses. It may therefore be assumed, that the perils above recorded attended its use only in large or increasing doses. Again, the writers who record these disastrous effects give us no intimation of any symptom denoting an overdose. The destructive agency of arsenic has therefore occurred in the hands of men who knew not how to control its use. In such hands it was a war-horse without a curb—a powerful steam-engine without a safety-valve! But a safety-valve has been discovered; and now, allow me to ask, which is the greater folly, to abandon a powerful medicine which has been proved to be under perfect control, or to use it without the safety-valve? We might as well abandon steam as a mechanical agent, or load the valve to the destruction of our fellow-creatures! Let us use the medicine; but use it discreetly. Let us not repudiate it; but let us beware of an over-

* Surely it would not be too much to expect from a writer who administers arsenic in unlimited doses, that he should distinctly state the symptoms of an overdose.

† Pharmacologia Anti-Empirica. By Walter Harris, M.D., 1683.

dose. It behoves every practitioner who prescribes so virulent a poison, to acquire an accurate knowledge of the phenomena to be expected under its use, not only as regards the suspension of diseased action, but more especially with reference to its influence on the general economy. This knowledge, it is true, has but recently dawned upon us, and the field is still open for further inquiry; but enough is known and published to secure the safe administration of the medicine, while it enables us to treat successfully the most inveterate cases of lepra, psoriasis, lupus, &c., as well as other diseases hitherto reckoned incurable, concerning which I hope to communicate some invaluable information on a future occasion.

I have already demonstrated, that arsenic, in five-minim doses, generally produces a slight degree of inflammation of the conjunctiva, tumefaction of the lower eyelid, and an increased secretion of tears; that these symptoms, while they *accompany* the salutary influence of the remedy, actually *precede* every other deleterious influence, and that these conditions depend upon the arsenic being taken on a full stomach, not, as Dr. Cormack and others recommend, on an empty one. I have further shown, that when the conjunctivitis becomes evident, the arsenic is in full operation over the disease; that this amount of therapeutical power cannot be increased by augmenting the dose, but is more fully secured by diminishing it; and I may now add, that I have often found that if the dose be not diminished, and more especially if it be increased, the disease, instead of getting well, often becomes unmanageable. And recent observation has revealed to me another important principle—viz., that whereas conjunctivitis is a primary effect of small doses of arsenic, it has also, after a time, a secondary effect. The trunk of the patient first, and, subsequently, all those parts of the body which are by the dress protected from the atmosphere, become covered with a dirt-brown, dingy, unwashed appearance, which under a lens reveals a delicate desquamation of the dermis, and is, in fact, a faint form of pityriasis. Now this appears to me to be an indication of a secondary form of arsenicalization; for I have observed, that when the dose is diminished under conjunctivitis, the eyelids may be allowed to get well, yet if the patient's skin be kept brown, the disease will vanish just as rapidly as though the conjunctiva were kept sore, which I once thought necessary. The first and larger dose of the arsenic appears to knock the disease down, (so to speak,) and to exhaust its energy. Its less malign, or secondary form, will be subjugated by the secondary or pityriatic action of arsenic. I have repeatedly watched these interesting processes with the most jealous attention, and commend them to the observation of your readers.

Herne Bay, Jan. 1847.

## Reviews.

*Practical Observations and Suggestions in Medicine.* By Marshall Hall, M.D. First and Second Series. Churchill, 1846.

These two volumes consist of papers already printed in different publications, or prepared for the press formerly, and, also, of numerous short articles strictly coming under the heads of the title, as Observations and Suggestions in Medicine. The author, having laboured zealously, through a tolerably long professional life, at subjects of comprehensive and lasting importance, has chosen to gather up the minor productions of his mind, which before lay scattered, and with these he has interwoven enough of new and practical matter to make them interesting to the mere lovers of professional novelty. The chief topics introduced are diagnosis, the earliest subject treated of by our author, and one to which he proposes to devote a great part of his remaining professional life: there is scarcely a page, indeed, in which something relating to this subject is not apparent. His discoveries in the nervous system are frequently referred to, and he has successfully attempted to place the subject intelligibly before his readers in short succinct articles. The essays on puerperal diseases, on which the author's earliest reputation as a practical physician was founded, are given, and they are almost as valuable now, after a lapse of many years, as when they first appeared in print. The subjects of bloodletting, intestinal irritation, paralysis, the physiology of disease or living pathology, in which Dr. M. Hall stands almost alone, are tersely and ably handled. Dr. M. Hall's earlier papers contributed to the Royal Society are also reprinted. These, and a great number of minor points of theory and practice, make up the present volumes; and the author announces his intention of passing on to a third of the same kind. Enough has been said to show that the Observations and Suggestions are valuable; still they must be taken for what they are, not as their author's most important works; they must be judged of as the labours of his leisure hours, rather than of his studious toil. There is always a tendency to criticise severely any minor publication from a man who has previously produced greater works; but much of the material now collected was produced in detached forms many years ago, so that the author is scarcely open to this kind of judgment. Nevertheless, we have seen critics so unfair as to positively estimate Dr. Hall's worth as a practical physician from these little volumes. We have seen them placed side by side with the ripe and mature works of such men as Abercrombie and Dr. Holland, and, of course, the balance given against Dr. Hall. Nothing can be more preposterous or unjust; if a trial is to be made, place the great works of our author by the side of the greatest works of any other modern physician, living or dead, and we are sure neither Dr. M. Hall nor his friends need fear for the issue.

But further, the criticisms upon these volumes have been made, by the ancient enemies of Dr. Hall, the vehicles of new slanders, and new attempts to rob him of his claim to originality in his discoveries in the nervous system. One of these attempts — that contained in the current number of the *British and Foreign Medical Review*—we feel it incumbent on us to notice. Many years ago, Dr. Hall was interrupted in his labours by an impudent pretence, on the part of this Review, of finding a "complete anticipation" of his doctrines in the works of Prochaska. Other congenial spirits supported the weak invention, by proving, from the records of the Royal Medical and Chirurgical Society, that Dr. Hall had actually borrowed Prochaska's works from the library, and they gave this as a clinching proof of Dr. Hall's dishonesty; thought he same jealous eyes that took note of the fact, saw, but said not, that Dr. Hall did not borrow the Society's copy of Prochaska, till long *after* the publication of the discovery of the reflex function. Dr. Hall instantly refuted the insinuation.

We quote the words in which, on the present occasion, the *British and Foreign Review* repeats its assertion of "complete anticipation" on the part of Prochaska:—

"On former occasions, we took some pains to notice the physiological views of George Prochaska. In our fifth volume, we reprinted the whole of his chapter on the functions of the Common Sensory; and in our ninth volume, we discussed, more at length, the claims to priority of neurological discoveries, in an historical retrospect of the whole subject. We then pointed out the real meaning of the terms used by Whytt and by Prochaska, and maintained, that on a due consideration of the true value of those used by Prochaska, his doctrines did, in fact, constitute, as we stated, '*a complete anticipation*' of Dr. Hall's doctrine of a reflex function. 'It is perfectly evident,' we said, 'that Prochaska had a very distinct idea of the function of the spinal cord and medulla oblongata as a centre of reflected action; and that he specified the principal classes of these, referring them all to the excitement of impressions. We do not see,' we added, 'what essential difference there is between this doctrine and that of the *reflex* function of the spinal cord, as *first* propounded by Dr. M. Hall.'"

In behoof of these opinions, and to show the "complete anticipation," the writer proceeds to give, *seriatim*, the points claimed by Dr. Hall, quoting his own words; and he then produces a translation from the "Adnotationes Academicæ" of Prochaska, as a triumphant support of his position.

We shall follow the reviewer by reproducing these claims, and by showing, from the very passages adduced in support of the contrary opinion, that, in the judgment of all having eyes to see, the decision must be irrefragably in favour of Dr. M. Hall upon the very points raised in question. The reviewer quotes a passage from Dr. Hall, in which he says:—

"My real objects have been,—

"1st. To separate the reflex actions from any movements resulting from sensation and volition.

"2ndly. To trace these actions to an acknowledged source or principle of action in the animal œconomy,—the *vis nervosa* of Haller acting according to *newly-discovered laws*.

"3rdly. To *limit* these actions to the true spinal marrow, with its appropriate *incident and reflex nerves*, exclusively of the cerebral and ganglionic systems.

"4thly. To apply the principle of action involved in these facts to *physiology*—viz., to the physiology of *all* the acts of exclusion, of ingestion, of retention, and *of expulsion*, in the animal frame.

"Finally, it is to these objects, taken as a *whole*, or as a *system*, that I prefer my claims; and I do not pretend that an occasional remark may not have been incidentally made by some previous writer bearing upon some one or more of them."

In subsequent pages, the reviewer passes before him at length the writings of Prochaska, and after much distorted reasoning, comes to the following conclusion:—

"We merely say that he (Dr. Hall) was culpably ignorant of what he ought to have known, and that he had the misfortune, not the fault, to be entirely anticipated, in all the essential parts of his doctrine, by others, and especially by Prochaska. So stood the case, we may admit, in 1832, or even in 1833, the date of Dr. Hall's first memoir. But how stands it now? How has it stood since 1835, the period at which Dr. Hall acknowledges he became acquainted with the writings of Prochaska? How, more especially, has it stood since April, 1838, when we, in this journal, and about the same time Mr. Durancé George, in the *Medical Gazette*, first disclosed to physiologists the claims of the Professor of Prague, and forced them more particularly on the attention of Dr. Hall? Very different indeed: to Dr. Hall, disgracefully different; inasmuch as, instead of acknowledging the merits of his predecessor, when made known to him, or admitting, in any degree, the similarity of his doctrines to his own—a similarity, to use no stronger term, which it is impossible for any unprejudiced person to deny—he has either studiously passed over in silence, or openly ridiculed and maligned, Prochaska's doctrines, and poured on the heads of those who did no more than assert their resemblance to his own, all the venom which his bitter nature could engender. And up to the very hour at which we write, he continues, as we have seen, to boast, as loudly as ever, of his originality; although for more than ten years he has, by his own showing, been familiar with the very writings which we have proved to contain, not merely the elements, but the developed germs, of his early doctrines, and from which he has demonstrably drawn not a few of the materials wherewith he has since so greatly modified them. We can add no comment, in words, that can in any way emulate, in damning potency, the eloquence of this simple statement. It is grievous to be forced to write it down — it is melancholy to contemplate its full import; we shall therefore turn from the painful theme, and hasten to conclude our task."

Amiable critic! lugubrious dulness! Let us also turn from the painful part of the theme, and show thee how thou mayest take comfort. Thy intended victim is not to be killed off by any critique. Thou art as much out of place in thy melancholy, as a veritable mute would be, standing with stave and band at the door of a house where all within was health and vigour.

We will take Dr. Hall's first claim, and contrasting it with what the Reviewer translates from the Latin of Prochaska, show the validity of claim the first:—

"*To separate the reflex actions from any movements resulting from sensation and volition.*"

Prochaska is made to say, by the Reviewer—

"That the common sensory extends to the medulla spinalis, is manifest from the motions exhibited by decapitated animals, which cannot take place without the consensus and intervention of the nerves arising from the medulla spinalis; for the decapitated frog, if pricked, not only *withdraws* the punctured part, but also *creeps* and *leaps*, which cannot be done without the consensus of the sensorial and motor nerves, the seat of which consensus must necessarily be in the medulla spinalis."

Here the words "withdraws," "creeps," and "leaps," evidently mean something different from what we now understand by mere physical reflex action. The "consensus," the "law written on the medullary pulp," is not the purely physical incident and reflex action of Dr. M. Hall. In another sentence, Prochaska shows this by saying, "Decapitated animals are observed to continue for a few moments to perform movements *with design*." Dr. M. Hall's doctrines are entirely opposed to the presence of *design*, on the part of the animal, in such movements.

2. Prochaska is further quoted by the Reviewer—

"Irritation being made on the internal membrane of the nostrils, excites sneezing, because the impression made on the olfactory nerves by the irritation, is conducted along them to the common sensory, there by a definite law is reflected upon motor nerves going to muscles employed in respiration."

Now the olfactory nerve is a nerve of special sense. If any movements occur from irritation of the olfactory nerve, they depend upon sensation, and not upon reflex action. The fifth is the excitor spinal nerve of the nostrils, not the first.

3. Again,—

"If a friend brings his finger *near to our eye*, (actual contact is not here expressed;) although we may be persuaded that no injury is about to be done to us, nevertheless the impression carried *along the optic nerve to the* common sensory, is so reflected upon the nerves devoted to the motion of the eyelids, that the eyelids are involuntary closed, *and prevent the offensive contact* of the finger with the eye."

Here, again, sensation is mistaken for an incident impression. The closure of the eye, which takes place when a blow is aimed at it by way of feint, is entirely different from the closure which takes place when the eyelid or the conjunctiva are touched. The one is spinal, the other dependent on sensation and emotion. Pointing the finger to the eye of one blind, however near the finger approached without touching, would not produce closure of the lid, unless the patient was conscious of the proceeding.

In another quotation, we find the following:—

"If the vis nervosa be increased in the common sensory, there results, firstly, that the external impressions made on the *sensory* nerves, and carried to the common sensory, are too suddenly and violently reflected, and pass on to the motor nerves, and thus excite *movement* and *convulsions*, contrary to the will of the soul, as happens in the *frights* of infants, and also of some adults, who are *terrified* by some trifling crash or noise."

Here the movements or convulsions, arising from *emotions*, as of *fright* or *terror*, are confounded with reflex spinal actions. Yet with these facts before him, the Reviewer asserts that "Prochaska *did* separate the reflex actions from any movements resulting from sensation and volition." We need make no assertion after giving the proofs, which might have been multiplied, that he *did not* do so.

We proceed to the second point of Dr. M. Hall's claim to originality, to which our Reviewer so bitterly demurs.

"*To trace these actions to an acknowledged source or principle of action in the animal economy—the vis nervosa of Haller acting according to newly discovered laws.*"

The Reviewer, in attempting to refute this point, entirely misapprehends the whole sentence. Dr. M. Hall defines the term *vis nervosa*, the motor power of Haller, the simple excito-motor power, as being quite distinct from the power of voluntary motion and sensation. Prochaska meant by the vis nervosa, a power inherent in the whole nervous system, concerned in sensation, in volition, and in the automatic movements irrespectively. One or two quotations will be sufficient to prove this.

"This fitness of the nerves to receive impressions, and quickly transmit them, either way, along their whole length, ought to be called the *vis nervosa* of the nerves; it is also properly called the *sensibility* or *mobility* of nerves; *or*, as Unzer also rightly termed it, the *corporeal* sense, without concomitant perception."

Again, Prochaska speaks of the *vis nervosa* as common to sentient and motor nerves. He describes—

"The equal function of the nerve in exciting sensation and motion—namely, to receive the impression of a stimulus, and to pass it quickly along its whole length, which impression, when it comes to the brain, causes a perception of a sensation, but if to the muscle excites its contraction."

Thus, then, Prochaska's idea is not Dr. Hall's idea of a pure motor power, inherent in the excito-motor system only, and quite distinct from the sensational, and voluntary motor, powers.

But Dr. M. Hall lays the greatest stress upon the "*newly-discovered laws*" according to which the *vis nervosa* acts. He teaches the doctrine of a *retrograde* and a *direct* action of the vis nervosa in the spinal marrow itself, and of an incident and reflex action along spinal excitor nerves; from excitor nerves *to* and *through* the spinal marrow, and along spinal or pure motor nerves *from* the spinal marrow *to* the muscles. We now quote a passage respecting the *vis nervosa*, which ought, according to the Reviewer, to be parallel with, or anticipatory of, this view. Our readers will be puzzled to find any similarity whatever.

"If an impression be made on the extremity of a nerve, termed an external impression, it is most quickly propagated along the whole length of the nerve as far as its origin, and, *vice versâ*, if an impression be made on the origin of the nerve, termed an internal impression, this also most quickly descends along the nerve to its termination; but if the impression be made on the trunk of a nerve, it is at the same moment quickly propagated both to the origin and termination."

We ask, is there here anything similar to, or anticipatory of, the excito-motor arcs of Dr. M. Hall?

This brings us to the third object set forth by Dr. M. Hall —namely,

"*To limit these actions to the true spinal marrow with its appropriate incident and reflex nerves, exclusively of the cerebral and ganglionic systems.*"

Prochaska treats of the *common sensory*, as the place in which sensorial impressions are reflected into automatic motor actions. Of this he says,—

"It certainly does not *appear* that the whole of the cerebrum and cerebellum enters into the constitution of the common sensory, which portions of the nervous system *appear rather* to be the instruments that the soul directly uses for performing its own actions, termed animal; but the common sensory, properly so called, *seems not improbably* to extend through the medulla oblongata, the crura of the cerebrum and cerebellum, also part of the thalami optici, and the *whole* of the medulla spinalis; in a word, it is coextensive with the origin of the nerves."

Any one may perceive that these are the ingenious probabilities of an acute and speculative mind, instead of the certainties of an experimental science like physiology. The spinal marrow of Prochaska is a centre from which sensorial impressions are supposed to be reflected upwards to the brain, and downwards to the muscles. Dr. M. Hall's "*true* spinal marrow" is a very different matter. He separates experimentally the spinal marrow, which was considered one organ by Prochaska, into *two;* the *true* spinal marrow, the organ of *physical* motion, completely different and distinct from the intra-vertebral cord of nerves, which belongs to the cerebrum, and which is the instrument of the *psychical* motions. Prochaska held nothing approaching to a definite idea of the division of the medulla spinalis into two organs—the one cerebral, the channel of the *vis mentalis;* the other, true spinal, the seat of the *vis nervosa*, the purely physical motor power of the animal economy.

Neither is there to be found in Prochaska or in any other writer, the slightest approach to a conception of an excitor spinal nerve distinct from the nerves of sensation, though residing in the same sheath. Neither was there any idea of the compound nature of the nerves of motion. Few persons, even at the present time, apprehend Dr. Hall so far as to see, that according to him the motor nerve, which produces a reflex motor act in any muscle, is different and distinct from the motor nerve producing voluntary movements of the same muscle: the one, in fact, influenced by the *vis nervosa*, the other by the *vis mentalis*, as in the spinal and cerebral divisions of the spinal marrow itself.

These actions of the spinal marrow exist too "exclusively of the cerebral and ganglionic systems." This is proved by an experiment performed on the frog:—

"1. Remove the brain. 2. Remove all the viscera. The first operation removes the centre of the cerebral system; the second, almost every branch of the ganglionic. What then remains? The spinal marrow — the *true* spinal marrow, hitherto undistinguished from the spinal *cord* of cerebral nerves, and the spinal connexions of the ganglionic system."

The next object set forth by Dr. M. Hall is,

"*To apply the principle of action involved in these facts to physiology—viz., to the physiology of all the acts of exclusion, of ingestion, of retention, and of expulsion, in the animal frame.*"

Prochaska gives a number of morbid reflex acts, such as coughing, vomiting, sneezing, and closure of the eyelid, from irritation, which he explains by means of his common sensory and the conversion of sensorial impressions into motor actions. He then sums up all into what he terms a general law.

"The general law, however, by which the common sensory reflects sensorial into motor impressions, is *the preservation of the individual;* so that certain motor impressions follow certain external impressions, calculated to injure our body, and give rise to movements having this object—namely, that the annoying cause be averted and removed from the body, and, *vice versâ*, internal or motor impressions follow external or sensorial impressions beneficial to us, giving rise to motions tending to this end—namely, that the agreeable condition shall be further conserved."

The British and Foreign Reviewer follows him as interpreter by saying,

"Prochaska also applied the principle of action of his common sensory to physiology, beautifully and clearly pointing out the general law by which it regulated its operations—namely, the law of preservation of the individual; not simply by the avoidance of the painful, but by attaining the pleasurable."

Again, the Reviewer, in reply to the assertion made by Dr. M. Hall, that "we have not in any author" the idea of "a reflex *physiological* act," exclaims:—

"Is it not staringly apparent that there *is* an idea of a *reflex physiological act* in Prochaska's illustrations, derived from the acts of sneezing or coughing? Does not Dr. Hall himself reckon them among the acts of 'expulsion'?"

Finally, in reply to another assertion of Dr. M. Hall's, that neither Whytt, nor Prochaska, nor any other author, had ever "associated *one physiological act* with any reflex *function* of the spinal marrow," the reviewer triumphantly says,—

"If Prochaska has not associated the physiological acts of vomiting, sneezing, coughing, (from an impression on the sensory nerves,) with a reflex *function*, appropriated to a certain portion of the central axis, then words have no meaning, and language convey no ideas."

Certainly, there are persons to whom words have no meaning, and to whom language conveys no ideas; and the Reviewer stands at the head of the class. He confounds *action* with *function*, and *physiology* with *pathology*, throughout. We suppose any one may, if they please, comprehend that sneezing from the introduction of irritating particles into the nares is a reflex *act*—a reflex *action* of the muscles of respiration; but that the play of the respiratory muscles, from the first respiration till death, excited, in the first place, by the contact of cold air with the surface of the body, and maintained, ever afterwards, by the formation of carbonic acid in the lungs, acting as an excitor of reflex action through the pneumo-gastric nerve, the medulla oblongata, and the respiratory motor nerves, is a *function*, the *function* of respiration; of the true nature of which there was nothing approaching to a clear and definite idea, before the researches of Dr. M. Hall. Yet upon no other evidence than that morbid

respiratory acts were called reflex in the speculative and ingenious writings of Prochaska, this critic claims for him a knowledge of the *function* of respiration. He jumps to a conclusion in these words:—

"Thus respiration is shown to be an excited act, and, *therefore*, ordinarily and habitually reflex in its nature."

The whole weight of the argument is made to rest on an illogical "thus" and a "*therefore*."

We have said the Reviewer confounds physiology and pathology. He positively does not know that "vomiting, sneezing, coughing," are all pathological reflex actions; to him they are all "physiological acts." Neither vomiting, sneezing, nor coughing, can ever take place, but from some morbid irritation. Dr. M. Hall, we are sure, never treated of them as physiological "acts of expulsion." If they were physiological, then one might die of the physiology of pertussis, or the rejection of food from the stomach. Does not such blundering admirably illustrate the fitness of the Reviewer for his office, and fix the value of his criticisms?

Much stress is laid by the Reviewer on the final end proposed for the reflex *acts* by Prochaska, "the preservation of the individual, *nostri conservatio*," and an identity of meaning between Dr. M. Hall and Prochaska is contended for, because Dr. Hall also sums up the function of the true spinal marrow under "all the acts of ingestion and egestion, in their relation to the *preservation of the individual*, and the propagation of the species." But the *nostri conservatio* of Prochaska applied to such acts as sneezing, coughing, the closure of the eye on the approach of a foreign body, conservative acts not natural to the system, but excited by the presence of substances irritating to the body, and being of a pathological kind. Dr. Hall, on the other hand, distinctly sums up all the acts of ingestion and egestion, the physiological acts by which air, food, and semen, are ingested, and the contents of the bladder, rectum, vesiculæ seminales and uterus, are egested from the system, for the preservation of the individual, and the perpetuation of the race. Though the words are alike, there is no similarity whatever in the meaning intended to be conveyed.

In all that we have said, we desire to be distinctly understood as intending to throw no discredit on the name and fame of Prochaska. We grant him a most subtle reasoner, considering the data on which his reasoning rested, far in advance of his contemporaries. But his physiology was not founded upon experiment, the only sure basis, and without which no great physiological discovery was ever yet made. His ingenious speculations are not the discovery of the spinal marrow; and though we would not in aught dishonour the memory of a great man dead, we would not meanly, and with a vain affectation of honesty and generosity, fawn upon and flatter him at the expense of a great man living.

On a review of the whole subject, we believe Dr. Hall fully and perfectly entitled to say, as he does,—

"*Let any one compare the distinct detail of my views with the observations of Prochaska, and he will at once discover that there is nothing in that author possessing the most remote similarity to those views.*"

Dr. Marshall Hall is a man of exact, mathematical mode of thought; if he had not been so, it is impossible that he could have ever seized and made plain the mystery of "the silver shining cord." The nearer those who read and study him approach to his exactitude, the greater the dissimilarity between his views and those of Prochaska, or any previous author. It is only loose, inaccurate, uninformed thinkers who would dream, in the present day, of attempting to show any similarity.

We may also ask—Was there ever such a tissue of ignorance or malignity as that we have attempted to follow and expose? Any one, understanding even the alphabet of the subject, may see that the Reviewer either stupidly mistakes Dr. Hall's meaning, or wilfully perverts it. If it be sheer ignorance and inability to comprehend the doctrine of the reflex function of the spinal marrow, then we may smile at the physiological Dogberry; but if it be malignity, the envy, hatred, and all uncharitableness, of a mean mind, he well deserves the invective launched against Zoilus—

"Non est vitiosus sed vitium,"

and his impotent "damning" to be reflected back upon himself.

But we turn from this specimen of the serpent biting the file, not merely with its teeth, but after its teeth are entirely gone, to an eulogy on Dr. M. Hall, which appeared in another quarterly, the *Medico-Chirurgical Review*, on the same day with the abominable and false slanders we have endeavoured to expose. Any one who turns to the *Medico-Chirurgical Review* will perceive that this is written by no friendly hand; but the praise is therefore the more valuable.

"No one can reasonably deny that he is a man of uncommon powers of mind, of unwearied industry, and indomitable energy; that he has long and successfully laboured in the vineyard of medical science; that varied writings proclaim him to be a keen observer and a subtle reasoner; that his discoveries in physiology have justly gained for him a foremost place among the investigators of that science; that to him alone belongs the rare honour of having first clearly propounded, and manfully worked out, one of the most perplexing problems in the history of animal life, unravelling the meshes of a most intricate perplexity, and pointing out the clue—the Ariadne thread of guidance—to all future explorers through the labyrinth of former darkness and confusion: that he has thus not only stamped the impress of his thoughts on the medical literature of the day, (one of the surest proofs of original genius,) and achieved for himself a world-reputation, but that he has also added to the intellectual and scientific fame of his country, which may now—thanks to the labours of Harvey, Bell, and Hall—justly claim the undisputed glory of being the birthplace of the two mightiest discoveries in physiological science. But these are not the only merits of our author. His more practical writings, even from the very outset of his career, have contributed, in no trifling degree, to render the symptomatology and discrimination of many diseases more accurate and intelligible; and although he has been apt on some occasions to exaggerate the importance of a few phenomena or signs for diagnosis and treatment, we cordially award him the praise of having done good service to the practice of medicine."—p. 164.

The same writer alludes to the conduct of the *British and Foreign Medical Review*, and the *Edinburgh Medical Journal*, in relation to Dr. Hall and his discoveries.

"That Dr. Hall has met with most unhandsome and unjust treatment from several of our contemporaries cannot now be gainsaid by any impartial witness. While one party has vainly attempted to rob him of his fair fame, another has, with equal impotence, thought to quench the torch of discovery by refusing to act as one of its honoured light-bearers. No such reproaches can be made by any one against us. We have uniformly maintained the justice of his claims as a great and original investigator of physiological science, against all envy and detraction."—p. 165.

These were literal truths when they were written; but the wickedness and folly of former attacks are outdone by the last, and we are promised more of the same deformed brood.

Dr. Hall may, however, well afford censure or condemnation from such a source,—as well expect "the worms of Nile" to be free from venom, as a foiled and disappointed bookworm to be delivered from the malice of his bitter rancour. The Review in question has been established many years. During that space it has not, as the medical world well knows, been stinting of self-praise. In its early youth it had the good or bad fortune to be proclaimed unparalleled by some friendly critic. Ever since, this single criticism has formed the staple of its advertisements. It has been like the one kiss of the ancient Lady Bellenden in her far-off youth, esteemed and boasted, with occasion and without occasion, to all comers. And what has this publication really done to feed its self-gratulations?—what bad men and works has it done to death,—what good ones raised and succoured? Let us endeavour to strike the balance. If it has driven Müller, the prince

of experimental physiologists, from this country, has it not raised up an image of brass and clay in his place? If it has perverted the deductions and precious facts of Louis, so as to turn this great and good man falsely against legitimate medicine, has it not praised Priessnitz, and gloried in the cold water cure. If it has sneered down the science of another of our own great men, the venerable Dr. Prout, have not its writers vouchsafed a smiling aspect towards Mesmer and Mesmerism, and promised to treat it like any other branch of "science"? If it has striven to drive Dr. M. Hall from out the esteem of his day and generation, has it not eulogized Hahnemann as an illustrious renovator of the medical art; and if it has everywhere vilified Old Experience and Modern Science, has it not promised us a professional regeneration from its own hopeful offspring, "Young Physic?"—the impersonation of scepticism in all science and art, gloating over the darkness visible of a medical chaos which it hopes to create, and where it would desire to reign!

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*Rapport a l'Académie Royale de Médecine sur la Peste et les Quarantaines, fait, au nom d'une Commission,* par M. Le Dr. Prus. Accompagné de piéces et documents, et suivi de la discussion dans le sein de l'Academie. pp. 1056. A Paris: chez J. B. Baillière, &c. 1846.

*Report to the Royal Academy of Medicine on the Plague and Quarantines, edited, on behalf of the Commission,* by Dr. Prus. Accompanied by documents and papers on the subject, and followed by the discussion in the Academy, &c.

This report of the French Commission is to us peculiarly interesting in many respects. It affords evidence, that in one European country, at least, medical men are properly entrusted with a grave and responsible duty—the solution of a question, involving not only the interests of commerce, but the lives of millions of people. This is most satisfactory. Our government, although our most valuable colony,—India, is continually scourged by cholera, and although that dread disease has even desolated this island, has never cordially endeavoured to elicit the collective opinion of medical men on the subject. A thousand disconnected monographs, and various discrepant reports, have appeared from time to time. But no encouragement has been given to a general "concours" on this subject. Our Colleges of Physicians and Surgeons have their little, but to them all-important, intrigues to manage; for an affair of this kind they can afford no time. And this, whilst our brave army is decimated by this disease on the plains of India!

Our neighbours manage such things very differently. The mere probability of an attack of plague at Marseilles or Algiers, and an enlightened wish to revise the laws of quarantine, so far as may be consistent with public health, have been sufficient reasons to induce the Royal Academy of Medicine, at Paris, to appoint a commission to investigate the matter in all its important bearings.

The two thick volumes before us, presented to the public under such auspices, are composed of three distinct parts:—1st. The report itself. 2ndly. The evidence, written and verbal, on which it is founded; and 3rdly, the subsequent discussion in the Academy. A public document of this importance deserves more than a passing notice. To the members of the Commission, and on the medical institutions of the kingdom that appointed them, it reflects the highest honour. Nor must we withhold our humble tribute of praise from M. Le Dr. Prus, the indefatigable secretary of the Commission, under whose care the work has been edited.

To the Report itself, as the most important section, we shall direct our chief attention, and endeavour to present our readers with a brief analysis of its contents. The first question discussed is the important one of the endemicity of the plague,—the fact that certain localities are permanent foci of this disease. Connected with this point, it becomes of importance to ascertain the antiquity of the disease, and for once medical antiquarians may serve the profession usefully. The Commission do not consider the symptoms described by Thucydides, in the memorable plague of Athens, sufficiently distinctive to mark it as the true disease of that name. The first undoubted mention occurs in the writings of Rufus, of Ephesus, a physician who lived in the time of Trajan. The passage in which he refers to this disease was first discovered at Rome by Cardinal Mai. After noticing bubo as a special disease, Rufus adds:—

"The buboes denominated pestilential are all fatal, and have a very rapid progress, especially those observed in Libya, Egypt, and Syria, and of which mention is made by Dionysius the stoic. Dioscorides and Posidonius have spoken of it at large in their treatise on the plague which ravaged Lybia in their time." "This passage proves, that three centuries before our era, the plague, marked by buboes, occurred as a sporadic disease in Libya, Egypt, and Syria. It proves, also, that in a period still more remote, an epidemic plague has devastated Libya."—(p. 12.)

The first question relative to the endemicity of the plague, which the Commission has endeavoured to solve, is, "In what country or countries has the plague commenced spontaneously?" To this the following general answer is given:—"The plague has commenced spontaneously, not only in Egypt, Syria, and Turkey, but in a great number of other countries of Africa, Asia, and Europe." This opinion, however, is qualified by the observation, "that at present the importation of the plague is chiefly to be feared from Egypt alone."

The second question proposed is—"Can we attribute the spontaneous development of the plague to certain conditions militating against the health of the community?" Are these the result of climate, or is their principal source to be sought elsewhere? The question is ably discussed by the commission. The natural salubrity of the Egyptian climate is insisted on.

"Every European who enters Egypt during the fine season will be struck by the constant serenity of the sky. The air possesses that purity, which the proximity of running waters is said to impart. Passing up the Nile, the traveller will be charmed, not indeed with the dull colour of its waters, but with their fresh and sweet flavour. If he should chance to travel right or left of the river, he will be captivated by the aspect of a country smiling with verdure, covered by citron, date, orange, tamarind, acacia and sycamore trees; watered by a thousand canals and trenches, bounded by the sands of the desert, and guarded on the east and west by a double chain of mountains. The salubrity of Egypt is still further increased by the winds that blow almost daily, especially those denominated the Etesian."—(*Pariset, Mémoires sur la Cause de la Peste.*)

Such is the enthusiastic description which Pariset has given of the natural fertility, beauty, and salubrity of Egypt. "How is it, then," continues the Commission, "that in a country so abounding with natural blessings, so little exposed to injurious influences, man, through ignorance and carelessness, is ill-lodged, ill-clothed, and badly nourished, drinking putrid water, and breathing an atmosphere of pestilence?"

M. Hamont partially answers the question; and for his eloquent narration of the miseries of the inhabitant of the Delta, we must refer to the work itself. Unhappily, our profession is often the witness of misgovernment producing disease. The "fellah" of Egypt feeds on the kernels of dates, pounded and made into cakes, on putrid fish, rotten cheese, animals who have died from disease, cucumbers, and flavourless melons: he lives in mud cottages, thickly grouped together, lying on a mat saturated with moisture and filth: his residence surrounded by excrement, which, when dried, serves as fuel. Such is the melancholy picture of the rural inhabitants of Egypt. We do not hesitate to say, that the words "ignorance and carelessness," applied by the Commission to the miserable sufferers, is but a slight part of the causes inducing this wretchedness. Should we not add, what the courtesy or policy of the French Commission to the

man "who rules the destinies of Egypt" has prevented them from stating?—should we not say, that in our eyes the "carelessness and ignorance" of the fellah are trivial faults compared with the vile extortion and tyranny of the government which (we use the words of the Commission) "forbids the labourer from tasting the corn his toils have produced." This was not forgotten in the discussion of the Academy. M. Dubois, of Amiens, only spoke the language of good sense and humanity, when he said, "That in other respects it sounded like bitter derision for the Commission to express their satisfaction at the parental character of the Egyptian government from the fact, that Mehemet Ali had *conversed* with M. Pariset, Gaetani Bey, and Clot Bey, on the best means of ensuring food and healthy habitations to all." The evil remains unredressed; the misery is still without amelioration; still the same grinding tyranny exists. "And although," continues M. Dubois, "it would perhaps have been more prudent if the Commission had said nothing about a matter compromising the character of a firm ally of the French government, yet, for my part, I do not hesitate to declare the opinion, that when a country is the prey of such horrible miseries, *it is the government that must be held responsible.*" We have made this digression, because, on this, as on many other topics, it is daily becoming more obvious, that those who have studied the laws regulating the health or disease of the community, should hold no insignificant position in the eyes of the legislator. Not for the sake of professional laudation or advantage, but for the cause of suffering humanity, do we earnestly hope, that on some subjects governments will listen more to the teaching of the humane physician, and less to those versed only in mere petty conventionalities. By the observance of the wise laws of hygiene, Egypt was, according to the testimony of Herodotus, one of the healthiest countries of antiquity. By the neglect of these, it has become in some places a desert, in others, a pest house. Not only does this intense misery and fearful neglect of all sanatory considerations prevail in the villages of Egypt, but these remarks apply with tenfold more force to the cities. Cairo is peculiarly marked as a focus of the plague. Besides the narrowness of the streets, and the wretchedness of the inhabitants, there is one abundant source of disease; this is the calidj, or great canal, which runs through the city.

"This is filled, once in the year, with the water of the river. This water, thick and muddy in itself, is mixed in this canal with the drainage, and all imaginable filth. It is in this state distributed to the poor, and drank throughout the city. The sun dries up the bed of the canal, the evaporating water becomes black, and exhales such a stench that the neighbouring houses are filled with a 'mephitism' oppressing the head and nauseating the stomach."

Erzeroum, Constantinople, and certain portions of the banks of the Danube, are also mentioned by the Commission as having witnessed the spontaneous development of the plague. There are local causes of disease to be found in all, more especially in the habits and condition of the inhabitants. These, indeed, would not produce plague without peculiar atmospheric conditions, but the latter would be comparatively innocuous without the aid of the former. From these and other facts, the Commission come to the following conclusion:—

"In all countries where the plague appears spontaneously, its development may reasonably be attributed to certain assignable causes acting on the majority of the population. These conditions are, principally, residence on alluvial or marshy soils, near the Mediterranean sea, or certain rivers—the Nile, Euphrates, or Danube; small, crowded, badly ventilated houses; a warm and humid atmosphere; the putrefactive decay of animal and vegetable matters; unwholesome and insufficient food; and great physical and moral misery."

All these causes are united in Lower Egypt, and the result is, that the plague is there endemic, cases occurring at a certain season, annually, and a terrible epidemic reigning about every tenth year.

History teaches us that Egypt was one of the healthiest amongst ancient countries. During the reigns at least of the latter Pharaohs, during the 194 years of the Persian dynasty, the three centuries during which it was governed by the Ptolemies, and the 630 years in which it was ruled by the Romans, it was considered eminently salubrious. Although, no doubt, sporadic cases of plague occurred there, it appears to have been free from pestilential epidemics. But we must remember the wise care which watched over public health, and although embracing only the earlier portion of that period, yet its results extended over many subsequent centuries. "Sesostris had canals excavated for running waters; caused all cities to be built above the level of the surrounding plains, on factitious hills, and allotted to every Egyptian a portion of land for his culture, and (what is more to our present purpose) for his maintenance also." The practice of embalmment, including both men and animals, was probably an aid furnished by the ministers of religion to a far-seeing, active, and enlightened hygiene. Those who, in the nineteenth century, crowd the putrefying remains of the dead amongst the living thousands of our cities, might learn much from the customs of ancient Egypt.

The Commission conclude, therefore, that the absence of pestilence during the long period in which Egypt was blessed by general plenty, and guarded by the sanatory regulations of her ancient rulers, justifies the hope that the plague may be extinguished, and that the same results may follow the same means.

We need not make any remark on the succeeding resumés of the commission, as they bear on points principally of local interest. They are, first, "That the sanatory conditions of Syria, Turkey in Europe, and Asia, the regency of Tripoli, that of Tunis, and the empire of Morocco, are in all respects similar to what they were in periods when plague has spontaneously arisen in them, and therefore it may again appear in the same localities. Secondly. That plague is not to be anticipated in Algiers as a spontaneous disease." The Commission insist on the fact that plague may be expelled from Egypt, and conclude by expressing an opinion, that "if the plague has entered Egypt with barbarism as its attendant, we may reasonably hope that returning civilization may banish it."

We shall take an early opportunity of briefly considering the views of the Commission on the epidemic and contagious character of plague, subjects which more especially bear on the existing laws of quarantine.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JANUARY 12.—MR. CÆSAR HAWKINS IN THE CHAIR.

ON THE DETECTION OF POISON IN THE URINE. By H. LETHEBY, M.B., Lecturer on Chemistry at the London Hospital.

(*Communicated by* MR. T. B. CURLING.)

THE author briefly referred to the experiments of Wohler and Steyberger, Tiedemann and Gmelin, Orfila and others, in showing that many mineral, animal, and vegetable poisons are admitted into the circulation, and eliminated by the action of the kidneys.

These facts led him to inquire whether the various poisons might not be disposed of in a similar manner; and if so, whether their existence in the renal secretion might not furnish a hint for the treatment of cases of poisoning; and thirdly, whether their detection in the urine would not supply evidence of a very valuable character for the guide of the medical jurist.

With these objects in view, he analyzed the urine of persons under the influence of the various poisons, and tested his results by experiment upon the lower animals.

He succeeded in detecting the following poisons — sulphuric, muriatic, nitric, phosphoric, and oxalic acids; of the alkalies, he had discovered the presence of potash, soda, and ammonia; of the neutral salts, he enumerated nitrate of potash, iodide of potassium, sulphate of magnesia, the red and

yellow prussiates of potash, and chloride of barium; of the salts of the other metals, he had recognised those of antimony, arsenic, lead, mercury, copper, iron, and silver.

With the view of detecting the organic poisons, the author instituted another class of experiments, the object of which was to ascertain if the vegetable poisons would, after their administration, endow the urine with any special physiological power over the system of another animal; and the conclusion to which he came was, that the active principles of many organic poisons, such as opium, belladonna, hemlock, aconite, &c., would, in part, pass through the system, and appear in the urine unchanged.

With respect to the second question, as to whether their detection in the urine might not furnish a hint for the treatment of cases of poisoning, the author showed, from experiment upon animals, that diuretics were of great service in getting rid of poisons which had been administered to them, and thus helping them very considerably in their recovery.

The third question embraced by the paper—viz., whether the detection of the poisons in the urine might not supply evidence of a very valuable character for the guide of the medical jurist?—was proved to be an important one, inasmuch as the urine might be the only fluid or product at the disposal of the chemist; 2ndly, the evidence deduced from it might be of a positive, and therefore satisfactory kind; 3rdly, those poisons are recognised with more ease in this secretion than they are in the tissues; and 4thly, they may exist there to a larger amount than in any other part of the body.

A few other questions were referred to as having an important bearing on this subject, as—

1st. Whether every poison makes its way to the urine, and what are the characters by which it is to be recognised?

2ndly. What is the smallest amount of each of the poisons capable, after its administration, of being detected in the urine?

3rdly. What is the earliest period at which the different poisons may be recognised, and what the latest?

4thly. Whether any relation existed between the quantity discovered in the urine, and the quantity administered?

5thly. Whether there are any circumstances which may increase the facilities for their elimination, and whether there are any which may diminish them?

These were questions which the author of the paper hoped to determine at some future period; at present, he believed that the facts, as they stood, warranted the following conclusions:—

1st. That many poisons are absorbed into the circulation.

2ndly. That these poisons are eliminated by the kidneys, and may be detected in the urine, either by their chemical or physiological reactions.

3rdly. That these facts, together with others from experiment, point to the value of diuretics in the treatment of cases of poisoning.

4thly. That it is possible to obtain, from an examination of the urine, some of the most valuable and certain evidences regarding the administration of a poison.

5thly. That we should not omit to examine this secretion in every case of suspected poisoning.

In the course of the paper, the author alluded to the presence of an excess of phosphates in the urine of persons occupied in the manufacture of lucifer matches, and referred it to the inhalation of phosphoric and phosphorous acids generated by the slow combustion of the phosphorus. He proposed a very simple remedy, that of exposing shallow vessels, containing turpentine, in different parts of the building, but especially in those situations where the phosphorus was most liable to oxidation: by this means he found that the vapour of turpentine would become diffused through the atmosphere, and so check that slow combustion of the phosphorus which was the source of all the mischief to the workmen.

Dr. Golding Bird remarked that the paper just read contained some points of great interest; the most interesting, however, being, probably, the least novel. Thus it was long ago demonstrated that the kidney carried from the circulation all effete and injurious matters that were held in the blood in solution, either in a changed or an unchanged condition. This latter law was of universal application, whether it related to saline or vegetable matters.

One of the facts mentioned in the paper confirmed the experiments made by Donne and himself, (Dr. Bird,) that when oxalic acid was taken into the stomach, either as a medicine, or as it exists, combined with potash, in sorrel, it was afterwards found in the urine, forming crystals of oxalate of lime. Dr. Letheby had found it in combination with urea. The experiments on the mineral acids were evidences of the remarkable depurating action of the kidneys, as mentioned by German writers; but before we could judge of the value of these experiments, the data upon which they were made must be examined. He had no doubt of the accuracy of these researches, for it must be remembered that sulphuric and muriatic acids existed in the urine; the former becoming greatly increased if the person ate mustard or other articles containing sulphur. He had been a little surprised to hear that the mineral acids in a free state were so soon detectable in the urine; for though it was mentioned in books as possible, he had repeatedly tried to detect it, and had been vexed to find how different were the results to those he had expected. He might, indeed, observe, that he had never succeeded in making urine acid by the exhibition of the acids, except by the benzoic. He had given the sulphuric and nitric acid in cases of alkaline urine for weeks together, but had never succeeded in making that fluid acid. One of the facts stated in the paper was of a startling character—viz., that from three to five grains of arsenious acid might be safely taken into the stomach if the kidneys were stimulated to diuresis, as it would be carried off by this channel. He could not understand how this could be, unless, indeed, there was some short road to the kidneys not at present known; for the arsenic, before it reached these organs, must be absorbed into the circulation. It was difficult to understand how escape from the poison was effected. The experiments respecting the absorption of the metallic poisons confirmed the experiments of the best French chemists. His experiments, also, respecting the presence of antimony in the urine, from poisoning by that agent, confirmed the views of others.

Dr. Snow said that the difficulty of removing an alkalescent state of the urine, by the administration of the mineral acids, was no proof that these acids did not pass off by the urine; for in nearly all cases of alkaline urine it became alkaline after its secretion from the decomposition of the urea, and such an amount of ammonia was produced in this way as it would be almost impossible to neutralize by any quantity of mineral acid which could be safely administered as a medicine.

Dr. Letheby observed, that the remarks of Dr. Snow had rendered it unnecessary for him to answer Dr. Bird, as far as regarded the detection of the mineral acids in the urine. He might observe, however, that in these experiments, the urine had been in the normal state, when, in fact, it was slightly acid, not when the phosphates were thrown out, as these would, of course, neutralize the acid given by the stomach. After giving these acids, the urine became more acid, the acids being formed either in combination with their base or not; but this did not affect the question. He could not explain any more than could Dr. Bird, in what way diuretics acted in cases of poisoning, but he had merely mentioned the facts which he had observed.

Dr. Copland, in 1821, had published a memoir on chemical remedies, and their mode of elimination from the system; and, in 1824, had experimented with the mineral acids and camphor. These experiments would be found in a forthcoming number of his "Dictionary." One circumstance which he had noticed in relation to these acids was, that the sulphuric was more easily detected than either the nitric or muriatic acids; but this he had supposed, at the time, to arise from the circumstance of the two latter acids being decomposed. He had found the same difficulty as had the author, in detecting vegetable substances in the urine, as turpentine, camphor, and other volatile substances, were sooner carried off by the mucous membrane of the respiratory organs, than by that of the urinary. The depurating power of the kidneys had not been overlooked by British writers, who had done as much in this respect as the Germans; the latter, however, had a great tact in taking hints from us, and, as the Methodists would say, "enlarging" upon them. One fact might be mentioned, in reference to the action of diuretics in stimulating the kidneys in cases of poisoning—viz., that often the excitement in the circulation was so great, that the secretion of urine was altogether arrested. We should, in consequence, fail in the exhibition of diuretics, unless we first got rid of the congested state of the kidneys by depletion and diluents.

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CASE OF STRANGULATED CONGENITAL HERNIA, IN AN INFANT SEVENTEEN DAYS OLD, REQUIRING OPERATION. By W. Fergusson, Esq., Professor of Surgery in King's College, &c.

The patient, a child seventeen days old, had been perfectly well until the evening of December 6th, when it suddenly became fretful, and from that time up to the evening of the

8th, when seen by Mr. Fergusson, its sufferings seemed to increase. There was a painful tumour in the region of the left inguinal canal, and symptoms of strangulated hernia. The taxis had been tried without effect, and the indications seemed sufficient to warrant an immediate operation with the knife. On opening the sac a tea-spoonful of turbid serous fluid escaped, and a portion of small intestine was exposed.

The testicle was observed at the lower end of the sac. The stricture was divided and the bowel easily pushed into the abdomen. The patient, soon after the operation, went to sleep; in the course of three hours, there was a copious evacuation from the bowels, and all suffering seemed to have ceased. In the course of a fortnight there was a firm cicatrix, with no tendency to further protrusion.

The author remarks, that the tightness of the stricture had so far impeded the circulation in the cord and testicle, that the veins were greatly distended. The colour of these parts was purple, and the testicle was somewhat swollen, and not unlike a small sloe. He states his belief, that it is the prevailing opinion that inguinal hernia in an infant is usually congenital. To show that this is not always the case, he exhibited an example of very large protrusion of intestine in a boy only two years of age, wherein the distinction between the tunica vaginalis testis and the proper hernial sac is clearly shown.

The author states, that he has never seen the operation for strangulated hernia performed on any patient under the age of puberty, excepting in this instance, and few surgeons have had occasion to use the knife in infants thus affected. In conclusion, the author refers to several cases on record, and to two communicated to him by Mr. Curling, in which an operation for hernia was performed at an early period of life, but he has not succeeded in meeting with any case of operation at an age so early as that of the patient whose case he has brought before the Society.

Mr. Cæsar Hawkins had operated for hernia upon a child under seven weeks of age. It was brought into the hospital in an all but dying state. The hernia had been strangulated some days. The little patient was pale and comatose. The operation, however, was successful; but the child became again subject to hernia after two or three years. He did not think strangulation at an early period in life was so rare as Mr. Fergusson seemed to imagine; for he (Mr. Hawkins) had seen several cases in very young children. In one case in which a hernia was strangulated in a child three weeks old, he feared that he should have had to operate; but the strangulation was eventually removed by constantly dropping ether on the hernial tumour. In a case at twenty-two months of age, the operation was required. He had seen several cases under puberty requiring this proceeding. He had operated successfully on a patient ninety-nine years of age.

Mr. Le Gros Clark had lately operated at St. Thomas's Hospital on a lad fourteen years of age, who was admitted into the institution with symptoms of strangulated hernia, which, as the taxis and the other usual means failed to remove, he proceeded to relieve by operation. The scrotum was found to be empty, and on examining the opposite abdominal ring, it was found blocked up by the testicle. The hernial sac lay in reference to the external abdominal ring like crural hernia. When the hernial sac was exposed, it was found to contain about an ounce and a half of limpid fluid, which escaped. The sac was laid open, and six inches of dark-coloured intestine and the testicle were exposed, lying together. The stricture was tight, but was divided, and the protruded bowel returned. The case did well; the testicle on the opposite side was retracted into the abdomen, but the testicle on the side operated upon kept its status. Now it was necessary to keep up pressure on the ring, or the hernia would again descend. Pressure might produce atrophy of the testicle; in what way, then, could it be safely employed?

Mr. Fergusson thought, that in the case related by Mr. Clark the safety of the patient would be ensured, and the testicle uninjured, by the application of a truss, with a pad so hollowed out, as to prevent its exercising pressure on the testicles, and keep up the hernial tumour. With respect to protrusion after the operation for hernia, he had seen it occur, as had probably most surgeons. Some had said that the cicatrix left by the operation was sufficient to prevent such protrusion, but this was not the case. He had brought forward the case detailed to the Society as an instance of an operation for strangulation being required at a very early period of life. Strangulation, he was well aware, was not so uncommon in young children, but these cases were generally relieved by the taxis. In this instance, however, a more prolonged application of this proceeding would have been a trifling with life; the parts were swollen and tender, and the operation was imperatively called for. He proceeded at once to perform it; and he thought the case, taken altogether, was a desirable one to bring before the Society, as an encouragement to surgeons not to despair in cases of this description.

Mr. Cæsar Hawkins had seen several cases in which a truss had been applied to the groin in a condition of parts similar to that in Mr. Clark's case. The pad of the truss should have its lower part concave, whilst its upper portion should press upon the external ring. With respect to the necessity of wearing a truss after operation, he had seen one instance, in consequence of neglecting this precaution, in which an operation was necessary to be performed a second, and in another instance, a third time.

Dr. Gregory inquired if, in cases of congenital inguinal hernia in children, it appeared to prevail in a family. He related a case of a family, in which three boys were affected with the complaint.

Mr. Cæsar Hawkins, when attached to a Truss Society, had known instances of mothers bringing two or three of their children with hernia.

## WESTMINSTER MEDICAL SOCIETY.

Saturday, January 16, 1847.—Mr. Hancock, President

### SLOUGHING OF THE UTERUS.

Dr. F. Bird placed upon the table the uterus of a woman who had been in labour for three days, her attendant being a midwife. It was a free presentation, and delivery was effected by Dr. Bird by means of the perforator. The woman died fifteen hours afterwards, and the uterus was found in a sloughy and sphacelated state. He narrated the case as a remarkable instance of the rapidity with which the organ had been disorganized, inflammation having set in only a few hours before delivery.

### INHALATION OF ETHER.

Dr. Chowne detailed some particulars of a patient who had been operated upon in Charing-Cross Hospital, whilst under the influence of ether. The particulars of the case are given in page 105.

Mr. Hancock related the case of a student of the hospital, from whose hand he had removed a large wart, whilst he was under the influence of ether. He inhaled for three or four minutes, the ether apparently producing some congestion of the brain, though unaccompanied by stertor. The pulse fell from 90 to 60, and became very small; the pupils contracted. He was conscious of everything going on around him, but felt only the first cut of the knife. The sensations imparted by the ether were pleasant ones: he felt as though he had had a "heavenly dream."

Dr. Snow said that the great effect of temperature over the relations of atmospheric air with the vapour of ether, had apparently been overlooked in the construction and application of the instruments hitherto used. This circumstance would explain, in some measure, the variety of the results, and account for some of the failures. The operators did not at present know the quantity of vapour they were exhibiting with the air; it would vary immensely according to the temperature of the apartment, as would be seen by some calculations he had made, and suspended in the room. One hundred cubic inches of air, saturated with the vapour of ether, at a temperature of

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| 44° | would contain | 27 | cubic inches of the vapour. | | |
| 54° | " | " | 34·3 | " | " |
| 64° | " | " | 43·3 | " | " |
| 74° | " | " | 53·6 | " | " |
| 84° | " | " | 66·6 | " | " |

being doubled by a rise of only thirty degrees.

He (Dr. Snow) was getting an instrument made which would enable the surgeon, merely by placing it in a bason of water, warmed or cooled to a given temperature, to administer an atmosphere of any strength he wished, and by this means to gain correct experience to guide him in future. The instrument which Mr. Ferguson, of Smithfield, was making for him, was on the plan of the inhaler of Mr. Jeffreys, with some alterations and additions. The air would meet with no obstruction from having to pass through sponge or ether, and the instrument, which would be of metal, as a good conductor of caloric, would be cheap and portable.

Dr. W. Merriman had seen, at St. George's Hospital, three cases in which operations had been performed after the

patients had inhaled ether. In the first case the inhalation succeeded whilst the patient was in the ward; but on coming into the theatre, the bandage fell from his eyes, he seemed frightened, no effect followed the inhalation, and he was sent away. In the second case, a man had to have a finger removed. The first efforts at inhaling the ether were followed by some spasm and struggling; but at the end of ten minutes he appeared to be insensible, and the operation was commenced; the instant, however, the knife touched him, he bawled out, and snatched his hand away. In short, the ether had failed. In the third operation, a leg had to be removed. The man inhaled for four minutes; he sank back as if insensible. Mr. H. J. Johnson got on with the operation, (the crucial one,) without evidence of pain, until he reached the bone; the man then awoke up, said the saw was being used, but expressed himself free from pain. He winced, however, under the application of cold water to the stump.

Mr. Brooke believed that in both these cases the pulse rose in frequency.

Mr. Hale Thomson believed that the failures in almost every case arose either from an injudicious use of the instrument employed, from the imperfect nature of the instrument, or the inhalation of free atmospheric air. He commented severely on the mania which seemed to prevail of making experiments with improper or imperfect instruments, instead of pursuing our investigations rationally and philosophically with an instrument known to be generally successful. He alluded to the instrument as modified from the one recommended by Dr. Boott and Mr. Robinson. Experiments made with instruments not at all calculated to develope the proper effects of ether were injurious to the character of the agent, and retarded the progress of our inquiries. He illustrated the baneful effects of this kind of proceeding by reference to the miserable and painful exhibitions which had taken place in the dental operations at the Westminster Hospital; where not only delirium, but convulsions, and almost asphyxia, had been the unfortunate results. He alluded to his own cases, recorded in this journal last week, as completely successful, and regarded their success as the result of a proper application of a good instrument. He threw out the hope that the ether would be a valuable agent in cases of hydrophobia, tetanus, and other spasmodic diseases.

Some discussion took place in respect to the value of the vapour ether in operations on the eye.

Dr. Ayres said, that the eye under the influence of the ether was fixed as in sleep.

Mr. Thomson thought it would be less applicable in diseases of that organ than in others. Operations on the eye were not of a very painful character. He thought, with respect to its use, that it could not be safely employed in children, as the debilitating effects of ether were often of a very formidable character.

Mr. Hancock had operated on a boy of eleven years of age for strabismus, under the influence of ether; no bad effects resulted.

Dr. Snow had seen Mr. Lawrence remove a diseased eye from the orbit with complete success.

Dr. Bowman thought that the fact of spasm and convulsion occurring in some cases would prevent the ether from being useful in cases of tetanus, &c.

## British & American Medical Journals.

### ON PURULENT OPHTHALMIA IN INFANTS.

A writer in the *Provincial Journal* relates several facts, intended to show that this painful affection has its origin in a gonorrhœal disease of the parent. He urges the necessity of attention to this fact, and adds—

"In all cases of purulent ophthalmia occurring soon after birth, I would not advise the scarification of the inner surface of the eyelids, which I have often known adopted, or the application of collyria only as an epithem. I feel persuaded that no astringent application can be efficacious, unless it be brought in actual contact with the secreting surface."

### THE CONDITION OF CRIMINAL LUNATICS.

There is much plausibility and some truth in the following remarks from the pen of Dr. Ray, in the *American Journal of Insanity*, on the confinement of criminal lunatics. The subject deserves consideration. A man in a paroxysm of insanity commits homicide: a jury declare him innocent on the ground of insanity; he is confined—he recovers; perhaps never again suffers from this disease. Is he justly made a prisoner for life?

The permanently insane, and the criminal whose insanity is less evident than his guilt, are probably as well provided for as is at present desirable. The one is deprived of the power of further injury to his fellow man; the other is punished, not less by the horrors of a mad-house, than by the disgrace of a prison. Dr. Ray remarks:—

"There are also objections to separate structures for this purpose, which, to me, appear to be of a most serious character. Although relieved of the stigma which confinement in ordinary prisons would fix to them, the condition of their inmates is scarcely improved. Innocent of any criminal design, the victims of a disease that may happen to the best of us, they are subjected to all the disabilities of ordinary criminals, and to all the severities of penitentiary discipline. We cannot but shrink from the idea of thus disposing of an individual who creditably sustained all the relations of a citizen, friend, and father, and perhaps secured the esteem and gratitude of the community by his public services, until, in obedience to an insane delusion, which to him had all the force of a divine command, he imbrued his hands in the blood of his family or friend. He did no more than thousands have thought of doing, and many have attempted to do, but were prevented by the interference of more vigilant and judicious friends. They recovered, and resumed their accustomed place in society, while he, in consequence of an accident over which he had no control, suffers for life, a felon's fate, compared with which death would be a mercy indeed. I do not say that no plan of separate confinement can be possibly devised that shall not possess these objectionable features, for I should be sorry to believe that, in the resources of an inventive philanthropy, there will never be found some way of obviating the difficulties that surround this subject. There can be no doubt of the propriety of providing a few strong rooms in our asylums, as insulated as much as possible, for the accommodation of such as may be sent by the judicial authorities, for the purpose of being observed. Some provision of this kind is absolutely necessary before we can encourage such a change in our methods of criminal procedure as will lead to a more just, humane, and satisfactory disposal of that increasing class of criminals who are suspected of insanity."

### PURE MURIATIC ACID IN THE TREATMENT OF APHTHÆ.

"Dr. Coudray reports several cases of aphthæ, in which the topical application of pure muriatic acid was followed by complete success. In many cases, when the exudation did not occur in thick laminæ, and when it occupied the tongue and lips only partially, it sufficed to use the acid diluted by an equal proportion of water, or two parts of the latter to one of the former. But whenever the pseudo-membraneous material was thick, resisting, and yellowish, and the child refused the breast, he had recourse to the pure acid; one or two applications of which caused the separation of the false membranes. Its use, he states, is attended with very little pain, and infants who had been unable to take the breast for several days before, became capable of sucking in a few hours afterwards.

"Bretonneau, many years ago, extolled the use of muriatic acid in this form of stomatitis; and again, last year, Trousseau and Delpech called attention to the great efficacy of the *fuming* acid, as one of the most powerful modifying remedies in severe aphthæ. Dr. Coudray, therefore, proposes nothing new. His cases, it may be also mentioned, belong to the symptomatic species, which supervenes generally in cachectic children, in whom the cure of the stomatitis itself is of much less importance than when it is idiopathic. In the latter instance, it is usually mild, except when epidemic, in which case the most energetic local treatment is of little avail."—*Dublin Journal.*

### A NEW MODE OF PRESERVING ANIMAL SUBSTANCES.

"The Abbé Baldaumik, preparator at the Museum of Natural History at Vienna, has succeeded in rendering animal substances as hard as stone. To effect this he immerses them in water holding in solution bichloride of mercury and hydrochlorate of ammonia. Substances that have remained in this liquid for some time acquire the hardness of stone: they may be polished, will resist the hammer, have an angular fracture, and give out a metallic sound when struck. They preserve their natural colour, and require no more care after they are taken out of the solution."

# THE LANCET.

LONDON, SATURDAY, JANUARY 23, 1847.


THERE is one passage in the speech of her Majesty the QUEEN, on opening the present session of Parliament, of special interest to the medical profession:—

"I recommend to your attention measures which will be laid before you for improving the health of towns, the importance of which you will not fail to appreciate."

Lord JOHN RUSSELL will therefore attempt, in the present session, to carry out into practice one of the principles on which he took office—namely, sanatory reform. In a national point of view, there can be no question of the importance of improved sanatory regulations. It is, indeed, a national crime, and a source of national weakness, that the preventible causes of disease should not be arrested as far as possible by the State.

The subject was never more pressing than at the present time—when the health of large masses of the people is impoverished by bad and insufficient food, so as to afford a ready scope for the havoc of disease; with a rate of mortality greatly increased above the average, and with the Asiatic cholera creeping, by slow, but steady and fatal steps towards Europe. If we are again to be visited by this terrible scourge, coming, as it may, upon the heels of scarcity, and finding our great towns unprepared by sanatory arrangements, its horrors are frightfu to contemplate.

The influence of sanatory legislation upon the medical profession would also be considerable. It must tend to bring medical men more into their just position in the State. Medicine must, in fact, under a good code of sanatory laws, become part and parcel of the administrative government of this country. Nothing would more surely raise the profession in public value and public utility than this. On every ground, therefore, personal and professional, medical men are interested in this subject, and should lend their aid to its promotion at every fitting opportunity.

THE Council of the Royal Society have met, and considered the requisition calling for a general meeting to inquire into the legality of the award of the Royal Medal in Physiology for 1845, and they have appointed the 11th of February, at two o'clock, as the day and hour for the meeting. At the last ordinary meeting of the Society, a paper from Dr. ROBERT LEE was read, on the nerves of the virgin uterus, and Mr. WHARTON JONES proposed to enter into a discussion relative to the asserted originality of Mr. BECK's dissections of the sympathetic nerve. The Marquis of NORTHAMPTON, however, objected to this course, and the conversation dropped. The whole affair is evidently a sore subject with the officials, and all those immediately connected with the award of the late medal.

By the day appointed for the Special General Meeting, ample time will have been given for the preparation of the case against those officers of the Royal Society who are bound by their position to guard the honour of the Society, and execute the statutes according to order and justice. Ample time, too, will be given for defence or explanation on those points of the charges that may admit of them. If the proceedings are conducted with caution, firmness, and spirit, they cannot but result in great good to the Society, and inestimable benefit to anatomical and physiological science.

But no thin glozing over of the matter will satisfy the scientific public. Already, those who have hitherto defended the proceedings of the Society, begin to lament that the constant discussion of alleged injustice and infraction of the statutes is doing great injury to the reputation of the Society. Let such persons lend their aid to a searching examination at once, so that what may be properly defended may at once be set right, while all that is indubitably bad may be abandoned or rectified. They may rest assured, that until this is the case there will be no rest to the Society, no burying the grievances complained of in oblivion.

It is not merely one act, but a long career, of injustice with which the Royal Society has been charged. Those who are ready to make a stand for justice, ought to interest themselves, not only in the distribution of the medals, but in the erasure from the *Philosophical Transactions* of that calumny respecting Dr. MARSHALL HALL to which we have often adverted.

But even supposing the President, the senior Secretary, and the Physiological Committee, to be justified in the course they have pursued, by a formal vote of a majority of the Society, the requisition and the general meeting will not have been in vain. Unless there had been just grounds for investigation, the men who signed the requisition would not have moved in the matter. No requisition possessing greater or even equal weight was ever before presented to a scientific body. Even those who were indifferent about the matter before, will now be roused to its investigation, and no vote contrary to the evidence adduced and made public at the meeting, will be worth more than its mere formal value. It is, indeed, refreshing to see such names appended to the requisition; the names of men who seldom move,—who may, indeed, be said never to have moved before in any public professional matter.

By an error of typography, the name of Dr. CHAMBERS was printed as A. W. CHAMBERS. It ought to have been W. F. the CHAMBERS, Physician to the Queen, and President of the Royal Medical and Chirurgical Society. The conduct of Dr. CHAMBERS in this instance should be appreciated by all those who wish well to scientific medicine. The President of one Royal Society, acknowledgedly the first purely medical Society in the kingdom, and himself standing at the head of the medical profession, challenging the conduct of another Royal Society, is in itself a noble act, and we trust an augury of good. We shall anxiously await the issue of the proceedings.

WE beg to direct the attention of our readers to a report, carefully drawn up by Dr. G. WEBSTER and Dr. W. TYLER SMITH, of the proceedings which followed their appointment as arbitrators on the part of Mr. WIGAN, in the proposed Court-Medical. We are glad these gentlemen have not shrunk from a public detail of the facts of the case, disagreeable as such a task must have been. It will be seen with what celerity Dr. GREGORY shrunk from an inquiry which he courted in such gasconading terms—a sure sign of the weakness of his cause. Mr. WIGAN's referees particularize in their report a number of excuses made from time to time by Dr. GREGORY, and we are able to add to the

list. In a letter addressed to us, immediately after the formation of the Court-Medical, he gave as his then reason for not allowing the inquiry to proceed, our opposition to his absurd proposal to deposit a hundred pounds a side as a commencement. We mention this to show, that from the beginning Dr. GREGORY had no intention to proceed with the matter. Now, Dr. GREGORY, whose reasons are "thick as blackberries," advances another: he will only be tried by his peers. Probably we shall yet have to record another, or others, if he has an opportunity of writing more letters. It is transparently evident that Dr. GREGORY committed, as he confesses, an error of judgment in the first instance, and his course, as a man of honour, was to have made the amende at once. Had he done so, much vexation and equivocation would have been spared.

## MR. WAKLEY'S MEDICAL REFORM BILL.

OUR columns are so occupied by the Draft of the Bill for the Regulation of Qualified Medical Practitioners, which Mr. WAKLEY proposes to introduce into Parliament during the ensuing session, that we have no room for our usual "Leader," and very little for any comments on this important document. This we do not regret, because we are unwilling to attempt any analysis or criticism of the proposed measure before our readers have had time to consider its details; and because we have no inclination to obtrude our own views or opinions on them until they can, by acquaintance with the plan suggested, appreciate their justice or correctness. We may, however, be permitted to advise our brethren in the provinces, as indeed we did in the case of Sir JAMES GRAHAM'S Bills, not to commit themselves to any course to be in future pursued respecting the matter until the proper time arrives. We in Ireland are charged with being too precipitate and too ready to decide and act on momentary impulse; but however this may be on other occasions, it has not been so in dealing with those measures of which this is one. Let us therefore give it, as we gave the Bills of Mr. WARBURTON, Mr. HAWES, and Sir JAMES GRAHAM, a fair, candid, and we think we may add, a cordial welcome. It contains provisions of great value, and suggestions worthy of the most favourable consideration, while, as it appears to us, after a hasty perusal, it contains little to which any serious objection can be raised. The registration of regular practitioners, in order to enable the public to recognise quacks and pretenders, may not be so necessary in Ireland as in England; but if conducted in a manner suited to the state of medical practice in this country, it will prove not only harmless but beneficial; and the provision to prevent the appointment of any but legally-qualified medical or surgical practitioners to medical charities, although not absolutely necessary, from our statutes now forbidding it, can do no mischief, and may do good. The proposed enactments to correct the defects in medical education, although not as extensive or comprehensive as "radical" medical reformers may expect, are yet of sufficient power to effect as much as more reasonable men may expect by way of instalment. The repeal of restrictions on practice, and of the laws which disable the practitioners of one part of the kingdom from settling in another, is a most important alteration; and the machinery for expelling delinquents from our body will perform good service. Taken altogether, Mr. WAKLEY'S Bill appears more likely to pass into law, with, of course, some modifications and amendments, than any of its predecessors. It contains less of what is calculated to provoke hostility, and more to enlist general support, than any of the former schemes, and goes as far towards removing existing abuses as could well be expected, considering existing prejudices and monopolies.—*Dublin Medical Press*, Jan. 13th.

## Obituary.

### JAMES JOHNSON, ESQ.

DIED, on Sunday, the 27th of December, 1846, at Stonewall Park, Penshurst, Kent, the seat of Edmund Wakefield Mead Waldo, Esq., James Johnson, Esq., Surgeon-Major, late First or Grenadier regiment of Foot Guards, aged fifty-two years.

The subject of this notice was born on the 4th of June, 1795, near Inniskillen, County Fermanagh, Ireland. He evinced, very early, a predilection for the medical profession, and commenced in the Dublin Schools, under the auspices of the celebrated surgeon, Kirby, those studies which were completed at St. Bartholomew's Hospital, London, under the late Mr. Abernethy.

In March, 1813, Mr. Johnson passed an examination as regimental surgeon, before the Royal College of Surgeons in London, and on the 25th of the same month was appointed hospital assistant. On the 20th of July in the same year, he was gazetted assistant-surgeon in the 102nd (afterwards the 100th) regiment of Foot. On the 9th of August, 1813, he joined his regiment at Bermuda, and in June of the following year proceeded with it to North America, where he remained until October, 1817. On the 15th of May, 1818, he was placed on half-pay, on the reduction of his regiment, and on the 25th of the same month, in consequence of the exceeding high character of his testimonials, was appointed assistant-surgeon in the First or Grenadier regiment of Foot Guards. On the 25th of February, 1819, he was again placed on half-pay on reduction.

Mr. Johnson now returned to his native country, and stood successfully a most severely contested election for the Dispensary of Manorhamilton. He did not long hold this appointment, having been called, 23rd Nov. 1820, upon full pay of the Grenadier Guards. On the 13th of March, 1828, he was promoted to the rank of battalion-surgeon, and on the 17th of April, 1840, to that of surgeon-major. Having completed his full period of service, he retired 7th of February, 1845.

On his retirement, the medical officers of the Household Brigade, at a dinner given him on the occasion, February 12th, 1845, presented him with a silver tea service, "as a testimony of the high esteem and regard in which he was held by them, and expressive of the deep and lasting regret they felt at parting with so valued a friend."

Whilst the medical officers of the brigade were thus testifying their respect and sorrow, the commanding officer of his own regiment, not less sensible of the loss the regiment had sustained by his retirement, issued the following regimental order:—

"REGIMENTAL ORDER.

"Feb. 8th, 1845.

"The retirement of Surgeon-Major Johnson being notified in yesterday's *Gazette*, Colonel Clive cannot allow Mr. Johnson to quit the service without returning him his best thanks, and expressing his regrets that the Grenadier Guards should lose those services which have so long been devoted to the benefit of the regiment.

"Colonel Clive feels assured, and begs to convey that assurance to Mr. Johnson, that every member of the regiment —those who have themselves been indebted to Mr. Johnson's skill, kindness, and attention, and those who have witnessed those qualities in his treatment of others, will unite with their commanding officer in offering to Mr. Johnson their best wishes for his future welfare.

"(Signed) ALEXANDER GORDON, Adj. Gren. Guards."

As an officer, Mr. Johnson commanded, by his manly and straightforward conduct, the respect and veneration of those over whom he was placed. If he did not exact of his subordinates a rigid performance of their several duties, he yet, by the scrupulous discharge of his own, set them an example which they could not fail to follow.

As a medical man, his perceptions were keen, his diagnosis accurate, his judgment matured, and his treatment vigorous and successful. No private consideration was allowed, even for an instant, to step in between him and his duty. The welfare of his patients was his first care: his anxiety for their recovery was unbounded. Hour after hour, day after day, night after night, was he to be found at the bed-side of the sick and of the dying, ministering, with the most unwearied solicitude, to their every want, not only as their medical attendant, but as their kind and tender nurse.

Mr. Johnson's intellects were of the highest order, and his judgment sound and matured. He possessed in an eminent

degree the faculty of analyzing the most complex subjects, and, by a kind of intuitive and inherent power, stripping them of all their difficulties and subtleties, and reducing them to the level of the meanest capacity. He exhibited the most undaunted courage, the most unflinching straightforwardness of purpose, a high and manly bearing, a keen sense of honour, with an ineffable contempt and loathing for the slightest deviation from the strict line of gentlemanly conduct.

Mr. Johnson, though naturally of retiring habits, possessed strong feelings, a warm and generous heart, a kind and gentle amiableness of disposition, and character, which secured for him the friendship and regard of all who knew him.

As a friend, Mr. Johnson is mourned by a large circle, by whom he was esteemed, beloved, and idolized.

Mr. Johnson did not long survive to enjoy the ease and retirement of private life. He sunk from repeated attacks of hæmatemesis from visceral disease, the consequence, in all probability, of typhus fever, of which he was the subject in January, 1833, in common with many of the men of his regiment, which was then quartered in the Tower of London.

The first symptoms of the fatal disease under which his athletic and robust frame subsequently sunk, made their appearance during some gymnastic exercises in which he had been indulging at Greenwich, in August, 1844. After a sudden fainting, he passed inky discharges from the bowels, which continued for many months.

In May, 1845, he had just reached Inniskillen, (from England,) when he complained of chilliness. During the night he vomited several pints of florid blood, and passed a large quantity of dark blood per anum. The hæmorrhage from the stomach and bowels continued with almost unabated violence for five days and nights, when it suddenly ceased.

From this attack he was slowly recovering, and had reached his home, Swanlinbar, when, in June, the hæmorrhage returned as violently as before, though its duration was much shorter.

The consequence of these repeated losses of blood was anasarca and ascites, to an extent threatening suffocation. The opinions of the highest medical authorities in Dublin confirmed the views of his medical attendants that the operation of paracentesis should be had recourse to without delay; but to this he objected on account of the extreme tenderness of the abdomen on pressure. Eventually the kidneys carried off the effused fluid, and he regained a moderate share of health, and returned to England.

In August, 1846, when at Brighton, he became the subject of jaundice, which continued, more or less, during a period of three months. During this time the alvine dejections were, for the most part, slate-coloured, and the urine of a deep saffron hue.

On the 29th day of October, when at Stonewall Park, he vomited, without any previous indisposition, two pounds and three-quarters of florid blood; another similar vomiting followed twelve hours afterwards; and at the expiration of thirty-eight more hours, he suddenly fainted, the pulse was lost at the wrist, and he appeared to be dying. This attack, which was unattended with vomiting, was followed by a large discharge of blood per anum. From this he again gradually rallied and was enabled to take gentle exercise in the park. His appetite and spirits returned, and he flattered himself he might yet do well. But on the morning of the 14th of December, he suddenly fainted whilst eating his breakfast, and some hours afterwards voided, per anum, a large quantity of coagulated blood, resembling black currant jelly. About four o'clock in the afternoon of the 24th of December, whilst eating his dinner, which consisted of fish only, he again fainted. At eleven at night, vomiting of dark fluid blood commenced, which continued with little intermission until five A.M. of Christmas-day. The vomiting returned at two P.M., and continued for about an hour. From this time he gradually sank, and died, at half-past four P.M., on Sunday, the 27th of December.

An examination of the body was made on the morning of Monday, the 28th, sixteen hours after death, by his relative, Dr. Dundas, and Dr. Pickford, formerly of the Grenadier Guards, when the following appearances were met with:—On opening the abdomen, the diaphragm was found flaccid and hanging down into the cavity of the abdomen. The spleen was enlarged and bloodless, and firmer than natural, and its capsule about one-third of an inch thick. This organ was adherent to the diaphragm and lining membrane of the costæ.

The liver was somewhat less than natural, and in a state of genuine cirrhosis throughout; the lobulus Spigelii was the least affected. This organ tore under the finger. The gall-bladder was full of healthy bile; the liver was firmly bound to the diaphragm, and to the lining membrane of the costæ, by fleshy bands. The ascending portion of the colon was firmly adherent to the inferior surface of the liver, and sent a solid band into the fossa umbilicalis.

There was no communication between this bowel and the liver. The stomach was opened throughout, and the duodenum and jejunum, but nowhere could any ulceration or open vessel be discovered.

The exsanguineous condition of the viscera militated against any opening of a vessel being found. The aorta was actually empty, a perfect "air-tube," as well as the veins. There was not blood enough left in the body to soil a cambric handkerchief.

The whole of the viscera were removed from the body, and upwards of two hours occupied in their examination. Lungs healthy; heart empty and flabby.

Mr. Johnson was buried on Saturday, the 2nd January, 1847, in the chancel of Hever Church, Kent. His body was followed to the grave by a large number of old and attached friends and brother officers, the pall being borne by three officers of his own regiment, and by the Surgeon-major of the Scots Fusilier Guards.

## REPORT BY DR. WEBSTER, OF DULWICH, AND DR. W. TYLER SMITH, OF THE PROCEEDINGS RELATIVE TO THE COURT-MEDICAL FOR INQUIRING INTO THE COMPLAINT OF MR. WIGAN AGAINST DR. GEORGE GREGORY.

The profession have already been made acquainted with the particulars of the cause of difference between Mr. Wigan and Dr. Gregory. In substance, Mr. Wigan (*vide* The Lancet, Oct. 10th) charged Dr. Gregory with a breach of professional etiquette in having visited a patient under Mr. Wigan's care, in his absence; with injuring him by subverting his opinions, and declaring the patient in danger; and with refusing to give any explanation when called upon to do so by Mr. Wigan.

On the point of etiquette which was referred to the proposed court-medical, the undersigned do not, as the arbitrators appointed by Mr. Wigan only, offer any opinion, but as, for reasons which will appear, the court-medical has not been proceeded with, they feel it due to Mr. Wigan and the profession, to state the circumstances under which its proceedings were stayed.

After the complaint of Mr. Wigan had been made public, and the Editor of The Lancet had suggested the propriety of referring the matter to a court-medical, Dr. Gregory published a letter, treating the whole affair as a joke, expressing a perfect willingness to appeal to the proposed court-medical, and professing to anticipate great pleasure from the examination of the witnesses on such a trial. At about the same time, however, Mr. Wigan received a private letter threatening him with an action at law, and referring him to his attorney.

A severe domestic bereavement prevented Mr. Wigan from making any immediate reply to this, or to Dr. Gregory's next proposal, which was, that the matter should be settled between Dr. Gregory, Mr. F——, (the husband of the patient,) and Mr. Wigan himself.

Dr. Gregory now definitively offered to abide by the decision of a court-medical, and took the initiative by naming Sir James Eyre and Dr. John Webster as his referees. Mr. Wigan immediately accepted the challenge, naming the undersigned as his assessors.

Before, however, the names were published, Dr. Gregory addressed a letter to the Editor of The Lancet, proposing so many conditions for the conduct of the investigation, such as the deposit of one hundred pounds by each party in the hands of the judges, and the payment of the judges for providing a dinner to them, and for the payment of any fine which the court might think proper to inflict, as to raise a suspicion that Dr. Gregory did not in reality desire any such mode of arbitrament.

After the appointment of the four arbitrators, a meeting took place at the house of Dr. J. Webster, in Brook-street, to arrange the proceedings, and elect a chairman; but at this meeting, to the surprise of all parties, a letter from Dr. Gregory to Mr. Wigan was read, in which Dr. Gregory stated that, upon reflection, he begged to abandon all idea of a court-medical. In the absence of all direct communication to themselves from Dr. Gregory, Sir James Eyre and Dr. John Webster at once considered themselves precluded from further interposition.

Dr. Gregory next addressed a letter to Dr. George Webster, of Dulwich, requesting him to arbitrate the matter solely, and to decide on any form of apology that might be considered

due from him to Mr. Wigan. Dr. Gregory also sent, notwithstanding this, a full letter of apology to Mr. Wigan direct.

On Dr. Webster, of Dulwich, declining to act in the manner proposed, from motives of delicacy towards Sir James Eyre and Dr. J. Webster, who had been formally named as his referees by Dr. Gregory, and both of whom expressed the utmost willingness to act, Dr. Gregory desired both the undersigned to undertake the adjustment of the matter. This was considered unbecoming towards Sir James Eyre and Dr. J. Webster, and was therefore declined.

In the meantime, Dr. Gregory had addressed several letters to Mr. Wigan's referees, explanatory of the part he had taken in the case of Mrs. F——, the patient respecting whom the difference had arisen, and respecting the motives which had actuated him. The substance of these explanations was, that Dr. Gregory had been called to see the patient, Mrs. F——, by her husband, expressly to give an opinion, whether Mr. Wigan had neglected the patient—whether he had taken a correct view of her case—and whether he ought, in justice to his wife, to continue Mr. Wigan in attendance. The sole ground for suspecting Mr. Wigan seemed to rest on his not having visited his patient till after six o'clock on the day in question; but Mr. Wigan considered her recovering; and it did not appear that she was at all worse on that day, or that Mr. Wigan had been sent for, though he lived in the adjoining street. Regarding the propriety of calling in Mr. Wigan to set him right with his patient, Dr. Gregory admitted that, looking back upon the matter, he was satisfied that it would have been better to have sent for Mr. Wigan, but that at the time he thought it most prudent not to do so. Mr. F—— did not express any wish either way. He considered the doubts expressed by Mr. F——in the light of a confidential communication, not to be divulged to Mr. Wigan. Dr. Gregory further stated, that he told Mr. F——, Mr. Wigan was doing everything that was right for Mrs. F———that she was in a fever, and he could not consider any patient in a fever free from danger—that he considered she should have been seen earlier in the day—and that he prescribed a medicine similar to that already sent by Mr. Wigan, leaving the patient to take which of the two she chose.

The friends of Mrs. F—— were, however, much alarmed after the visit of Dr. Gregory. They understood him to say that she might die in twenty-four hours—that she was suffering from a twenty-five day fever, and would not in any case be free from danger till that time had passed. This, with the publicity given to the matter among the friends and neighbours of the patient, in Mr. Wigan's own immediate neighbourhood, was the cause of his seeking so immediate an interview with Dr. Gregory.

In his visit to Dr. Gregory, Mr. Wigan was accompanied by Mr. Eyre, of Fitzroy-street, the gentleman with whom he had served his apprenticeship; and on learning that Dr. Gregory was dining at the house of Mr. Craddock, and had left directions to be sent for, they proceeded there, thinking a word would settle the matter, and wishing to save him trouble.

On meeting Dr. Gregory, however, it was impossible to obtain any satisfactory explanation whatever; some altercation took place; Mr. Eyre openly charged Dr. Gregory with a breach of professional etiquette, and the parties separated. Dr. Gregory afterwards stated, in his letters of explanation, that he felt irritated at the interruption of dinner, and the interference of a third party, with whose name, intentions, and profession, he was unacquainted. In the excitement, a formal introduction seems to have been omitted. Mr. Wigan's apology was, the urgency of the case, his having left the patient and her friends impressed with the idea that she would die within the twenty-four hours, and the consequences of such an event threatening him with serious injury in his practice.

Dr. Gregory, after sending the apology to Mr. Wigan, complained that Mr. Wigan did not show the same inclination as himself to forgive, and to heal the breach. It is here necessary to state, that the sole reason, on the part of Mr. Wigan and the undersigned—for not immediately accepting and publishing the apology of Dr. Gregory, and so settling the matter at once, was a feeling that the apology was much too humble, and that Dr. Gregory required to be defended from himself.

After these occurrences, as the undersigned—both in justice to Mr. Wigan and Dr. Gregory, and from feelings of delicacy towards Sir J. Eyre and Dr. J. Webster—still declined to act alone, Dr. Gregory wrote a request that his letters of explanation might all be returned to him, in order, as he explicitly stated, that he might place them in the hands of Sir James Eyre and Dr. J. Webster, and abide by their advice. With this distinct understanding they were returned to him.

But instead of doing this, Dr. Gregory next informed us, that he had done all that he considered necessary for his own justification, and that he should now proceed to place the matter in the hands of the President and Fellows of the College of Physicians.

On our addressing him respecting his former intention, and the vacillating conduct he had pursued, and still urging him to allow the matter to be arranged amicably, as at first proposed, the only replies received were, acknowledgments of the letters, and an intimation of his having placed them in the hands of Dr. Paris.

In conclusion, we cannot but regret being obliged to make the present statement.

Mr. Wigan was passive throughout, after placing the matter in our hands. Both Sir James Eyre and Dr. J. Webster expressed their perfect willingness to act; and we had no other feeling than a desire to promote mutual explanation and apology, where apology seemed due, whether from Dr. Gregory or Mr. Wigan. Dr. Gregory's conduct alone prevented this. We have already expressed our opinion that Dr. Gregory's apology was couched in terms which we considered too strong; and we are not prepared to say that some explanation should not have been given to Dr. Gregory and Mr. Craddock, by Mr. Wigan and Mr. Eyre. We now feel very strongly, that, from the first, Dr. Gregory has continually evaded anything like a decision upon his interference with Mr. Wigan's patient, as well before as since the appointment of the members of the court-medical. We ground this opinion upon his first public appeal to a court-medical, followed by a private hint of legal proceedings against Mr. Wigan; his public declaration of his willingness to submit to any investigation, with the fullest confidence in his cause, followed by the instant willingness to admit himself wrong, and to retract, upon the actual nomination of the members of the court; at one time pertinaciously defending himself, and at another expressing a wish that the court-medical should not proceed, as he had, on consultation with his friends, found such reasons for mistrusting his own judgment as to prefer tending an apology. Indeed, at every new phase of the proceedings, Dr. Gregory has been ready with some new excuse for not permitting the arrangement of the matter.

Jan. 1847.

GEORGE WEBSTER.
W. TYLER SMITH.

# Operations Without Pain.

## ST. GEORGE'S HOSPITAL.

THE following are the brief, though accurate particulars of the case which occurred lately at St. George's Hospital, where amputation of the leg was performed by Mr. Henry James Johnson, on a patient previously rendered insensible by the sulphuric ether.

The subject of the operation was a young man, about twenty-four years of age, the son of a farmer near Wisbeach, in Norfolk. He was tall, rather spare, and though of a nervous temperament, composed and resolute. He was evidently possessed of the will to submit to any experiment, and the courage to carry it out.

In the latter part of 1845, he began to feel pain in his left ankle, which induced him, about Christmas of that year, to apply to a neighbouring bone-setter. This professional gentleman assured him that the bones of the joint were "out," manipulated them severely, and then told him they were "in again." But he was none the better, notwithstanding, and therefore consulted the bone-setter a second time, with the same assurances, operation, and success. In September, 1846, he went to another bone-setter, who, wiser or more honest than the first, said that the bone was not out at all. In December, the poor fellow entered St. George's, worn with pain, and presenting every symptom of ulceration of the cartilages of the ankle-joint. On the 20th of the month, without any very ostensible cause, unless great suffering were such, he was seized with maniacal delirium. This was calmed by opiates, and a moderate allowance of gin. It is right to observe, in reference to the latter, that the patient had always been temperate in his habits, and stimulants were administered, not because they were rendered necessary by custom, but because his appetite was destroyed, and his health impaired, by the long continuance of a painful malady.

Such was the person whose limb Mr. Henry James Johnson was called on to remove. It had been agreed, in consultation, to administer the ether with care, the maniacal attack, arguing, as it did, a possible tendency to cerebral congestion, calling for more than usual circumspection. The patient himself

was perfectly prepared both for the inhalation and the amputation, and seemed equally desirous and equally fearless of either.

The operation was performed in the theatre of the hospital, on the 14th of the present month. After inspiring the ether for about two minutes and a half, which he did without either solicitation or difficulty, his pulse, which had been gradually growing more frequent, became very rapid and weak; a sort of unconsciousness quickly stole over him; he ceased to inhale from the tube, and quietly fell back into the assistant's arms. His complexion altered little, if at all, neither evincing the pallor of syncope, nor the lividity of asphyxia; while the temperature of the surface rather augmented than sank, and a gentle moisture stood upon the forehead. This was the moment for the application of the knife, and amputation below the knee was at once performed by Mr. Johnson. The circular method was the one adopted, in conformity with the general usage of the hospital. During the division of the skin and of the muscles, the man evinced no sign of sensibility, the limb betrayed no evidence of pain. Not a feature altered, not a fibre quivered, and the operation was like one on a dead body. While the saw was traversing the bones, the poor fellow opened his eyes, as if awaking from a tranquil sleep, and said, in a dreamy sort of way, "You are sawing." The tone was that of a casual observation from a bystander, not the exclamation of a man who, at the instant, was losing a limb. Mr. Bumpstead, the house-surgeon, with whom he was familiar, asked him at the same time if he knew him. The patient, regarding him with a vacant air, replied, "Yes, you're Edward," that being the name of the surgery-man. It was evident that he was still not thoroughly alive to what was going on around him, evincing, as he did, insensibility to pain, and unable to recognise familiar faces. In this condition he made two or three more inspirations of the ether, after which it was put aside altogether. He relapsed no more into insensibility; he quickly knew the persons around him, and chatted with coolness and apparent unconcern. In this state, the anterior and posterior tibial and peroneal arteries were tied, the tourniquet was loosened, tightened, removed; the stump was sponged, examined, pressed; yet he continued as unconcerned as if he had no personal interest in the matter. But some venous bleeding continuing after the vessels were secured, Mr. Johnson washed the stump with cold water. This was too much for his sang froid, or his unconsciousness, and he loudly complained of it. Oozing still going on from the veins, it was thought expedient to defer the final dressing of the wound for an hour. It was necessary, then, for the second time, to apply cold water, and although he bore the general dressing with resolution almost amounting to indifference, he could not support the impression of the cold without exclamations of suffering.

The patient being accustomed to a dose of morphia at night, had one on that of the 14th, as usual. He slept well, and has hitherto (we are writing on the 19th) had no unfavourable symptom. The stump has done well; there has been less than the ordinary amount of febrile movement, and no unpleasant consequence can be traced to the exhibition of the ether.

Before we close this notice of the case, it is well to state the impressions or declarations of the patient. He avers that he felt no inconvenience, either in the chest or head, during the act of inhalation; that it occasioned no sense of warmth in the thorax, no feeling of intoxication; that he knew, just before he became unconscious, that he "was going off," but that the sensation was neither pleasurable nor painful; that when he regained his sensibility, he saw or heard the sawing of the bones, but did not feel it; and if he had not been informed that his leg was off, would not have known it. All this he states with such an air of sincerity, that, borne out as it was by every collateral evidence of insensibility, it would be difficult, indeed impossible, to refuse credence to it. At the same time, as Mr. Henry James Johnson remarked, in the course of some observations which he made upon the case, the patient was a favourable subject for experiment. His sensibilities, physical and moral, are, palpably, not of an acute character, and to this he joins strong sense and undaunted courage. Could a more happy temperament, for the purpose, be selected?

In the observations to which we have alluded, Mr. Johnson professed his unwillingness to draw any wide conclusions from a single case. The same feeling induces us, the reporters of it, to use the same circumspection. It would be well for medicine, if this wise caution were always acted on. Facts are what we want at present—facts accurately and honestly reported—facts as they occur, whatever the result.

## ST. BARTHOLOMEW'S HOSPITAL.

The operating theatre of this hospital was much crowded on Saturday last by practitioners as well as students anxious to witness the exhibition of the vapour of ether. Before the first patient was brought in, Mr. Lawrence addressed the assembly. He said, that on the previous day he had removed a diseased eye from the orbit of a patient under the influence of ether, and the result was so satisfactory that he had felt no hesitation in recommending Mr. Stanley to have it administered to his patient. Mr. Hooper had given the vapour in the way he was now about to give it, and the patient, after inhaling it for about two minutes, gave a slight convulsive struggle, and immediately became insensible, when the operation was performed, and on his reviving he said he had experienced no pain.

A middle-aged man was brought in, and commenced the process of inhaling, which he continued for about ten minutes, and Mr. Stanley proceeded to remove one of the middle fingers at its articulation with the metacarpus; the patient, however, not only cried out as much as the tube would allow him, but struggled so hard that he was with difficulty kept on his seat, and at the conclusion of the operation, he said that he had felt more pain than he expected. After his removal, Mr. Stanley said that the man confessed that he had at one time been a free drinker, and this was probably the cause why the ether did not affect him.

The next patient was a little boy who had ruptured his urethra by a fall, and required an operation to reëstablish the natural current of the urine. The vapour was administered by Mr. Tracy, by means of an apparatus of his invention, and in about four minutes Mr. Skey commenced the operation, which was necessarily a tedious and, a little time ago, we might have added, a very painful one. The boy, however, showed little, if any, symptom of suffering. With one or two short intermissions, the inhalation was continued during the operation. His breathing was once or twice laborious, the abdomen heaving a good deal, but the withdrawal of the tube from his mouth quickly removed this state. His face, and even the whole surface of the skin, was somewhat purple the greater part of the time. At the end of the operation, he seemed very cheerful, and when questioned, said, that when he began to feel a little pain, they told him to "breathe again, and then he did not feel it." This patient went on inhaling for about twenty-five minutes, with short intervals.

## CHARING-CROSS HOSPITAL.

W. D—— was on Thursday last, Jan. 14th, operated upon by Mr. Hancock, at the Charing-cross Hospital, for the removal of the nails from both his great toes.

The patient having expressed a wish to be submitted to the influence of the vapour of sulphuric ether previous to undergoing the operation, it was accordingly administered to him. He is about thirty-four years of age, rather slightly built, and of a middle height, with a florid complexion.

He states that he has for several years suffered from the growing-in of nails of the great toes, for which, about nine years ago, he had that of the left foot removed. At present there is considerable inflammation of the toes; and having himself lately removed part of the nail of the right foot down nearly to the root without having completely done so, that which remains produces so much irritation as to prevent his walking, and causes him intense pain upon the slightest pressure on the part.

The operation was commenced at two o'clock, at which time he began to inhale. Having done so for three minutes, he became insensible, and the nail of the right foot was immediately removed, by running the sharp-pointed blade of a pair of scissors rapidly from before backwards under the nail, and dividing it into two halves, which were then pulled away by strong forceps. He was evidently completely under the influence of the ether whilst this was done; but upon Mr. Hancock passing the point of the instrument round the wound to ascertain whether any portion of the nail remained, he called out, and suddenly drew away his leg, starting up, and saying, "If that is what is called making people insensible to pain, I had rather be made more so." Upon being questioned, however, as to the degree of pain, he said that he only felt the instrument applied once, and that was when he called out, but he was unconscious of the previous steps of the operation.

In four minutes from the first administration, at his own request, he again inhaled, preparatory to the removal of the nail of the left great toe. He continued to do so for three minutes and a half, when he became perfectly insensible; his

arm when raised falling powerless by his side. The nail was quickly removed by the same method as the other, but without producing the slightest appearance of pain; in both operations the feet and legs were purposely left free from restraint; in fact, they were not touched except by the operator, who merely steadied the toes whilst doing the operations, so that muscular twitching, or similar evidence of pain, might easily have been observed: but during the removal of the second nail there was not the slightest sign, either of twitching of the toes or contraction of the muscles of the leg, whilst the countenance remained unchanged. A towel was then thrown over his feet, to obscure them from his view when he recovered from the insensibility, in which he continued for several minutes after the operation was completed. For the first four minutes after the second inhalation, he was in a state of complete coma, accompanied by stertorous breathing, but his pulse beat quietly, at about 60. At the expiration of this time, he sat up on the mattrass, and addressed Mr. Hancock as a noble lord, in whose service he had formerly lived, remonstrating against his dismissal, and asserting that it was caused by the jealousy of the steward—that he liked his lordship and her ladyship very well, and that his place was the most comfortable of any he had ever been in. He continued upon this topic for about ten minutes, occasionally falling back upon his pillow for a second or two, and then raising himself up, and staring wildly around him. He afterwards became sufficiently rational to answer questions; and upon being asked whether he was ready to undergo the operation, he said he was, and told Mr. Hancock he might begin; when, being shown his toe, and informed that the nail had already been removed, he expressed great satisfaction, declaring he had felt no pain, and was totally unconscious of anything having been done. Wet lint was applied to the wounds, and the patient sent to bed.

His pulse, during the first inhalation, remained natural, at 90, and continued so until about the middle of the second inhalation, when it dropped to 60, and became small; as he recovered consciousness, it gradually returned to its natural standard. His conjunctivæ were slightly congested, but not particularly so, and his pupils natural, the irides acting when exposed to the light. When the patient sat up, and the eyes were shaded from the light by his projecting brows, the pupils were about one-fifth of an inch in diameter; but when he lay upon his back, with the eyes exposed to the full glare of light from the skylight of the theatre, the pupils then contracted to less than one-eighth of an inch in diameter. His skin retained its natural temperature throughout. Upon being carried up stairs, he was immediately placed in a warm bed, as he complained of feeling very cold. In his answers to questions, he was at first rather incoherent, and evidently confused, not having the slightest idea where he was. Some hot wine-and water was given to him, which he swallowed without any difficulty, and wrapping his head in the bedclothes, begged not to be disturbed, as his head ached very much. About an hour after the operation he appeared much more sensible, but still had headach, with some confusion about what had been done and where he was; noise and light distressed him; he did not sleep, but appeared to be suffering from a preternatural degree of sensibility. After two hours he appeared quite recovered. He laughed when told of his conduct in the operating theatre, and corroborated all that he had said during the time. He had lived with a nobleman some time ago, and had been parted with on account of a disagreement with the steward. He got up to take his food, and subsequently passed a good night, not requiring any sedative whatever. Next morning, not feeling any uneasiness, and being desirous of reaching his home, in order to take his part in the duties of his situation, he left the hospital and walked to Suffolk-place, (his residence,) suffering no inconvenience from the effects of the operation.

He was seen on Sunday, and was then going on perfectly well. The apparatus employed upon this occasion was one made by Mr. Weiss; it is very convenient and portable, and certainly proved most efficient. Had the operation required a quarter of an hour, it might have been performed without any further inhalation, so completely was the patient under the influence of the vapour.

## OPERATIONS FOR STRABISMUS.

Sir,—Though the utility of sulphuric ether in producing insensibility to pain has been pretty clearly substantiated, it may nevertheless not be uninteresting or unprofitable to add to the testimony which has already appeared in its favour. No remedy probably has ever been proposed capable of producing such astounding, such gratifying effects, and few, indeed, have in so short a time so fully realized the promises which have accompanied their announcements. As the process is only just in its infancy, I cannot but imagine that every fact relating to it must be of importance in enabling the profession to form an opinion of its merits, and to judge accurately of the extent and capabilities of what promises to be one of the greatest boons ever conferred on humanity. With this view, I beg to state the result of two operations for strabismus, (in which I was assisted by my friend Mr. Harris,) performed after "letheonizing" the respective patients. They were both boys, about nine years of age. The first, after inhaling the ether from a common bladder for two or three minutes, fell back in his chair, and appeared to be completely under its influence. The operation was proceeded with. At the moment of dividing the tendon, he uttered a faint "oh!" and shortly after awoke, as it were in a state of surprise. On being asked if he felt much pain, he said that I had "pricked his eye." The slightness of his suffering may be judged of from his immediately consenting to have his other eye operated upon, which, under ordinary circumstances, few or no youthful subjects would submit to. This, however, was not deemed advisable. The second case was less satisfactory. The patient inhaled the vapour for several minutes, then stared about him in a vacant manner, and was so far insensible as not to complain of pain on being sharply pinched. The operation was proceeded with, and though the signs of suffering were not to be mistaken, he nevertheless made much less resistance than is usually met with in children; and on being questioned afterwards, said the pain was not great. As the whole of the tendon did not appear to be divided, it was necessary to reintroduce the blunt hook, and incise a small portion which had escaped. This second incision, he stated, was much more painful than "all the rest."

From the result of these cases, I cannot but conclude that we are in possession of a most powerful means of alleviating human suffering, and am of opinion that it will be found of especial utility in operating on young subjects, whose struggles during the performance of an operation are generally the greatest difficulty the surgeon has to contend with. I may mention, that neither nausea, vomiting, nor any other disagreeable effect was produced in either instance.—I am, Sir, your obedient servant,

EDWARD PARKER,
Kirkdale, Liverpool, Jan. 1847. Surgeon to the Industrial School.

## OPERATIONS ON THE TEETH.

Sir,—I have used the vapour of ether, in seventy cases, for procuring insensibility to pain, during the extraction of teeth, with the various apparatus recommended for that purpose, and kindly supplied by Mr. Ferguson, instrument-maker to the hospital. I can bear testimony to their general efficacy in all cases where the vapour has been properly inhaled. As my experience increased, I could not but observe the inconvenient size and costliness of the various apparatus, coupled with the expense of preparing them for use; and as economy and convenience must be considered in that which will become general, my thoughts were directed, like those of many others, to the production of an apparatus which would at once combine simplicity with utility; and as hookahs have been chosen as the fashionable shapes, so mine bears some resemblance to a German pipe, and has been found efficient. The pipe is of glass, and mounted at the top with a brass cap and stopcock, into which an elastic tube is screwed, of sixteen inches in length, which is surmounted by a double-valved mouthpiece, of the description in ordinary use, a steel compress, padded, being used for securing the nostrils. It has been hinted to me, that a valve made of some fine tissue, and secured to the top of the mouth-cap, would be an improvement on the compress in general use, as many patients dislike their noses being secured by such an instrument. As much ether may be poured into the pipe as will fill the well and saturate the sponges. The mouthpiece should be placed between the patient's teeth, the stopper should be removed, and the stopcock turned on, when the patient should be directed to inhale in a natural way. The operator will derive a great advantage in the use of this apparatus, as he will perceive the rising of the fluid in the tube, as the air passes in at each inhalation—a means which will greatly aid his judgment as to the probable effect of the vapour on the patient's system. I have performed more than twenty operations with this apparatus, making, in the whole, above ninety cases; and I can with safety affirm, that this has answered better than any other I have used.

It was again tried, in an operation (likely from its character to be a protracted one) performed here by Mr. Skey, on Saturday, the 16th. A boy, aged ten years, met with an ac-

cident five weeks since, by which he ruptured his urethra: it was followed by an abscess, and almost entire closure of the canal. Mr. Skey, after some difficulty, succeeded in perfecting the communication of the separated portions of the tube. The operation occupied twenty-five minutes, during the whole of which time the patient was insensible to pain. I need scarcely observe, that he inhaled the vapour, at intervals, during the whole time; and before being taken out of the theatre, exclaimed to the question, "Have you suffered pain?" "No; he put something into my mouth which sent me to sleep!" I may here add, that the patient is doing well.—I remain, Sir, your obedient servant,

St. Bartholomew's Hospital, January, 1847. S. J. Tracy.

N.B.—The apparatus described was manufactured by Mr. D. Ferguson, instrument-maker to the hospital.

## REMOVAL OF A TUMOUR.

By John Charles Hall, M.D., M.R.C.S., East Retford.

Jan. 14th, William E——, aged twenty-six, applied at my house for the purpose of having a small fatty tumour, about the size of an egg, removed from his neck. Mr. Cocking, one of the medical officers of the Hull Dispensary, was present during the operation. The man was placed in an arm-chair, and the vapour applied by means of an instrument which was supplied to me by Mr. Hooper, the operative chemist, and is the one figured in The Lancet of last week, and is certainly very complete, and well adapted for the purpose. He complained, at the first, of a slight tickling sensation in the throat: this soon went off; in two minutes, the pulse had risen to 135; in another minute, his arm was slightly raised; his feet were then extended, and he fell back in his chair in a complete state of insensibility. The tumour, being somewhat adherent, required a good deal of dissection to separate it from the surrounding parts. The operation occupied about three minutes; and in about another minute, the man awoke, declaring he had "felt no pain;" and it took some little time to convince him the operation had been performed. During the operation, he raised the leg once, but said he had felt no pain at all: he had been in a dream.*

There is a class of cases in which the vapour has not yet been tried; and from my experience in one case, I am led to recommend it with confidence to the members of my profession. I allude to retention of urine from spasmodic stricture of the urethra: in such cases it will, I think, be found an effectual and elegant substitute for the warm bath, opium, bleeding—the whole paraphernalia of the former plan of treatment. In the case to which I allude, all attempts to pass a catheter were useless. On applying the vapour, the patient passed into a state of insensibility in five minutes; and during his dreamy unconsciousness, a catheter was passed without any pain, the bladder emptied, and on coming round, he got up perfectly free from pain, although previously in the greatest agony from an overloaded bladder. I have every reason for thinking the application of the ether vapour will be attended with the greatest possible benefit to those unhappy patients who may be suffering from the torments unrelieved retention of urine causes, and have therefore embraced the earliest opportunity of making the result of my experience known to the profession. We all know the difficulty of passing a catheter in these cases—a difficulty which I hope will now, in the majority of them, be removed.

Grove-street, East Retford, Jan. 1847.

## THE OPERATION FOR PTOSIS.

*To the Editor of* The Lancet.

Sir,—Some years ago, I performed the operation for ptosis, described by Dr. Brett in your last number; but resolved never to have recourse to it again, should similar cases present themselves to my notice. My patient was in a much worse predicament after than before the operation, in consequence of the want of protection to the ball of the eye from dust, flies, &c., the intolerable annoyance of which is infinitely greater than the evil of a closed eyelid. My patient never forgave me.—I am, Sir, yours, C. R. Bree.

Stowmarket, Dec. 1847.

* The first evening I received the instrument from Mr. Hooper, not having a patient to practise upon, and wishing to try the effects of the vapour, I applied the tube to my own mouth. I had not tried it long, before I fell back in my chair, and remained in a dreamy state for some little time. When I awoke, I was not for a moment aware of what had taken place, until the sight of the instrument recalled it to me. So far from being unpleasant, the effect was a most delightful one.

## PATENT HUMANITY.

*To the Editor of* The Lancet.

Sir,—I am a constant reader of The Lancet, in common, as I believe, with many other members of the bar. As your reader, I could not but take considerable interest in the new application of ether for the purpose of procuring insensibility during surgical operations; and as a lawyer, my attention has been equally arrested by the attempt which seems to be making to degrade a noble discovery to the level of a quack medicine. I agree with you, that a testimonial is due to the discoverer; but let us distinguish between the discoverer and the speculator, and let the interests of humanity and the claims of genius walk hand in hand. It is the duty of the physicians and surgeons of our public hospitals to vindicate both; and it is *your* province not to suffer either question to die.

But, with regard to the patent, it is said, on the one hand, that the discovery is not susceptible of such a thing; and, on the other, that no one can tell whether the patent can be sustained or not, until the specification, not yet lodged, has been examined. Nor, I may add, can there be any proceeding for sustaining the patent, until that specification *be* lodged: in fact, there is no patent until then. But although it be very true that, with regard to the specific letters in question, no opinion could now be adventured on whether they could be supported or not, it is equally true that, for all the purposes of the argument, enough exists in the patent law itself to warrant the decided opinion, that no extent of legal ingenuity could frame a specification which could prevent a medical man from procuring insensibility by administering ether, or from cutting off a leg or an arm, or performing any other surgical operation during such insensibility.

We need not go, although they are not unimportant to the question, to the general conditions, subject to which all patents are granted, to prevent their abuse, in proof of this; for the direct condition is decisive of the point. The patent must be in respect of a *manufacture*, as that manufacture must be *new*. You cannot have a patent of a principle; you cannot have a patent of a result, except with reference to the material mode by which it is brought about; for materiality is still more an essential condition than absolute novelty. In fact, a patent can only be obtained in respect of a process or an apparatus; the vendible result is but the accidental or tangible representation of the thing: the patent itself is in respect of the novelty of the material, or of the novelty of the combination or process by which that vendible result is produced.

Now there is no pretext for saying that a patent can be taken out for cutting off legs whilst the patient is in a state of insensibility, or the mesmeric quacks might patent their manual flourishes and passes; nor could a patent be obtained for the mere administering of ether, for that is common, both as a medicine and a toy. Can there, then, be a patent for administering ether by inhalation, so as to produce insensibility? Can you patent the administration of jalap till a given effect is produced on the bowels? That is the *reductio ad absurdam* to which we are driven. Take the highest ground, and say that the effect is to be produced invariably by a given fixed quantity; you might as well try to patent a definite number of grains of rhubarb; or a publican might as well try to patent a certain proportion of Gordon's gin to a definite quantity of hot water and sugar, and call it a patent inebriator. But the question need not be argued so high as that: the inhalation must vary with the constitution of the patient; and the administration itself must be a matter of skill in the hands of those employing it. That is decisive of the question. The discovery is, that insensibility can be produced by a known medicine, so to call it, administered, by a known process, up to a certain point; that is an accidental fact, of great value, certainly, but it is not a vendible result. If, indeed, the discoverer has any novel method of generating the gas, or any novel apparatus for administering it, both may be patented; but it will be open to the faculty to employ every other method, whether now known and generally used, or which may be hereafter contrived by the application of their abundant scientific knowledge, and of the mechanical skill of the many able men who construct instruments for the medical profession. I am Sir, your obedient servant,

Smith-square, Westminster, Jan. 1837. J. B. Kington.

"Medicine has for centuries served as the prop to natural science—a benefit which the latter has repaid by making the other feel its superiority."—*Professor Marx.*

# Correspondence.

## EFFECTS OF CAMPHOR ON THE TEETH.

We have received a variety of communications on this subject, and as it would be quite impossible to insert them all entire, we select such passages from the most important as will be most interesting.

Mr. Silvester writes to say, that he has observed the influence of camphor upon the teeth, for a space of eight years, during which he has "seen brittleness of the teeth to be an almost invariable concomitant of the camphor dentifrice." He deatils some experiments of Mr. Newenham, of Cheltenham, who found that

"Teeth immersed in spirits of camphor exhibited on their surfaces white spots, which were easily produced by a sharp instrument."

Mr. Silvester concludes with the opinion,

"That in the majority of cases, *fragilitas dentium* first appears at the external surface, as we should reasonably suppose it would, from the continued passage of the brush charged with camphor, over the front of the teeth, when the pores would imbibe the hurtful substance."

Our former correspondent, Mr. Hunt, writes another letter upon the subject, in which he objects to the experiments of Mr. Herapath, that they "are not conclusive, because they were destitute of one great peculiarity, and offer no parallelism to the act of brushing the teeth;" and he argues that even much of a mere chemical action of camphor upon the teeth may depend upon friction. He adds:—

"I do not undertake to define the *modus operandi* of this substance; whether it affect the enamel primarily, or whether, acting (as I should rather suspect) as an irritant, it attacks the dentrin beneath, and so, removing its subjacent support, causes it to crumble away almost imperceptibly. All I state is,—and the statement continues to receive almost daily confirmation,—that in the mouths of those persons whose teeth are affected by the disease in question, camphor has been employed."

Another gentleman, Mr. Davies, of Heytesbury, gives a detailed account of his own case:—

"My age is twenty-eight: some fifteen years ago I broke an incisor tooth of the upper jaw by a fall, in consequence of which I have worn a false tooth nearly ever since.

"In the spring of 1845, I had it replaced by a dentist at Bath, and I remember the observation he made on an inspection of my mouth. 'I must congratulate you on the capital state of your teeth. We seldom are able to say at your age what I can of yours. I believe every natural tooth in your head to be perfectly sound;' or words to this effect.

"I returned much pleased. I bought a new sort of powder, containing camphor and chalk. About ten months since, I was annoyed at finding every now and then pieces of enamel breaking off from my second molar tooth, on either side of the upper jaw. The brittleness soon extended to the dentes sapientiæ; and at this time, on the outer surface, I have scarcely a particle of these teeth remaining.

"I suffered most miserably from toothach, and almost constantly from uneasiness from the fixtures of my false one. Notwithstanding I attended to my stomach, &c., and took aperient pills two or three times a week, in other respects I enjoyed wonderful health. On seeing Mr. Tearne's statement, I discarded my tooth powder, and have since used simple prepared chalk.

"I have never suffered from that time to this from toothach, even in the slightest degree, nor have I found the decay increased. As I have before said, I will leave the explanation to others, and merely add, in support of the statement of Mr. Hunt, that 'the decay commenced at that part of the tooth where the enamel terminates, and the protection of the gum commences.'"

In contradiction to the foregoing we have received a statement of experiments, from Dr. Reid, of Edinburgh, which appears to confirm the experiments made by Mr. Herapath. The following quotation will set his most important facts before our readers:—

"Having taken four bicuspidati, I split each of them in two, longitudinally, and numbering one half of each, I laid it aside, in order that the exact effect produced upon the other half, if any, might be ascertained by comparison. Of the remaining halves, I placed No. 1 in dry camphorated chalk; No. 2 in the same preparation, moistened with water; No. 3 in camphorated spirit; and No. 4 in camphorated water. After the lapse of thirty-five days, I removed, and joining the halves of each tooth, subjected them to microscopic scrutiny. In none of the portions that had been experimented on did I find the least apparent alteration of structure; the surface of the bone and enamel bore no trace of erosion, and the split edges of each half appeared as sharp as those of its fellow.

"Enough has already been said to show that the use of camphor in dentrifices or lotions has nothing to do with the appearances noted by your correspondents. I fear they have jumped at a conclusion before satisfying themselves of the truth of their hypothesis. Mr. Tearne admitted he had not employed the microscope in his experiments, but intimated his intention of doing so, and communicating the result to you. This, so far as I am aware, he has not done, although five months have elapsed since the date of his letter. Mr. Hunt supports the views of the former correspondent by observations made in the course of his practice, drawing his deductions from that source, rather than from experiments as to the action of the substance upon the bodies in question. The appearances noted by Mr. Hunt and others have been met with by me on the teeth of those who use camphor in neither one shape nor another. The unusual fragility of decayed teeth, where camphorated spirit has been applied, may be accounted for in this way—namely, that individuals suffering from severe toothach are apt to fly from one remedy to another, and thus, to camphorated spirit may have been ascribed the mischievous effects of creosote, when, as is frequently the case, it contains a large portion of acid."

It will thus be seen, that among persons who have evidently considered the subject with care, great discrepancy of opinion exists. The subject is certainly one which ought to be set at rest if possible. At present, if we are to judge from the evidence before us, it would seem that camphor is inimical to the teeth. Facts and experiments are the only means of solving the difficulty. In estimating the value of simple observation, it must, however, always be borne in mind, that the *post hoc ergo propter hoc* argument is extremely fallacious; that to determine the injurious effects of camphor on the teeth, we must have other than the fact, that in a certain number of instances, fragility of teeth came on after the use of camphorated dentifrice or spirit,—we must have something like evidence that the brittleness would not have occurred had the camphor not been used.

## TREATMENT OF PLACENTA PRÆVIA.

*To the Editor of* The Lancet.

Sir,—Every woman ought to thank you for the ready and cheerful assistance you render to them, and mankind in general, by admitting the opinions and discussions of medical men on these distressing cases, into your journal.

It is now some years since I have had one of these anxious cases to manage; *that*, however, I shall never forget, and although it sickened me of midwifery, it has often induced much and serious reflection.

What I now write must be considered as a mere suggestion, submitted to the opinions of my professional brethren.

Suppose, by stethoscopic examination, the situation of the funis well ascertained — what is there to prevent a fine trocar and canula being passed in a contrary direction through the placenta, *and the liquor amnii drawn off?* The uterus contracts around the child, labour follows, as a matter of course; the uterine action induces pressure of the fœtus on the lacerated vessels, and consequently prevents hæmorrhage; whilst the gradual dilatation of the os tincæ goes on, tearing the placenta in two parts, or pressing head and it down together. Hæmorrhage, under such circumstances, cannot, I think, take place, and *I believe* both child and placenta would come off together. At all events I feel convinced no more danger could take place than in any other case.

I have written in haste, and perhaps not so full as I could wish; but I ask my professional brethren to think over this; and I ask them to consider the now established rule, that where partial separation of the placenta, *high up*, takes

place, the puncture of the membranes, evacuation of the liquor amnii, and uterine action following, proves always the best safety both to parent and child.

As I promulgate this theory for opinion, I shall not feel pained or pleased either at censure or praise.—I am, Sir, yours obediently, JAMES BULLIN.

Farringdon-street, Dec. 1846.

## LONDON HOSPITAL.

ADMISSION OF SYPHILIS.

*To the Editor of* THE LANCET.

SIR,—As a brief answer to your correspondent's communication respecting the non-admission of venereal patients to the London Hospital, I beg to say, that during the last thirty years, I have not, upon any occasion, known a patient to be refused admission because his case was venereal. It is true that the worst cases only are admitted as in-patients, all the less severe cases being treated as out-patients.—I am, Sir, yours faithfully. CHIRURGUS.

Dec. 1846.

*** The above letter is authenticated by the name of the writer."—ED. L.

## LONDON HOSPITAL.

ADMISSION OF SYPHILIS.

*To the Editor of* THE LANCET.

SIR,—In proof of what I asserted in my last letter to THE LANCET, I enclose you an in-patient's letter, on which is printed in italics the following passage :—"No children under seven years of age, (except cases of compound fractures, amputations, or stone, and other cases of equal or greater urgency ;) no pregnant woman, nor person under mental derangement ; no person having measles, scarlet fever, small pox, itch, or other infectious disease, or the *venereal distemper*, or in a state of confirmed consumption, or deemed by the physicians or surgeons incurable, or more capable of relief as out-patients, are admissible into the hospital." The motto of the institution is, "Blessed are the merciful;" yet no mercy is extended to unfortunates labouring under those diseases.—I have the honour to be, Sir, your obedient, humble servant,

Jan. 1847. SCRUTATOR.

## LIBRARY FEES AT KING'S COLLEGE.

*To the Editor of* THE LANCET.

SIR,—Permit me, through the medium of THE LANCET, to inquire why a library fee is exacted from each matriculated student at a medical school, and how such fees are annually expended at a medical school which holds out so many advantages to its pupils; but at the library and reading-room of which (unlike the other leading metropolitan schools) neither THE LANCET nor any other weekly or quarterly periodical is taken in for the perusal of those who subscribe to it? An early insertion of these queries will much oblige, your obedient servant, A KING'S-COLLEGE STUDENT.

Dec. 1846.

## MEDICAL REGISTRATION.

*To the Editor of* THE LANCET.

SIR,—I have just read the very able letter of your correspondent "Spes." I also am of opinion that the profession "should be up and doing," and I feel assured, that without some agitation your "Registration Bill" will not be enacted into law : that Bill, with its few clauses, in my humble opinion, contains nearly all we want. It does not interfere with the regulations of the different Colleges; they may educate and examine their members as before, their ALPHABETICAL registration, when they *become* members, being all it requires. Surely this is no very grave request; but this, and this only, is the cause of the great opposition, by the heads of the different Colleges, it being the destruction of this class-distinction that rankles so deeply in their bosom.

Another source of opposition (fortunately by a less powerful body) is, that it is Mr. Wakley's Bill: this selfish and disgraceful clique will move heaven and earth to oppose it, solely because Mr. Wakley is its author, forgetting how much they are indebted to that gentleman for all the benefits the profession is now enjoying.

An unknown individual like myself can do little but urge upon his brethren in general practice not to allow the approaching parliamentary season to pass without each putting his shoulder to the wheel, so that you, Sir, to whom we all owe so much, should say with confidence, in your place in Parliament, that you had the voice of the whole profession with you. We all know, and indeed acknowledge to each other, that your Bill is nearly all we want; we then leave to some more ardent individual the unthankful duty of carrying it, forgetting that we have no right to throw all the work upon the too-willing horse. Let us then, one and all, arouse ourselves, and success is certain.

I would suggest that an association should be at once formed with the *sole* object of carrying the "Registration Bill;" it might be called the "Registration Association;" and if you, Sir, should deem it an advantage to join it, as its head and director, the weight of your name alone would rally to your standard the supine and the wavering; and a few notes of preparation in the pages of THE LANCET would, I hope, arouse my slumbering brethren. When once awake, we know, from experience, with what energy they pursue their onward way. I say, "Agitate, agitate, agitate." No great measure has yet been carried without it, whether medical or political; therefore, I say again, "Agitate, agitate, agitate."

With greatest respect for your unwearied energy in our cause, believe me to remain, your obedient servant,

London, 14th Dec. 1846. CYMRO.

I enclose you my name and address.

## TREATMENT OF ULCERS BY FIRING.

*To the Editor of* THE LANCET.

SIR,—In consequence of having lately observed in your journal several communications relating to the use of the method called "firing," by Dr. Corrigan, I am induced to call the attention of your readers to another method of applying dry heat, which I have repeatedly witnessed in the practice of M. Malgaigne at the Hôpital de Clinique.

This method is chiefly useful in procuring cicatrization of unhealthy ulcers of the skin, such as are left after the evacuation of the pus of buboes. The heat is applied by heating to redness one of the numerous irons used for actual cautery in the Paris hospitals, and holding it over the sore at such a distance as to produce an agreeable sensation of warmth to the part. In proportion as the iron cools, it is carried nearer and nearer, until, at last, it may be entrusted to the patient himself to hold, with instructions to continue approaching the iron to the ulcer as the iron cools.

I have not seen this method of treating obstinate ulcers employed anywhere else but in the wards of M. Malgaigne, although, from the excellent effects I witnessed from its use, I think it is deserving of being more generally tried. The first visible effect of the application is the assumption of a cleaner appearance by the sore, then a shining white pellicle of lymph spreads over the surface, and frequently, within twelve hours of the first application, cicatrization has made some progress around the edges of the sore. In two cases I noted the complete cicatrization of unhealthy-looking ulcerations, resulting from large buboes in the groin, in eighteen hours. ROBERT BARNES, M.B.

Notting Hill, Jan. 1847.

## DR. TODD'S CYCLOPÆDIA OF ANATOMY.

*To the Editor of* THE LANCET.

SIR,—The extraordinary delays in the publication of Dr. Todd's "Cyclopædia of Anatomy" requires some definite explanation from that gentleman. There are many reasons why this should be given, independent of the propriety of satisfying the natural impatience of those who have hitherto subscribed to the work. It may be that the sale does not remunerate the proprietor, and that he is therefore taking this method of quietly dropping the speculation. If this be the case, it is fitting that he say so, inasmuch as some other person, equally competent, might be found, who would undertake to complete the work, and who would, I conceive, be generally supported by those who have taken the numbers already published.

It can scarcely be supposed that this "course of development" has been caused by the dilatoriness of any individual contributor, since, were such the case, Dr. Todd was bound, in duty to his subscribers, to have taken the wanting article out of such lazy writer's hands, and transferred it, as he would have had no difficulty in doing, to some other competent author. If, however, this be the excuse, I have no hesitation in saying, it will be insufficient to satisfy the reading public. The delay that has already occurred has been in-

jurious to Dr. Todd, as regards his capacity to be editor of such a work. The book cannot pay, for many will discontinue the further taking in of the wanting numbers, and the sale of the whole (if it ever become complete) will be compromised by the fact of the great delay that will have taken place between the issue of the first and last numbers of a work, the subject matter of which is always progressive.

It is further injurious to other authors whose work may appear in numbers, as few will be inclined to subscribe to publications on this plan, after the specimen of regularity that has been given by the author of the Cyclopædia of Anatomy.—I am, Sir, your obedient servant,

January, 1847. W. H. L., A SUBSCRIBER.

## THE SYDENHAM SOCIETY.

*To the Editor of* THE LANCET.

SIR,—Will you have the goodness to inform your readers what has become of the Sydenham Society? Have its Council been provisional committee-men to some exploded railway scheme, and escaped to Boulogne, there to wait until the interest of the Sydenham subscription fund shall enable them to liquidate their railway responsibilities? Has all printing been suspended on their Society's behalf until that day arrives? or why is it, that the subscribers have not, in 1847, obtained the books which were promised them in 1845? Will the subscribers be cajoled out of Harvey's works, and be politely told, that "the sub-committee to whom the works of Dr. Harvey were referred, assigned in their report, reasons which satisfied the council that it was inexpedient for them to proceed further with this object"?* On the 1st of May, of last year, the subscribers were told, that the printing of that volume was "so nearly completed" that it would "shortly be in the hands of the members." The poor members have not yet touched, or seen, the goodly volume.—Yours,

Jan. 1847. A VICTIM.

* The manner in which they *have been* treated in reference to Dr. W. Hunter's works.

# Medical News.

COMMON PLEAS.—COOPER *v.* DICKSON.—This was an action for defamation. Mr. Sergeant Murphy and Mr. Bovill were for the plaintiff; Mr. Whitehurst and another learned gentleman conducted the defence. It appeared, from the learned sergeant's statement, that the plaintiff is a respectable surgeon-dentist, residing in Berners-street, and the defendant is a Physician, residing in Bolton-street, Piccadilly. Defendant, some time since, introduced to the plaintiff a Mr. Wm. Henry O'Driscoll, for the purpose of getting his teeth set in order. Some time elapsed, when Mr. Cooper met with a severe accident in the Regent's-park, and was attended by the defendant in his professional capacity. The next time Mr. O'Driscoll met the defendant, on inquiring after the plaintiff, the defendant declared that he (the plaintiff) was a ruffian, and was leagued with burglars; that in France he had been under the surveillance of the French police, and that his name had been published in the police reports in the newspapers. Mr. O'Driscoll, having cause to suspect that the defendant's statement relative to the plaintiff was exaggerated, called on the plaintiff, and stated to him what the defendant had said. The plaintiff solemnly denied the truth of the statement, and told Mr. O'Driscoll that the defendant was actuated by the basest motives. Subsequently, he saw the defendant, who showed him a newspaper where the plaintiff's name was mentioned, and cautioned Mr. O'Driscoll from any association with him, repeating the charges, that the plaintiff was leagued with robbers, shoplifters, and burglars. Mr. O'Driscoll underwent a very severe cross-examination as to his motives in visiting the plaintiff, and taking a memorandum of the slanderous words; and as to his previous life, he stated that he had been in the navy, and admitted that he was put under an arrest on board an Indiaman, for striking the captain.—Mr. Sergeant Murphy, on the part of the plaintiff, reëxamined the witness, and begged him to state all the plaintiff had said to him. The witness then made the following extraordinary statement:—"When I visited the plaintiff, and on my inquiring the cause of the defendant's (Dr. Dickson's) animosity towards him, plaintiff replied that Dr. Dickson was a bad man: the cause of his enmity was, because I refused to perform an operation on a lady to procure abortion. That lady was married in Brussels at the Ambassador's Chapel, and was closely veiled. After the ceremony she was handed over to another gentleman, and the person who married her, after receiving a certain consideration, went away." Mr. O'Driscoll went on to state that Dr. Dickson proposed to him to marry a lady, and he believed that it was the same person who had been married at Brussels, but he refused.—Mr. Whitehurst, for the defendant, addressed the jury, and characterized the action as a most base one, and was only supported by the solitary testimony of Mr. O'Driscoll, and ought to be viewed with suspicion.—Mr. Justice Coltman summed up, and the jury, after a few minutes' consultation, found a verdict for the plaintiff—Damages, 40*s*.—*Sunday Times.*

INSTITUTE OF MEDICINE AND ARTS.—An institution, bearing this title, has been commenced under very favourable auspices at East Temple Chambers, Whitefriars, for the purpose of preparing medical men and students, by practical instruction, for the examinations of the Royal College of Physicians, the University of London, College of Surgeons, and Apothecaries' Hall. The mode of teaching is to be strictly practical, and as far removed as possible from the ordinary system of grinding. The gentlemen who have undertaken the duties of tutors are, Mr. Richard Hoblyn, M.A. Oxon, Dr. Cooke, and Mr. E. J. Chance.

MESMERISM.—Warm discussions have recently taken place at Halifax and Exeter in the public papers. At Halifax, Mr. F. S. Garlick defended his profession with temper and ability; at Exeter, some medical and non-medical gentlemen have laid bare the most extraordinary instance of fraud, gullibility, and collusion, ever made public, even in the annals of mesmerism itself.

Mr. VINCENT has resigned the office of Surgeon to St. Bartholomew's Hospital, and Mr. Wormald that of Assistant-Surgeon. Mr. Wormald is a candidate to succeed Mr. Vincent, and Mr. W. Pennington, to the post of Assistant-Surgeon.

Dr. ROBERT LEE has resigned the office of Physician-Accoucheur to the Brownlow-street Lying-in Hospital.

Mr. SOUTH has sent his resignation as Professor of Surgery to the College of Surgeons.

## CORRESPONDENTS.

*X. Y. Z.*—To the first query is, "No." There would, under the present state of the law, be the possibility of prosecution. To the second, the answer is also in the negative. Foreign diplomas alone confer no legal right of practice in this country.

*Mr. F. S. Garlick*, (Halifax,) shall receive a private note.

*Mr. Currie.*—We hope to be able to call for the aid of himself and friends. We shall preserve the drug document.

*Veritas*, (Manchester.)—Apply to a regular medical man, but avoid the advertising quacks.

We have to acknowledge the the receipt of the *Western Times* and the *Liverpool Standard.*

*F. L. H.*—Yes.

*T. B.* would not be safe.

*Detector.* will find a letter addressed to him at Mr. Churchill's, Princes-st.

*Dr. Milroy* shall receive a private note.

*Inquirer.*—It is no positive infraction of the law, but it is certainly morally unjustifiable. In case of any accident, an inquest should be resorted to.

*M. D.*—In reference to the Editorial remarks in our last number, on the Memorial of the College of Physicians to the Home Secretary, a correspondent informs us that the College has recently required all candidates for the licence, whether intra or extra urban, to submit to the same examination, and that this examination occupies three distinct days.

*E. H.*—We should prefer the Library of Medicine as well suited for the purpose named.

*Maxaων.*—Our correspondent has purely mistaken our meaning. We answer, no! to the first question most decidedly, and we are "the same."

*A Subscriber.*—Will only be able to register by virtue of his English licence.

*A Student.*—It would be impossible to give precise answers to the queries proposed.

ERRATUM.—At page 60, first column, line nineteen from bottom, *for* "some occult and inappreciable constitution of the liver." *read* "constitution of the air."

Communications have been received from X. Y. Z.; Mr. F. S. Garlick; Dr. George Gregory; J. B. Kington, Esq.; Mr. Currie, (Blackburn;) Anti-Humbug, jun.; Mr. Parker, (Kirkdale;) Dr. M'Evoy; Mr. Tracey; Veritas, (of Manchester;) Dr. Dick, with Tracts for the Improvement of Popular Literature, Nos. 1 and 2; Dr. J. C. Hall, (East Retford;) Mr. C. R. Bree, (Stowmarket;) A Victim of the Sydenham Society; A Subscriber; Mr. J. W. Lake; Dr. Cossar; An Apprentice; the Reviewer of Dr. Marshall Hall's "Observations and Sugestions" in the last number of the *Medico Chirurgical Review*; Amor Justiciæ; Inquirer; E. H.; Dr. Thurnam; A Subscriber; A Student; Mr. Charles Muller, (Highworth, Wilts;) Mr. Linton, &c.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION; AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

### CANCER OF THE MALE BREAST; EXTENSION OF DISEASE TO THE BONES; FRACTURE OF THE RIGHT HUMERUS.

CASE 1.—David H——; aged forty-five; butcher; a widower for fifteen years, without family; formerly a stout and robust man, but now much fallen away. Noticed, about a twelvemonth ago, a hard, moveable, subcutaneous knot, the size of a marble, in the right breast. The tumour, which never caused him any pain, unless he over-exerted himself with the right arm, has been slowly, but gradually, enlarging up to the present time, when it is as big as a walnut. Admitted into Pitcairn ward, Oct. 5, 1846, under Mr. Stanley.

There is a scirrhous mass, the size of a walnut, of cartilaginous hardness, occupying the situation of the right mammary gland. A chain of enlarged and hardened absorbent glands extends into the axilla. The appetite is good, but he sleeps badly at night. Meat diet. To take an opiate at bedtime; purgative medicine when necessary.

12th.—Whilst lying in bed this morning, the right humerus broke about the lower third, during a fit of coughing. Splints were applied to the arm.

Jan. 3rd.—He is much fallen away; respiration is hurried; and he suffers from occasional attacks of bronchitis; he complains of pain in all his limbs, and lies in bed quite helpless. The splints are still applied to the fractured humerus, which has not yet become firmly united.

19th.—He has been almost in a moribund state for some days. He has now somewhat rallied. Opium at night as usual. Wine, brandy, and whatever food he fancies.

Still in the hospital.

### CANCER OF THE MALE BREAST; EXTENSION OF DISEASE TO THE AXILLA.

CASE 2.—William H——; aged forty-three; compositor; a tall, spare man, of healthy aspect, and of temperate habits; has been subject to slight discharge from the right nipple for the last five years. A twelvemonth ago he noticed a small, hard, and subcutaneous moveable knot, the size of a pea, a little to the outside of the right nipple, which, with the increasing size of the tumour, became gradually lost in the distended skin. Six months ago he applied aquafortis to the part, and the growth shrivelled up to nearly one half its original size; but it shortly grew again with increased activity, and has been steadily enlarging up to the present time. He became out-patient at the hospital under Mr. Lloyd, and as he was very desirous of undergoing some operation, was admitted into Bentley ward, November 3rd, 1846.

There is a hard knot, the size of a walnut, occupying the situation of the right breast, and covered by adherent and livid blue integuments. Immediately below, are two smaller subcutaneous knots, the size of peas, connected to the former by several hard cords. From the larger tumour three hard cords run across the chest into the axilla, and terminate in enlarged and indurated absorbent glands. He has never experienced any pain; but occasionally, when rubbing himself with a coarse towel after washing, he has felt as if needles were running into the chest. He is not confined to bed, but moves about, and takes his meals as usual. After careful examination, it was the general opinion of the surgeons that the whole of the diseased parts could not be satisfactorily removed. No operation, therefore, was performed, and the patient left the hospital about the end of the month.

Until the age of puberty, there exists but little difference between the two sexes in the shape of the chest, or the size of the mammary glands. These organs are composed of an assemblage of follicles, hanging like bunches of grapes upon minute lactiferous ducts, which, uniting in their course to form larger ducts, terminate in variable numbers upon the surface of the nipple. The glandular structure is surrounded by a considerable quantity of adipose and areolar tissues, the latter containing a large proportion of yellow elastic fibrous tissue, which supports the delicate lactiferous tubes in their course to the surface. In the adult male, the mammary gland is rarely larger than half a walnut, but is more commonly about the size of a pea; occasionally, it becomes atrophied, and can with difficulty be recognised. Instances are not very uncommon, in which, for a longer or shorter period of a man's life, there escapes from the nipple a secretion, which incrusts upon the surface, and gives rise to some irritation. In Case 2, this discharge had existed for full four years previous to the first manifestation of cancerous disease; and the patient informed me that the breast of one of his brothers was subject to a similar affection.

It is not surprising that an organ so rudimentary as the mammary gland in the male should be rarely the seat of disease. I have met with but two morbid conditions of the part:—

1. Inflammatory swelling, arising from various causes.
2. Scirrhus, or hard cancer.

The following remarks refer only to the latter disease:—

Cancer of the male breast is almost invariably of the scirrhous or fibrous variety. It attacks people, otherwise healthy, at or after the middle period of life. The statement, that it occurs only in men of advanced age, between sixty and seventy, is incorrect. David H—— (Case 1) was forty-four, and William H—— (Case 2) was forty-two years of age, when their attention was first directed to the disease. Commencing as a hard, moveable, and circumscribed subcutaneous knot, in or near the mammary gland, it pursues its course slowly, and often unattended by pain, if unirritated by caustic applications. In the course of six or eight months, the axillary absorbent glands become enlarged and hardened; and the absorbent trunks, passing to them from the mammary gland, may be converted into firm, hard cords. Other smaller subcutaneous knots, also connected to the seat of the primary disease by hard cords, may be occasionally detected upon the surface of the chest. Case 1 affords an instance of extension of the disease to the osseous system. Cancerous matter, deposited in the form of tough, grey-coloured, pulpy mass, distends the compact bony structure, and converts it into a loose trellis-work. Under these circumstances, the application of very slight force is sufficient to produce a fracture.

The disease usually proves fatal by its extension into the cavity of the chest. Frequent attacks of bronchitis exhaust a frame much reduced by long-continued suffering, loss of appetite and of sleep. The immediate cause of death can in general be referred to effusion of fluid into the cavity of the pleura, consequent upon morbid deposits in the membrane.

It is a commonly received opinion, that when cancer attacks the breast in the male, there is less probability of internal organs becoming affected, than when it occurs in the female; and it is from thence inferred that an operation may be undertaken in the former, at a more advanced stage of the disease, with better prospect of permanent cure. I am not acquainted with the grounds upon which these statements rest; they do not receive support from the evidence afforded by the two cases here related. In them we find the disease pursuing a course precisely similar to that which we have more frequent opportunities of witnessing in the female. In the course of a few months, the cancer spreads from its original size to the neighbouring absorbent glands; next, it attacks the bones, or manifests itself in some of the important cavities of the body, where its presence soon leads to consequences fatal to life.

# Original Papers.

NOTES OF

## THE WEATHER, AND THE MORE PREVALENT DISEASES OF THE SUMMER OF 1846.

By WILLIAM MACINTYRE, M.D., Physician to the Western General Dispensary, Marylebone.

*(Read at a meeting of the Harveian Society, November 21st, 1846.)*

*(Continued from p. 88.)*

NEXT to abdominal diseases, affections of the nervous system contributed most to swell the bills of mortality, an increase being observable in the deaths from apoplexy, paralysis, delirium tremens, insanity, and cerebral inflammation. The augmentation of prevalence and fatality in this class of diseases may fairly be ascribed to a continuously exalted atmospheric temperature. Headachs and vertiginous feelings were very generally complained of by persons in ordinary good health;

and tremblings, and what are called nervous ailments, were universally aggravated in valetudinarians. Some sudden deaths were recorded as having taken place in the country from "insolation," or the imprudent exposure of the head, uncovered, to the direct rays of the fervid sun.

*Apoplexy.*—One case of apoplexy, a disease relatively rare among the labouring classes, occurred in my dispensary practice, in a stout woman who had been long subject to giddiness. It was a well-marked example of the "apoplexia fortis," in which consciousness, sensibility, and voluntary motion, are suddenly abolished. On the seizure, Mr. Palmer, the resident medical officer, promptly attended, and took away fifteen ounces of blood from the arm. Leeches and blisters, with active purging by calomel, were afterwards employed, and the patient recovered her consciousness entirely, and her speech partially, but she remains helplessly paralytic.

*Meningitis and cerebral abscess.*—The influence of a strong exciting cause, such as a high temperature, in suddenly rousing dormant mischief into activity, was probably exemplified in the following case of long-standing otorrhœa purulenta, which at this time ended in abscess of the cerebellum:—

William W——, aged forty-three, a coachman, was entered at the dispensary, and attended at his home, on the 7th of August. He had enjoyed good general health till two years before, when he began to be troubled with headachs, which he attributed to being frequently hit on the head by one of his horses, which, from vice or frolic, was in the habit of striking him with his mouth and teeth. He had, however, been totally deaf on the right side for sixteen years, and most of that time subject to a discharge from the ear, trifling in amount, except when labouring under a cold, or after violent exercise, when it was found to flow more copiously. About the end of July, he had one of these attacks, which was much more violent than usual. On this occasion, the pain was confined chiefly to the right side of the head and face; and he described it as intense and distracting, depriving him completely of rest and sleep. Fever soon set in, with a considerable amount of delirium; and when visited on the 7th of August, he had all the symptoms of acute cerebral inflammation. The most active treatment, consisting of general and local bleeding, cold to the head, blisters, and the free use of calomel, was put in force by Mr. Palmer and Dr. Day, who attended him in my absence; but the pain did not remit; and on the 14th, the mouth was observed to be drawn to the left side. He now became drowsy, and towards the end of the month, stupor set in, and continued increasing till the 3rd of September, when I first saw him. He was then almost entirely unconscious, and on the 8th died comatose. We were assured by his wife, that two days before his death, in the middle of the night, when the coma was profound, he all at once recovered his senses, with some power of speech, and for several hours talked coherently about his family, his own funeral, and some matters he wished to be communicated to his master.

On a post-mortem examination, a probe was found to pass much deeper into the right ear than into the left, and gave the impression of traversing denuded bone. When the calvaria was removed, all the meninges presented appearances of intense inflammation, with sub-arachnoid effusion. The substance of the brain was vividly injected, and in a state of ramolissement, particularly in the neighbourhood of the ventricles, which cavities were greatly distended with serum. On raising the cerebrum, a considerable bulging of the *sensorium cerebelli* was observed, near to where that membrane is fixed to the *pars petrosa* of the temporal bone. This prominence was found to be caused by an abscess in the substance of the cerebellum, which contained about two ounces of green viscid pus, and communicated, by the meatus auditorius, with the internal ear, and by numerous carious perforations, with the mastoid cells. This portion of the bone and parts adjacent were extensively diseased, and soaked with purulent matter. A preparation of the parts exhibits the chasm in the brain which gave lodgment to the matter, and numerous portions of diseased bone attest the devastation not unfrequently committed by this destructive but insidious malady. The history of the case strikingly illustrates the insecurity of life under even very trifling discharges of matter from the internal ear, if long continued; for there can be little doubt that disease had been, for years, progressively, though slowly, advancing among the osseous structures, before it arrived at the dura mater, where it lighted up the inflammation which so speedily involved the envelopes and substance of the brain, and thus extinguished life.

*Delirium tremens.*—One death from delirium tremens was registered at the dispensary during the summer. The case did not fall under my observation, nor did I meet with any decidedly marked example of the disease among the poor of the district. In private practice, however, I had the opportunity of seeing two cases, with the details of which I will now close this communication.

The first case was that of a tradesman, thirty-four years of age, whom I saw on the 19th of August, then under the care of Mr. Lawson, whose constant patient he had long been for most of the evils springing from habitual indulgence in the excessive use of spirituous and fermented liquors. I attended him with that gentleman about two years before, when the usual consequences of such a course of living had made serious progress,—pulmonary and cardiac disease being superadded to gastric and hepatic affections of earlier date. At length the nervous system began to sympathize, and when I saw him on the 2nd of October, 1844, he was verging upon, if not actually in a state of, delirium tremens. For several days he had not slept, was trembling all over, sweating profusely, and extremely restless, with a countenance expressive of anxiety and terror. His answers were distinct, though hurried; but when not engaged in conversation, he rambled on various subjects. The pulse was weak and irregular; the action of the heart feeble and fluttering, and its sounds indistinct and confused. His tongue was pale, and he had almost constant vomiting, the stomach rejecting medicine, and every kind of food, however bland. The attack of nervous irritation had followed a debauch, and as he had not, for nearly a week, tasted any liquor stronger than water, he was asked, at our visit, if he thought he could keep down a glass of ale. He replied that he thought he could, it being the very thing he was longing for. A pint of ale was accordingly procured from a favourite emporium, which he had been careful to name, and he quaffed nearly the whole of it with great relish. He was equally fortunate in retaining it on the stomach, and expressed himself wonderfully comforted by the indulgence. Infusion of calumba, with fifteen minims of tincture of henbane, and five grains of carbonate of ammonia, were prescribed every four hours. This he also retained, and after taking another draught of his wonted beverage, and a toast, at bedtime, he passed a good night, and next day he was quite calm, and so much recovered, that I took my leave, with an admonition to mend his way of living. He continued for some time very weak, but under a course of stomachic bitters and a regulated diet, directed by Mr. Lawson, he recovered strength sufficient to enable him to resume the management of a rather extensive business. Though not uniformly strict in his regimen, his habits became more temperate; and though always an invalid, he was not again laid up till a fortnight before the present attack, when, after indulging too freely at an annual feast, which he gave to his men, all the symptoms already detailed, recurred with redoubled violence, and diminished constitutional powers to withstand them. The restlessness, tremor, pervigilia, and delirium, were now more marked, and associated with diffused bronchitis and a congested state of the lungs. The stomach, as on the previous occasion, was extremely irritable, the breathing oppressed, the pulse hardly to be felt, and the action of the heart equally feeble.

The patient, who had been freely purged, and blistered upon the chest, was now ordered to take the compound infusion of gentian and carbonate of ammonia in a state of effervescence, and half a grain of acetate of morphia at bedtime.

Next day we found him sitting up quite tranquil and collected, enjoying a boiled sole. Almost immediately after having taken the morphia, he fell asleep, and slept till morning, when he awoke, he said, feeling quite well. He was now free from sickness and headach, but the skin was still perspiring profusely. He was ordered to continue the gentian and ammonia in a state of effervescence, and to repeat the morphia should the restlessness return.

He continued in this comfortable state throughout the day, and did not take the morphia at night; for soon after going to bed, he went off into a natural sleep, awaking occasionally to pass water, without making any particular complaint. At six o'clock in the morning, however, his wife discovered that, though stirring, he could not speak, and had lost the use of his right arm and leg. Mr. Lawson saw him soon afterwards, and found him completely paralyzed on the right side, with the angle of the mouth drawn considerably towards the left. He appeared conscious, however, and to understand what was said, though unable to articulate. The face was rather flushed, but the pulse very weak. Six leeches were applied to the forehead, and a stimulating liniment to the limbs.

When I saw the patient at noon, the character of the attack had not changed, but its more prominent features had some-

what improved. He seemed perfectly conscious, and though his speech was embarrassed, he was able to tell us that he had no pain, but that he could not move his arm. The distortion of the face was now scarcely perceptible; the pupils were much dilated, but there was neither stertor nor drowsiness. The bowels had not acted for twenty-four hours, but he had made water repeatedly since the attack, asking for the utensil on these occasions. The face was pale, the pulse very weak, and the skin clammy. The leeches had drawn very little blood.

The bowels having been freely opened by a clyster, cold lotion was ordered to be applied to the shaved head, a blister to the nape of the neck, and three grains of calomel to be given every four hours.

The following day, August the 22nd, an evident improvement was observable. The patient had recovered in a great measure his intelligent look; the pupils had resumed their natural dimensions; he spoke more distinctly; could move his arm, grasp pretty firmly, and draw up the affected leg. Beyound this, however, very little progress was made in the recovery of motion, and about the end of the month he became again extremely restless, anxious, and occasionally very excited. In this state I saw him on the 3rd of September. He had then been three days nearly without sleep, incessantly talking about the state of his health and of his affairs alternately, and suffering extreme anguish about the præcordia, leading to voluntary deep inspirations, which were succeeded by prolonged expirations and a loud cry of distress; in short, his whole manners and aspect exhibited the agony observed in the worst cases of angina pectoris. Nevertheless, he spoke distinctly, and answered questions rationally, saying, he felt as if sinking to death, which, indeed, seemed to be the case, for the pulse was scarcely perceptible, the body bathed in cold perspiration, and every attempt to raise him up in bed threatened fatal syncope. The pupils were rather dilated, but there was no suffusion of the eyes, nor intolerance of light. He had taken hardly any nourishment for two days, as the stomach was very irritable, and he was very unwilling to aggravate his sufferings by attempting to swallow either food or medicine. With some persuasion he was induced to try a little wine and sponge cake, part of which he retained, and afterwards a draught of camphor julep, with compound spirit of ammonia, and half a grain of acetate of morphia.

We visited the patient again in the evening, at nine o'clock, when we found him just awoke from a tranquil sleep of four hours, into which, we were told, he had fallen directly on taking the morphia. He was now quite easy and composed, was, above all, free from the gasping so distressing in the morning, and conversed coherently. The pulse was perhaps somewhat improved, but the cold clammy perspiration was still present, and the exhaustion extreme.

After giving him some wine and arrow-root, which he swallowed without difficulty, directions were left to support him during the night with nourishment, and to repeat the morphia should he not go to sleep within an hour. Soon after our visit the restlessness returned, and continued, notwithstanding the anodyne, till twelve o'clock, when he fell asleep, and slept till two in the morning. He then awoke perfectly calm and collected, but more exhausted, constantly desiring to change his posture, and while supported in bed he became very faint, did not rally on lying down, and after a few minutes of hard breathing, expired.

The body, which presented remarkable muscular development, and a considerable amount of adipose substance, was examined, thirty-six hours after death, by Mr. Lawson, Mr. Palmer, and myself. Cadaveric decomposition had begun; there was a good deal of lividity of the face, neck, and depending side of the trunk, and much black fluid blood followed the division of the scalp. The calvaria was very thick, but no morbid adhesion existed between it and the dura mater. This membrane was opaque and thickened, its veins and sinuses loaded with black blood; but, like the other meninges, it presented no undue arterial vascularity. A very trifling amount of serum was found effused under the dura mater, and in the ventricles. On the right side, the cerebral substance was of unusual firmness, but free from vascularity, congestion, or sanguineous extravasation. On making horizontal sections of the left hemisphere, a collapsed cavity was exposed in the centre of the middle lobe, of an irregular oval shape, an inch and a half long, having its walls smeared with a grumous exudation, but containing no coagulum or recently effused blood. This cavity had very much the appearance of an excavated ulcer, with raised edges, and was lined by a firm membrane, apparently vascular, but which, when detached from the cerebral substance beneath, was found to be extremely delicate, and pellucid as the hyaloid or chorion, the appearance of vascularity which it presented being derived from the subjacent cerebral substance. These characters seemed to mark it as an apoplectic cell, from which the clot had been removed in an unusually short time; for the patient had no apoplectic or paralytic symptoms at any time prior to the attack of the 21st of August, a fortnight before his death. Around this cavity there was no softening, and indeed the brain throughout was of remarkable firmness, almost equal to what an ordinary healthy brain acquires by maceration in spirits.

The lungs filled the cavity of the thorax, and did not collapse on its being opened. They were of a dark hue, from sanguineous congestion, and sero-sanguineous effusion. There were no pleuritic adhesions or effusion. The pericardium occupied a large space, being distended with bloody serum, amounting to several ounces. The heart was collapsed, all its cavities greatly dilated, their walls thin, and structure so devoid of cohesion, that it could be easily torn into shreds by the fingers. Its external surface was of natural appearance, but the lining membrane of the ventricles was of a deep colour, as if stained by the black, loose coagula which they contained, for there was no appearance of vascularity, and the valves were free from disease. The stomach was very capacious, and thinned, its peritonæal covering vascular, and its lining membrane almost universally in a state of erythema, and smeared with a grey-coloured exudation. The liver was enlarged, greatly congested, black, and very lacerable. The gall-bladder was distended with a deep-yellow bile. The spleen and the kidneys were also large and flabby, but presented no special lesion.

The second case, which I saw, about this time, with Mr. Fitzpatrick, occurred in a gentleman between thirty and forty years of age, who had been, for five or six days previous to the 29th of August, laid up with influenza, or catarrhal fever, and treated with salines, purgatives, and one application of leeches to the temples, in consequence of his complaining of pain in his head. The fever had been moderate, but there was a great deal of restlessness; and for the last three nights he had got no sleep, rambled occasionally, and during the day was very anxious about his affairs, wishing to be out and busy. Under these circumstances, Mr. Fitzpatrick gave him half a grain of acetate of morphia on the 28th, which, however, procured him no sleep till towards morning, when he dozed off for a short time, at intervals, and afterwards appeared more tranquil and collected. In the afternoon, however, in consequence of one of his men, who had been entrusted with a large sum of money for deposit in the bank, not returning so soon as he expected, he became extremely anxious and agitated, tossing about in the bed, and jumping out when not closely watched and restrained. At last, he became nearly unmanageable, requiring four or five people to hold him.

In this state, I saw the patient late in the evening. He had just become composed, after a violent paroxysm, which, on our speaking to him, was renewed. He suddenly sat up in bed, looked suspiciously at us, but was silent, and apparently watching an opportunity to escape. He had no tremor, but was constantly drawing his legs up and down, and moving his hands on the bedclothes, as if searching for and clutching at some object. On being questioned, he said he had no pain, that he was quite well, muttered something about business, and renewed his attempts to escape, by awkward and ill-directed exertions certainly, for he was now on his hands and knees, strenuously determined on making his way through the bottom of the bed. After continuing these exertions for four or five minutes, he sank down exhausted, sweating profusely, with a full, bounding pulse, and tumultuous beating of the heart. The face was flushed, the eyes red, but there was not the least intolerance of light. The bowels had acted thrice during the day, and as often, we were told, as twenty times the preceding day.

Notwithstanding the absence of tremor in this case, the nature of the attack was very evident, from the peculiar character of the delirium, its supervention on a febrile attack requiring depletion and evacuants, the want of sleep, the profuse perspirations, and perpetual anxiety about a business, involving heavy responsibilities. The history of the patient's habits accorded with these symptoms. He was convivial rather than intemperate, and immediately prior to the present attack, had been drinking deep.

Under this view of the case, we agreed to give him one grain of acetate of morphia immediately; and if sleep should not be procured in three hours, half-grain doses, to be repeated, with the same intervals, till that object was attained. He was not, in his violence, disposed to do mischief, but as it was

feared that his exertions, if uncontrolled, would soon exhaust him, or lead to serious determination to the brain, it was thought advisable to have a strait waistcoat in readiness, it being considered that he would suffer less from this mode of restraint than from manual force. Happily, however, this unpleasant measure, of last resort, was not needed, as he became tranquil after the first dose of the morphia, which amounted to nearly a grain and a half, for some of the grain dose having, in his struggling, been spilt, Mr. Fitzpatrick gave also the half-grain dose. He soon became drowsy, and at twelve o'clock fell asleep, and slept continuously and soundly till six in the morning, when he awoke quite calm and collected, perspiring copiously, but complaining of nothing besides weariness and exhaustion. He referred to the attack of the preceding evening, detailing very correctly the sayings and doings of the attendants and bystanders, who then thought him unconscious, and regardless of what was going on. Some brandy and soda water was now given, followed by another draught of morphia, which was succeeded by a sleep of three hours, when he again awoke, feeling very comfortable. After taking some breakfast, the morphia was repeated, with the usual effect of inducing sleep.

At our visit before noon, he was quite awake, with a natural expression, perfectly rational, with his pulse reduced to 76, and soft, and nothing complained of but weakness. Under these favourable circumstances, it was agreed that the opiate should be discontinued, and a draught of tincture of hops, sal volatile, and camphor julep, was substituted. It was necessary, however, to repeat the morphia that and the following night, as he was found, towards evening, to be getting rather talkative, fidgety, and excited. After this time, he passed good nights without the morphia, and from day to day the nervous symptoms subsided. His convalescence, however, was slow, and the return to full strength retarded by the great hepatic and intestinal derangement which was now found to exist. For a long time the evacuations consisted of black, pitchy matter, discharged daily in great abundance. This condition it was necessary to heal with some tenderness, for any amount of purgative invariably increased the nervousness. Under the use of small doses of mercury and chalk, with Dover's powder, and the calumba-bitter, with carbonate of soda or lime water, the secretions were improved, the appetite returned, and the patient eventually recovered perfectly.

The two cases just detailed illustrate the important fact, that much of the danger and much of the obscurity which attend a given disease, may be traced to the complications with which it is associated; and that a due regard to the nature of these complications would go far to explain the discrepancies which unhappily prevail among practitioners respecting the efficiency, value, and safety, of particular remedial agents, and general modes of treatment.

The last case, though not entirely uncomplicated, was so purely an example of delirium tremens, that no hesitation could be felt in having recourse to the ordinary remedy. The event justified this course, for the disease was subdued, and left the patient sound. In the first of the cases, the affection was an intruder, as it were, upon a group of diseases, which had long held possession of the whole frame, any one of which would, in no long time probably, destroy life. Still the facts of the case suggest the grave question, whether the treatment adopted caused or favoured the development of the ultimate serious head attack; whether, in short, considering that the specific poisonous effects of opium are of a lethargic character, and the resulting lesions, turgescence of vessels, increased vascularity, and sanguineous extravasation, the drug may not, when used as a remedy in the predisposed, lead to an apoplectic state? I am inclined to think, that in the instance before us such was not the case. The tranquillity which invariably succeeded its administration; the absence, subsequently, of stupor, or contraction of the pupils, and the cessation of tremor and other distressing symptoms, seem to show that the drug acted medicinally only. Dr. Sutton, to whom we are indebted for the introduction of the opium treatment in delirium tremens, and whose views, in other respects, have been so remarkably verified by the experience of subsequent observers, informs us, that he was in the habit of using the medicine with safety and success in certain cases of apoplexy and palsy, being decidedly of opinion that the association of paralysis with delirium tremens ought not to divert practitioners from the use of a medicine which is so eminently successful in the latter disease. It would even appear that this peculiar and dangerous affection of the nervous system has a paramount claim to attention in all cases, and that its specific treatment cannot be safely dispensed with, whatever may be the nature of the disease on which it is engrafted. That the presence of traumatic inflammation is no bar to the administration of opium is abundantly attested by the experience of our surgeons, particularly of those serving in the metropolitan hospitals, who, on the supervention of delirium upon severe injuries and the great operations, find themselves often forced to lay aside their evacuants and the antiphlogistic regimen, and have recourse to stimulants and opium to save their patients.

Harley-street, Jan. 1847.

## ON THE ACTION OF ATROPINE IN PAINFUL AFFECTIONS OF THE FACE, ETC.

By W. PHILPOT BROOKES, M.D., M.R.C.S.E.,
SURGEON TO THE CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.

A few weeks back, I was called in to a lady in this town, suffering from a severe cold, accompanied with a most intense and painful affection of the right side of the face, forehead, and around the orbit of the eye. The pain continued after all the symptoms of the cold had left her, and I could not allay it with warm fomentations or other common remedies. I at last tried the application of an ointment, composed of atropine, five grains, lard, three drachms, with one drop of ottar of rose; a piece the size of a pea to be applied three times a day. The pain was allayed after the second application by day, but at night returned with as much violence as before. The remedy was continued, and after two days, all pain ceased, and has not since returned. The effect of it was so marked, that I am inclined to think it will prove a most useful remedy in painful neuralgic affections.

I must also mention the marked effect it had on the pupils of the eye, in this case, after the second application of it: they were dilated to a great extent, (much more than I ever saw from any other preparation of belladonna,) and continued so for two or three days after it was discontinued.

I have since tried it in the case of a man on whom I operated for cataract in both eyes. The one in the right eye was not perfectly depressed, and rose again; (he had also lippitudo of the eyelids from a burn.) Belladonna had but little effect on this eye, (although it perfectly dilated the other,) but the ointment of atropine, three grains to two drachms, dilated it effectually. In a case of glaucoma I have now under treatment, belladonna will not increase the size of the pupil in either eye to any great extent, but the ointment does so satisfactorily.

I certainly think this active principle is well worthy of a trial; and it will be found a much cleaner, more certain and elegant form than any other preparation of belladonna.

Cheltenham, Dec. 1846.

## THE OPERATION OF PARACENTESIS THORACIS.

By J. CARSON, M.B., Physician to the Fever Hospital and Workhouse, Liverpool.

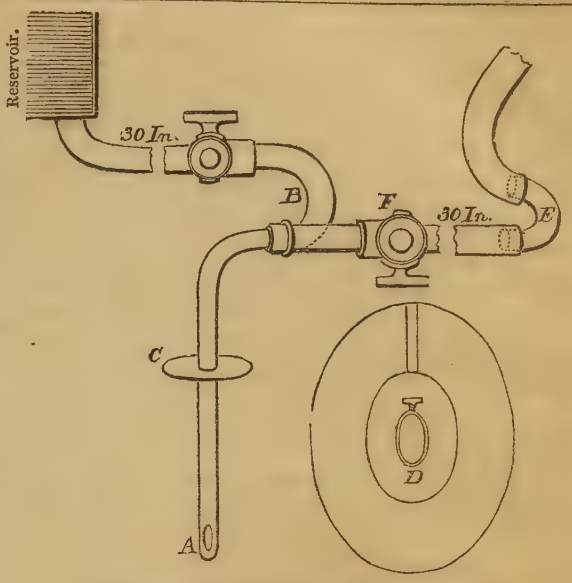
Permit me to draw the attention of the medical profession to a plan of performing the operation of paracentesis thoracis, published in the eighteenth volume of your journal, p. 456, in the year 1830, by my father, the late Dr. Carson. I am induced to revive the idea by the highly favourable opinion of the plan expressed in a letter addressed to me on the subject by that eminent physician, the late Dr. Macdonnell, of Belfast, and by the notion, that with some slight modifications, the instrument may, with advantage, be made use of in the treatment of other surgical diseases. A case which recently fell under my own observation, in which the operation of paracentesis was performed in the usual manner, affords a good example of the nature of the obstacles to the successful performance of this operation, which it is one of the principal objects of this plan to obviate.

Martin M——, an Irish labourer, of intemperate habits, was admitted into the workhouse hospital on the 27th November. He had been discharged six weeks previously after a severe attack of dysentery. He had, at that time, slight bronchitis, which continued, in a chronic form, until six days previous to his readmission, when he was seized with shortness of breath, and says he noticed swelling of the right side of the chest. For this he had been bled twice.

On admission, the right side of the chest was found to be

an inch and a half larger than the left, and the vocal vibrations were not felt. There was general dulness on percussion. On the left side respiration was exaggerated, and attended with general mucous rhonchus. There was no respiratory murmur on the right side, but at the root of the lung there were heard bronchophony and bronchial respiration. The expression of countenance was anxious, and there was considerable dyspnœa. Calomel and hyoscyamus were ordered, with the view of affecting the mouth, and a large blister was applied to the right side. This course was proceeded with for two days, when, the debility increasing, some wine, with stimulant expectorants, were administered.

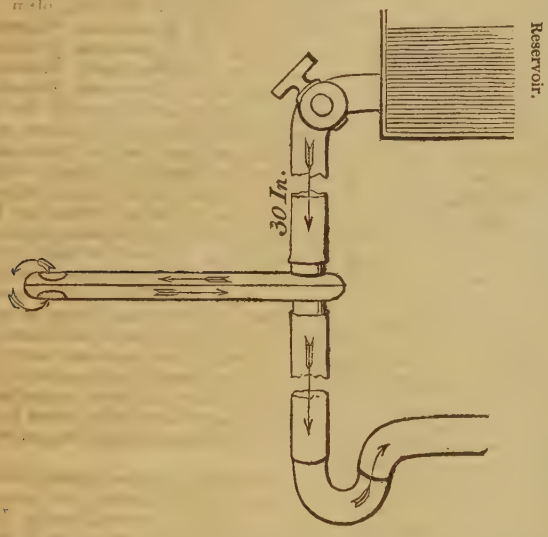
On the evening of the third day, I was sent for to see him, and found the dyspnœa much increased, approaching to suffocation, as the effusion had obviously increased in quantity, and by its pressure prevented the perfect expansion of the left side of the chest. I requested my colleague, Mr. Burgess, to perform the operation of paracentesis thoracis. The puncture was made beneath the fifth rib with a trochar, the canula of which was about the size of an ordinary goose-quill. Through this was evacuated, in a free stream, about twenty-two ounces of clear serum, without any appearance of shreds or particles of lymph. The stream was affected by the respiratory movements in jerks, which were more marked as the fluid ran out, and at the last, care had to be taken at each respiration, by placing the finger over the orifice of the canula, to prevent the entrance of the air into the cavity, although there was obviously remaining a considerable quantity of blood in the cavity, and although the passage was not impeded by any particle of lymph, or by the apposition of the diaphragm or lung to the internal orifice, yet by no change of position could any more fluid be drawn off than the quantity mentioned. The outflow of the fluid was stopped, as is the current from a barrel of beer, before the vent-peg is withdrawn. The canula being withdrawn, and the wound dressed with a pledget of wet lint, secured by adhesive plaster, the patient was allowed to lie down. His dyspnœa was obviously much relieved, and he expressed himself as easier, though exhausted. Some wine was given to him, and the following day, at noon, he informed me that he had spent a better night than for some time previously, that he had breathed much easier, that his cough had been less troublesome; but that he felt the difficulty of breathing and uneasiness coming on again, and begged me to repeat the operation. He was, however, in a state of very great debility, and, in spite of the favourable effect of the first evacuation, my opinion as to the ultimate event was not improved. I directed the wine and stimulant expectorants to be continued, and at eight o'clock in the evening, about sixteen ounces more of fluid were withdrawn from the chest, of the same character. The same circumstances presented themselves as in the former operation, and prevented a more complete withdrawal of the fluid. This operation was not followed by the same beneficial results as the preceding, and the patient sunk exhausted early the next morning. On a post-mortem examination, the right cavity of the chest was found to contain several pints of serum, free from lymph or purulent admixture; the lung was compressed into a small size, of a blue colour, quite free from air, not crepitant, and sinking in water. There were no adhesions, nor the slightest appearance of false membrane upon its serous surface, which, as well as that of the costal pleura, was in a perfectly natural condition. The left lung was congested, especially at the base, and there was marked sanguineous congestion of the lining membrane of its bronchi, which were filled with the yellow mucous expectoration which he had thrown up during life. The liver was contracted in bulk, and presented an admirable specimen of the hob-nail degeneration. I regret that, from hurry and inadvertence, I did not examine the kidneys, as from the intemperate habits of the man, and the puffy, anæmatous character of his countenance, I think it is probable that he laboured, in addition to his other disease, under Bright's affection of the kidneys. Although from the first, in this case, the prognosis was necessarily unfavourable, yet from the relief obtained from the first tapping, I am inclined to think that had the operation been earlier performed, and had we been able more effectually to evacuate the effusion into the right cavity, a better chance might have been afforded of recovery of the patient from the present urgent symptoms at least. The condition in which the liver was found puts out of the question altogether the idea of ultimate recovery. I believe the plan suggested by my father would have obviated the difficulties met with in the operations just detailed, and I have since had constructed (by Messrs. Reay and Robinson, of this town) an apparatus on the principle he laid down.




Plan of instrument arranged for tapping or injecting.

*A B* is a flat canula, about three inches and a half long, closed at *A*, with eye-holes at the side sufficiently large to permit the passage of small flakes of lymph. At *B* the canula is bent down, and there is a ledge round its open extremity by which a tube of Vulcanized Indian rubber can be attached. *C* is a flange, of which *D* is a plan, which slides upon the canula, and is fixed at any necessary point of it by a small screw. The Indian rubber tube attached to the open end of the canula should be about thirty inches in length, and to its lower extremity is fixed a bone or wooden continuation of the tube, of the form represented at *E*. A piece of cat's intestine, three inches long, attached to the extremity, *E*, completes the instrument. There should be a small stopcock, *F*, on the tube near *B*. The operation is performed as follows:—An incision about an inch in length being made at the point selected parallel and approached to the upper edge of the rib, and continued down to the pleura; a perforation is to be made in this membrane sufficiently large to admit the closed extremity of the canula, which, with the tube attached, is to be prepared in the following manner:—A circular piece of adhesive plaster is to be fixed to the inner side of the sliding flange, so that its adhesive surface be towards the wall of the chest. The tube and canula are to be filled with blood-warm water; the small piece of cat's intestine being previously well soaked in warm water to make it flexible. The tube is to be inserted into the aperture in the pleura, to the requisite depth, the lips of the wound being pressed with the fingers against the flattened sides of the tube, to prevent the escape of fluid between the tube and the walls of the incision. The sliding flange, with the sticking plaster, is to be pressed upon the chest, secured by its screw, and more firmly attached to the chest by straps of sticking plaster passed over its outer side. The cock, *D*, being then opened, the fluid gushing out of the chest will descend through the tube, without the possibility of any air entering into the cavity. When, however, the evacuating force of the distended chest has ceased to discharge the fluid, it is still drawn out by a force equal to the pressure of a column of water, of thirty inches, or of any height to which it may be thought necessary to increase the pendent tube. The use of the cat's intestine is, to act as a valve, which freely permits the exit of the fluid, but will prevent any regurgitation which might be caused by a deep inspiration. In the instrument proposed by my father, the tube was recommended to be of glass or metal, to prevent the collapse which the pressure of the atmosphere would produce in a flexible tube, the amount of which would of course be in proportion to the length of the tube. It is conceived, however, that the elasticity of the tubes of Vulcanized Indian rubber is sufficient to obviate this difficulty. The regurgitation and entry of air was to be prevented by keeping the lower extremity of the tube in water. The flap-valve, made by the flexible cat's intestine, suggested by M. Reybaud, in 1841, in an instrument for paracentesis thoracis, which I will now describe shortly, is a decided improvement on my father's plan. M. Reybaud's instrument is precisely the one described, with

the exception of the long tube. The sliding flange for fixing the instrument to the walls of the chest, and the flap-valve, are both suggested by him, and are decided improvements. The canula is perfectly straight, and is so made at its open extremity, that an instrument for injecting the cavity of the chest may be connected with it. In the event of the necessity of such injection, it may easily be effected by the instrument which I have described. If the tube, filled with tepid water, as in the commencement of the operation, be inserted in the bottom of a reservoir, containing the fluid to be injected, raised to a sufficient height above the level of the orifice in the chest, an injection will thus be thrown into the chest, with any degree of force required. An account of M. Reybaud's instrument, and of the successful use of it in several cases, is given in the New "Dictionnaire de Médecine," article "Poitrine," tom. xxv. I conceive this plan of operation may be applied with great advantage in the evacuation of lumbar abscesses and other large collections of pus anywhere in the body, in which openings made in the ordinary way are followed by such alarming constitutional symptoms, from the putrefaction of the pus caused by the admission of air. A very simple modification of the instrument which I have described, would enable us to inject and evacuate the cavity simultaneously, and thus to establish through the interior a constant current of tepid water, or whatever fluid it might be thought proper to throw in. If the canula were divided into two cavities by a septum, as in the catheter by which fluid is injected into the bladder, and if the upper division were in communication with a flexible tube descending from a vessel containing the fluid to be injected into the cavity and the lower, with a similar depending tube, as in the annexed engraving, a continued




current of the fluid, in the required quantity, and with the necessary degree of force, might be made to pass through and wash the walls of the cavity. Stop-cocks on each of the tubes would with ease regulate the quantity, and the requisite degree of force would be determined by the length of the tubes, and would, for either, be within the limits of the pressure of a column of water thirty inches in height.

In the forty-third volume of the *Philosophical Transactions*, in the twelfth page, there is the history of the cure of a dropsy by the use of stimulating injections into what was supposed to be the cavity of the peritonæum, by Dr. Warwick, of Truro. The disease, supposed to be an ascites, was evidently an ovarian cyst. Equal parts of claret and Bristol water, in large quantities, were injected twice into the cavity, and in less than a month the woman was cured of a disease under which she had laboured for several years. The case at the time seems to have excited considerable attention, and, in consequence of it, the celebrated Stephen Hales suggested, in the same volume of the work, a method of throwing fluids into the peritonæal cavity, in principle similar to that now proposed. Instead, however, of a canula with a double chamber, he advises the insertion of canulæ into two punctures in different parts of the abdomen—the one for injecting, and the other for drawing off, the fluid. Dr. Warwick repeating his experiment with this apparatus, in real cases of ascites, was induced, by more than one fatal result, to retract, in another volume, his opinion of the propriety of this remedy. In the present day, when the pathology of ovarian disease is better understood, and when the formidable operation of ovariotomy is so much in vogue, I think it is a question whether Dr. Warwick's mode of treatment may not, in a great proportion of cases, be with advantage resorted to. In a communication made by me to the *Provincial Medical and Surgical Journal*, I recommended a recurrence to the operation of Houston and Ledran. And although some of the most eminent surgeons both in this country and in France have condemned it, I hope to be able shortly to show that they have done so on insufficient grounds, and that this plan of treatment has been more eminently successful than any other in the treatment of the disease. Since I made this communication, and in consequence of it, I was called in to assist at an operation performed on these principles by Mr. Bainbrigge, of Liverpool, to whom I suggested the operation and its details, and to whom, from evidences which I had at that time collected, I was enabled to show the extreme probability of a safe and favourable result. The history of this case has been published by Mr. Bainbrigge, in the *Provincial Medical and Surgical Journal*, in terms that oblige me to recal to that gentleman's recollection, that his *original* intention, previous to consulting me upon the subject, was to remove a portion of the cyst, to return the remainder into the peritonæal cavity, to close the opening in the walls of the abdomen, and to leave the matter to Nature and the absorbent process. In this case, the presence of the adhesion of the ovarian cyst to the abdominal parietes at the place of incision, rendered unnecessary the steps by which it was intended to secure this condition. The sac was perforated and the communication with the outward air preserved by means of a tent. Inflammation and suppuration of the lining membrane of the sac was soon established, without any pain, or symptom of constitutional irritation in the patient. The cavity of the sac, which held, at the period of the operation, three gallons, gradually contracted, until, in the course of two months, the whole amount of discharge was reduced to about an ounce in the twenty-four hours. At present, I understand there remains a fistulous opening from which about half an ounce of pus is discharged per diem. Stimulating injections of strong solutions of alum, of iodine, in the proportion of one ounce of the tincture to seven of water, were at an early period thrown into the sac, without being the source of the slightest pain, or constitutional irritation to the patient. The principal inconveniences were the exhaustion occasioned by the profuse muco-purulent discharge, and the anorexia, from its excessive fœtor. I am now of opinion, though then cordially agreeing with Mr. Bainbrigge in that line of treatment, that it was not desirable to keep up, by stimulating injections, the irritation of the lining membrane of the cyst. On the contrary, I believe that if it were possible to have prevented inflammation altogether, the sac would have contracted at least as soon as it did, and the profuseness and fœtor of the discharge might have been altogether prevented. I hold this opinion, from confidence in the correctness of the great principle first introduced into modern surgery by the late eminent professor of Dublin, Dr. Macartney, that inflammation, in whatsoever degree it exists, is so far prejudicial to the reparatory processes by which a return to health in diseased structures is effected. A constant supply of tepid fluid water, washing out every part of the sac by means of the apparatus that I have suggested, would, by the removal of every irritating substance, and the constant application of the best emollient we possess, have most effectually served this purpose. The exhaustion from a profuse and protracted purulent discharge, and its unpleasant fœtor, with its consequences, would have been prevented. The question of the solution of calculi in the bladder, either by an alkaline or acid condition of the urine, induced by the use of internal remedies, or by the direct action of a solvent thrown into the bladder, has at all times occupied the attention of surgeons. Having written thus far, I referred to Dr. Willis's able work on "Urinary Diseases," and I cannot help joining in his expression of astonishment, that the removal of stone by the injection of solvents has not more frequently been tried, after the successful issue of the case thus treated by Dr. Butter. I find, moreover, from the same work, that Dr. Hales had invented an apparatus, similar in principle to the one I have suggested; and, by experiments on dogs, had shown that alkaline solutions of considerable strength could be borne in the bladder, without uneasiness, for some time. The instrument was improved upon by Gruithusen, and employed by Messrs. Majendie and Amussat, with decided benefit, in the case of an English gentleman in Paris. Dr. Willis quotes two cases in which this practice was followed by a complete cure; the one related by Sir B. Brodie in the *Medical*

*Gazette* for June, 1831, and the other a case of complete solution of a calculus, effected at Malaga, by Dr. Rodriguez, in the space of forty days, by an injection in which lemon juice was the solvent. By the instrument suggested, weak alkaline, or acid solutions, according to the diathesis under which the patient may at the time labour, in considerable quantities, may be passed in a continued or interrupted stream through the bladder, and alternated with currents of warm water, as an emollient, in the event of irritation resulting from the presence of the solvent. The experiments of Littre, Gruithusen, and Billaret, on the solubility of calculi in ordinary water, encourages the hope that, with patience, a continued stream of tepid distilled water would effect this desirable object. At least, such a mode of treatment is the best remedy for the chronic inflammation and pain caused by the presence of these foreign bodies in the bladder. If it were deemed necessary to keep the double-chambered catheter permanently in the bladder, the inconvenience of the incrustation by salts of the part of the instrument in the bladder, would be obviated by the dilution of the contents of that viscus, and the irritation of the neck of the bladder would be alleviated by the emollient influence of the water.

Liverpool, December, 1846.

## ON THE NOMENCLATURE OF THE SCIENCE OF MEDICINE.

By R. G. MAYNE, M.D., Leeds.

### No. III.

COMPOUND TERMS ENDING IN ODES.—NAMES, OR, RATHER, TERMS APPLIED TO THE LINNÆAN CLASSES AND ORDERS OF PLANTS.

The quality and character of compound terms ending in *ōdes*, as *Icterōdes*, *Hæmatōdes*, &c., the number of which is comparatively small, I consider to be precisely similar to those of the terms in *oides*, noticed in No. 1 of these inquiries and suggestions. There is this difference, however, in their formation, that the Greek diphthong *ει*, of the root *εἶδος*, is changed into long *ō*, instead of long *ī* of the latter. The remarks, therefore, formerly offered are, with this exception, equally applicable to them.

The compound terms which distinguish the classes and orders of plants in the Linnæan, or Sexual System of Botany, have been hitherto characterized, where characterized at all, as nouns feminine of the first declension. In advancing an opinion that this character has been erroneously assigned to them, I fear, from the familiar intimacy with which they, of all other scientific terms likely to come under the present discussion, have long been entertained, the announcement will be received with doubt. Nevertheless, such a feeling must not be permitted to deter me from endeavouring to establish its correctness, as an important part of the purpose for which my inquiries were instituted.

These terms have no classical existence, but appear to have been invented and adopted for the systems of botany, to illustrate their peculiar arrangements. Those of them which are employed to distinguish the Linnæan classes, from one to fifteen inclusive, were meant to indicate the number of stamens, or male organs, existing distinct from the pistil, and from each other, in hermaphrodite flowers. The first class was accordingly named *Monandria*, from *μόνος*, one; *ανὴρ*, a man, as the symbol of the male organ of plants: the second, *Diandria*, from *δὶς*, twice, or double; and *ανὴρ*: the third, *Triandria*, from *τρεῖς*, three; and so on with the remaining twelve, varying the first, or the first two syllables correspondently with the number of stamens. In the same manner, the terms used for the orders, from one to thirteen inclusive, were meant to denote the number of pistils or female organs in hermaphrodite flowers. The class *Triandria* has three orders—*Monogynia*, from *μόνος*, one; *γυνὴ*, a woman; the symbolic term for the pistil, or female organ: *Digynia*, and *Trigynia*, according to the number of pistils in the flower. In short, these stand exactly in the same position as the terms applied to the classes in all points, only, have reference to the number of pistils as they to that of stamens. It is unnecessary to specify the titles given to the succeeding classes, or orders, which differ from those quoted only in composition, and not in the point under consideration, as the arguments to be stated in respect to the latter, if held good, will equally affect the whole. One and all of them, I contend, from their meaning, and application, and from analogy, are to be regarded, not as nouns at all, but as adjective terms; it being impossible to attach to them a distinct signification otherwise. I will now, with all deference, try to justify this opinion on the grounds stated.

1. By the meaning of these terms. Let us take, for example, that applied to the letters last quoted, *Triandria*, from *τρεῖς*, three; *ανὴρ*, a man, or a husband—that is, a stamen, or male organ. It is difficult to conceive how such a compound term could, with due regard to correctness, have been considered a noun f:; for it is not the name of a thing, but a term plainly expressing the quality of some word that is the name of a thing—of a noun. We might, indeed, by some straining, appear to give a substantive expression to it in this way—a triple stamen, or tre-stamen, as we say tre-foil. But such a word would indicate a single, particular object—like the tre-foil, which, although it presents the semblance of three leaves, and hence its name, they proceed from *one* stem—and not the class of objects intended. For it is to be marked, that *Triandria* (or any other of the Linnæan titles referred to) does not bear special reference to three stamens united in some way or other so as to form a triplet, or threefold object; but is applied to a set of plants, the flowers of which are provided with three stamens, not connected with each other by a single part of the flower, but distinct from the pistil and from each other. The strictly correct and only legitimate translation of this term, therefore, must be adjective—viz., having, consisting of, or provided with, three stamens, or more tersely, perhaps, *three-stamened;* and so of all the rest.

2. By their application. All the titles of the classes and orders are applied to *genera*, or kinds of plants, which agree in the particular arrangement of stamens and pistils, signified by such titles respectively. Thus, as I conceive, were they originally employed, for thus, alone, can they be regarded as correct and proper terms. *Triandria*, as the nom: pl: n. of an adjective of the second and third declensions, "agrees, in gender, number, and case," with *genera*, the nom: pl: of *genus*, n:, a kind, or species; and they, together, aptly express the *three-stamened kinds* of plants; while *Monogynia*, *Digynia*, or *Trigynia*, also agreeing with *genera*, as fitly notify the same kinds, as *having*, or *provided with one pistil*, or more, as the case may be; in other phrase, as one, two, or *three-pistilled*. Added to this, it is common for botanists, in their writings, lectures, or in conversation, to make use of English adjective terms which are synonymes directly formed from the Latin ones, as Monandrious, or Monandrous, (the presence or absence of the letter *i* being immaterial as to most of them,) Diandrous, or Triandrous plants; also Monogynious, Digynious, Trigynious, &c. To render these into Latin again, as would be very necessary if the character of nouns feminine of the first declension, hitherto given to the titles of the classes and orders, be maintained, we should have to create new adjectives in addition to, but quite the same in one gender, at least, as these reputed nouns. This were a clumsy expedient, at the best, and one altogether superfluous, the terms in their proper and adjective quality already answering that, as well as their original purpose.

3. By analogy. The terms applied to the classes, divisions sections, orders, and families, in natural history, are compound adjective, agreeing with *Aves*, *Pisces*, *Genera*, *Species*, *Tribus*, or the like, with exception of but a few examples of simple names of animals, as *Accipitres*, *Sturiones*, *Polypi*, &c. Those appropriated to the divisions, sections, and orders of the Jussieuan, or natural system of botany, are compound adjective, agreeing similarly with *genera*, *species*, or *tribus*, excepting some simple names of plants, as *Fungi*, *Algæ*, *Filices*, *Lichenes*, &c. A Linnæan term itself is occasionally set aside by other authors, who substitute in its place a compound term indisputably adjective; as, for instance, the *Cryptogamia* of Linnæus are, by Richand, entitled *Inembryonatæ*, *Exembryonatæ*, or *Ahrizæ;* by Decandolle, *Cellulares;* and by Lamarck, *Agamæ*. In a modern work on botany which I have just looked into, this term *Cryptogamia* is translated, in perfect consistency with the opinion here advanced, "Cryptogamic, or flowerless plants," a translation which can never be twisted out of a miscalled noun.

So far as opportunities of reference are available in a provincial town like this, they have not enabled me to find any authority for making nouns feminine out of these adjective terms, other than in the several editions of Hooper's useful "Medical Dictionary," to which I have before had occasion to allude. In other works of a like description, they merely appear as they did when first published by Linnæus himself. I must again, however, make exception of those of French authorship, in which, not only a Gallic noun, "*s: f:*" (*Cryptogamie*) is in each instance created as a synonyme of the name of a class, but also another term (*Cryptogame*) is had recourse to, and presented as "*adj: et s: f:*" This customary way of

patching up such difficulties may have been judged requisite in that language, from its deficiency, like our own, in distinctive terminations, with which the Latin is so well supplied. Will it amount to treason against these authorities, to suppose they could have been misled by the final letter of the terms, and by the circumstance, that each appears as *the name* of *a* class, or order, and so decided that they must be received as nouns feminine of the first declension?

If, after all, some shall be ready to say—it may be very true that these words are not correctly characterized, according to their strict meaning or application; but, still, they have been long in use as they are, and serve the purpose intended well enough,—without one word of condemnation, I put it to the profession, whether, on the score of convenience alone, their legitimate character of adjective terms be not preferable to that hitherto assigned them.

Leeds, Jan. 1847.

## ON A NEW ARM-SLING
IN CASES OF
## FRACTURE OF THE UPPER EXTREMITIES.

By W. T. KEAL, Esq., Surgeon, Oakham.

Having had, by further experience, my convictions greatly strengthened in the advantages of the sling which I use, and the mode of wearing it, in all cases of injury to the upper extremity, over the usual method since I made it known to the profession, in the *Medical Gazette*, eight years ago, I cannot forbear troubling you with my reasons for believing that the ordinary position of the limb in such injuries is altogether prejudicial.

Should you, after a personal inspection and testing of the sling, consider that I have not overrated its superiority, and be disposed to grant a space in your valuable periodical for the following particulars, the profession would have an opportunity of testing its qualifications.

The new method of suspending the limb was, the result of an injury which I received on the 30th of December, 1837, as stated in the *Medical Gazette* of July 7th, 1838. At that time three ribs on the right side were fractured, and the scapula end of the clavicle dislocated, in consequence of the right side of my body striking violently against a tree, as my horse was passing unexpectedly by it, when in a gallop. I discovered that when the arm, being placed in the ordinary sling was brought across the breast, the dislocated end of the clavicle was forced an inch above its natural position, and considerable aching and pain were caused in the injured parts. Yet, when the arm was placed by the side of the body, at a right angle with it, the bone returning to its natural position, the painful feelings subsided.

My object, therefore, now, was to support the arm in this position, which was accomplished by wearing a sling of my own invention, which kept the forearm at a right angle with the body, and caused a steady pressure upon the clavicle; as I have observed that there is a tendency to elevation of the bone whan loosened from its humeral attachment. The application of this sling, which my brother, Mr. John Keal, surgeon, 24, Woburn-place, Russell-square, will exhibit, accomplishes this object in the most perfect and comfortable manner.

In fractures of the humerus, in whatever part of the bone, I consider the ordinary sling to be highly objectionable. In such an injury it is not possible to place the arm in the ordinary sling, without causing the lower end of the fractured portion to make nearly a quarter turn upon the upper extremity of the fracture; and if the bone be irregularly broken, it is not possible, after this twist, that the bones can be in exact apposition. It must be evident, also, that if the bones unite in this twisted position, the action of the forearm backwards will be circumscribed.

In March, 1843, I had the opportunity of again testing the sling in my own person, having fractured the right humerus about its middle, when, in attempting to jump off my garden wall into the paddock below, my foot slipped, and I fell, my arm being under my body. In this injury, as well as of every other of the upper extremity, with the exception of the dislocated clavicle, the sling, which I request you to accept and to test, will, I believe, be found most suitable. In fractured clavicle also, the ordinary sling has a prejudicial influence; by bringing the shoulder forward, one end of the bone is made to pass beyond the other, causing what is termed a riding of the bones. It is perfectly evident also, that the muscles attached to the humerus posteriorly, must be in a state of undue tension in the ordinary sling, whilst those situated anteriorly are in a corresponding degree of relaxation, which must cause a prejudicial influence upon the reunion.

Upon reflection, the old sling must be considered very objectionable in fractures and injuries of the condyles of the humerus, as well as of the bones of the forearm, when connected with the joint, as also of the radius and ulna, when unconnected with the joints. In conclusion, I have the fullest conviction, that every unprejudiced surgeon, with the smallest share of mechanical intelligence, will, upon trial of the sling, simple as it is in mechanism and application, never use any other. The cost of the sling need not exceed five shillings, and any person, after a momentary inspection, could give directions to his carpenter and saddler for its manufacture.

If not trespassing too much upon your valuable pages, I wish to state my conviction, that surgeons—the living as well as the dead—protract the making use of a limb, after the reunion of the fracture, far beyond its due limits. This I learned more especially in my own case, as well as from former experience.

On the 22nd day after the fracture of my arm, there was not the least sign of union of the bone; on the 23rd, there appeared to be some union taking place, which was manifested by there being a sense of stiffness of the parts; on the following day, there was evidently much more firmness, and on the twenty-eighth, exactly the day month after the injury, I left off the splints and roller, and rode on horseback, and used my arm, as free from pain or inconvenience as if no fracture had existed. I judge, from the above circumstance, that our patients are restrained from the use of a limb that has been fractured far beyond the proper limits; and that the muscles are much weakened, and the recovery of their tone and action retarded, by the continuance of a roller after the union of a fracture.

Oakham, Oct. 1846.

## Reviews.

*On the Nature and Treatment of some of the more Important Diseases, Medical and Surgical, including the Principal Diseases of the Eye.* By John Charles Hall, M.D., Member of the Royal College of Surgeons of England. Second edition, enlarged.

Dr. Hall, in this work, (a second edition of which has been called for,) has collected a great deal of valuable information, and not only gives us the result of his own experience, but has admirably epitomized the opinions of most of the authorites on the subjects of which he treats. We find, in different parts of the book, quotations from the works of Sir A. Cooper, Lawrence, Tyrrell, Jacob, Middlemore, Sir B. Brodie, Guthrie, Liston, Elliotson, Wardrop, Lisfranc, Andral, and many other celebrated physicians and surgeons of our own and other countries.

The book is divided into two parts. Part I. is devoted to "Certain Diseases of the Eye;" and amongst these only the most important have been noticed. The modes of treatment advocated are generally founded on sound surgical principles, though we may perhaps differ from the author on some minor points. Thus, in his treatment of pterygium, he says,—

"In the treatment of this disease astringents and escharotics are of little use, and frequently do more harm than good. Much time is lost by their employment; during which the disease daily advances, and in the end it is discovered that it ought to have been removed at once, instead of wasting weeks, perhaps months, in such inefficient trifling."—p. 65.

In some cases of pterygia, we have seen the judicious application of nitrate of silver remove the deformity in a very satisfactory manner.

In his article on scrofulous inflammation of the iris, Dr. Hall speaks of the ill-effects of mercury, and recommends an active but very judicious treatment.

"But," he says, "how are we to treat such cases? Bleeding and mercury, to the extent already advocated, would make matters worse. In the early stages, in a moderately strong child, a few leeches may be applied to the lower lid, and the bowels must be freely opened with a full dose of calomel and

rhubarb. I think the best way of administering mercury, in these cases, is in the form of grey powder: three grains of hyd. c. cretâ, five grains of sesquicarbonate of soda, and two of Dover's powder, may be given every night, at bedtime. If we give calomel, push it to ptyalism, and still go on with it, under the idea that it is the proper remedy, I apprehend the patient's constitution will, in nine cases out of ten, be seriously injured, and vision either altogether lost, or seriously impaired. In such cases, the exhibition of the sulphate of quinine is followed by the happiest results."—p. 118.

The author states that he has found salicine useful in those cases where quinine could not be taken. He says,—"The salicine is also a valuable medicine, and may be given where quinine disagrees. I knew a lady suffering from a disease of this nature, in which quinine could not be taken, but where salicine was administered with the happiest effects." He also adds, that, "as soon as the inflammation of the iris is somewhat checked by the application of leeches, and the administration of a brisk purgative, blisters should be applied behind each ear, or to the back of the neck, and should be kept open."—p. 119.

Part II. deals with some of the more important medical and surgical diseases, and contains notes of, and observations on, some interesting cases of fistula, fractures of the cranium, hernia, bronchocele, cancer of the breast, suppression of urine, uterine hæmorrhage, gout, and rheumatism, and concludes with a chapter on "Diet, and the disorders of the digestion," and an excellent and highly original one on "Nitrate of silver in certain forms of erysipelas."

At page 130, Dr. Hall gives an account of the manner in which he had seen M. Roux perform the operation for fistula, and which will, no doubt, strike those who are accustomed to the neat and expeditious way in which the English surgeons perform that operation, as being rather an extraordinary proceeding. He says—

"He introduces a long piece of boxwood into the rectum, having its concavity towards the fistula; a silver director is then introduced along the fistulous track, and its end made to come in contact with the wooden gorget in the bowel. A long, strong, narrow, sharp-pointed knife is then introduced along it, till it comes in contact with the piece of boxwood; the director is then withdrawn, and by keeping the point of the knife fixed upon the gorget, and withdrawing both together, all the parts between the fistula and the rectum are divided. This part of the operation completed, the bistoury is exchanged for a scalpel, and all the hardened base is carefully dissected out. A thick, long probe is then procured, having a button at one end; this is covered with charpie, smeared over with some yellow-looking ointment, and the wound crammed full of it to the bottom."—p. 139.

In the chapter on disorders of digestion, Dr. Hall states, that in those cases of indigestion where "pain comes on as soon as the food is taken, and continues during the whole process of digestion, until vomiting ensues, which gives relief," and which he considers to depend on "chronic inflammation, or some morbid sensibility of the lining coats of the stomach," he found the nitrate of silver, in doses of a quarter to one grain, three times a day, as recommended by Dr. James Johnson, eminently useful.—p. 227.

He also gives some good directions for the regulation of the diet and exercise of dyspeptic patients.

In conclusion, we would add that Dr. Hall's little book is calculated to be useful to the student, as it presents him with a graphic description of the symptoms of those diseases with which it is so important he should be well acquainted; while to the practitioner, a perusal of it will prove interesting, since it is a purely practical work, and has a practical object. "For," says our author, "I feel it a duty thus to bring before my professional friends the result of my experience, that, by comparing notes with each other, we may, in the end, come to fixed and certain rules for the treatment of disease."—p. 103.

*The London Medical Directory for* 1847. London: J. Churchill.

This comparatively novel undertaking seems, in the present year, to have reached a degree of accuracy which renders it a safe work of reference,—thanks to the profession itself, in the metropolis, for universally placing in the hands of the industrious editors the means of rendering it perfect. We have several times joined in arousing our professional brethren to a sense of the value and interest attaching to such an index of the London medical community. Proof is before us, that the appeals made to them by letter from the compilers, and the notices in our journal, were successful. The volume for 1847 is otherwise, also, so much the more acceptable than its predecessor, inasmuch as it contains an almanack for the year, exhibiting the days and hours of meeting of the various medical societies, numerous events that are designed to occur during the current twelve months, and a chapter on the puzzling question of "Medical Etiquette," the very discussion of which, in its pages, by inducing the profession further to ponder on the *principles* that should guide their personal intercourse and communications, must produce a good effect, whether the doctrines laid down by the editors on the present occasion be sound or not; for false notions respecting convenience, dignity, mutual justice, and goodwill, in medical practice and consultations, cannot long withstand the purifying influence of general and serious debate. Besides these additions there are some others, appropriate to the work. A fellow volume is announced,—one embracing the whole of the counties,—bearing the name of the "Provincial Medical Directory," designed to be incorporated with "The London," for those who desire to possess that doubly useful work—an index to *the whole profession* of England and Wales. Considering the difficulty of obtaining the materials, the undertaking must have been one of extraordinary labour. Hitherto, the official lists of the colleges, universities, and halls, were merely embarrassing productions, no pains having ever been taken to render them worthy of examination; and it is only just to the new work, to expect that it will be a true and correct guide to the medical body.

## Medical Societies.

### MEDICAL SOCIETY OF LONDON.

Monday, January 18, 1847.—Mr. Bishop, President.

#### NATURE OF OVARIAN TUMOURS.

In reference to the discussion on the previous meeting of the Society, the President requested the opinion of Dr. Frederic Bird as related to the questions of the malignancy of ovarian tumours, and the probable duration of life in those affected with such form of disease.

Dr. Frederic Bird said that he was not disposed to advance the position of all ovarian tumours being referable to a malignant type, but he believed that the majority of them bore a very close relationship to malignant disease, and that it would probably be more easy to establish a still nearer affinity, were it less difficult to give a correct definition of malignancy. Without alluding to those forms of ovarian disease commonly admitted to be malignant, he was inclined to believe that nearly all were associated with a tendency to become so, and that such tendency could be traced in many of the most simple varieties of ovarian growths; that although a large class of cases had been described as belonging to a simple and unilocular type, he had very rarely met with such examples, as in almost all the examinations he had made of what were termed unilocular cysts, secondary and tertiary cysts were present; in many instances the secondary cysts were very small, and commonly occupied the basic portion of the parent sac; in others they were of much larger size, and in some completely filled up the containing cyst; but in all appeared to arise from the structures subjacent to the lining membrane of the parent sac, which thus became completely reflected over the secondary cysts; that perhaps all were essentially compound in structure, and that each component cyst had the property of developing other cysts in

its cavity, and thus gave rise to the often rapidly increasing size of the large hard masses frequently observed after the withdrawal of fluid by paracentesis. Not unfrequently the development of such secondary growths occupied but a very short period, and he had seen many cases, in which, after the first tapping, little or no solid matter could be felt; at a second tapping, less fluid had been removed, and a larger solid growth detected; whilst, after repeated tappings, the whole of the cavity of the parent sac had become filled by myriads of cells, containing serous, mucous, colloid, and often purulent or muco-purulent secretions. In their compound structure, in the manner of their growth, in the frequent rapidity of development, and in common association of fungoid and cerebriform degeneration, some evidence might be found of the relationship of ovarian tumours with other diseases admitted to be malignant. He could not accord in the opinion that had been expressed in reference to the duration of life in those affected with ovarian disease. Statistical evidence derived from his own cases, gave but three years as the average duration of life, and such result was supported by reference to hospital records, as well as by the written opinions of those who had recently investigated the subject. He was quite prepared to admit that exceptions were occasionally to be met with, but they were comparatively rare; and that some, at least, of such cases, were not examples of true ovarian tumours, but consisted of cystic collections of fluid contained in the broad ligaments, and not involving the structure of the ovary itself.

Dr. Oldham did not regard the average duration of life in ovarian disease as being so short as had been stated, and alluded to cases in which the patients had lived on for a much longer period. He inquired as to the cause and seat of ovarian tumours, and expressed his belief that, in their incipient stage at least, they might be capable of removal by remedies; and he narrated a case in which ovarian tumour had, under the influence of local depletion and general remedies, remained stationary. He was opposed to the opinion of the malignancy of ovarian disease.

Dr. F. Bird remarked, that in the table of cases he had referred to, he had assumed the duration of life as extending from the period of abdominal enlargement to the time of death. It was possible that the primary stage of ovarian tumour, in which the small size of the morbid growth allowed it to remain within the cavity of the pelvis, and hence in many cases not detected, might be slow; but that he had not included the time occupied by such stage of incipience in the results he had given. With reference to the etiology of ovarian tumour, he believed that ovaritis was a common cause, and that the same influences which might produce such disease might also give rise to the formation of tumour.

Dr. Chowne spoke at length in reference to the evidence afforded by statistical records, and objected to the data employed, inasmuch as fatal cases alone had been included; and he had seen examples, to four of which he referred, in which ovarian disease had existed for many years, unassociated with any great impairment of the general health.

Dr. Clutterbuck coincided in the view that had been expressed of the frequently inflammatory origin of ovarian tumours, and believed that much good would often result in the earlier stages of disease, by the careful employment of antiphlogistic measures; and he adduced a case in which frequent small bleedings from the arm, aided by other general antiphlogistic remedies, had been of marked benefit.

Some farther discussion ensued, in which Dr. Waller, Mr. Clarke, Dr. Chowne, and Dr. Oldham, took part, and the Society adjourned.

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Monday, January 25, 1847.—Mr. Dendy, President.

CANCER.

Mr. Dendy related the case of a single lady, thirty-five years of age, who, four years since, came to London for advice respecting a genuine scirrhus of the breast, of which she was the subject. Her mother had died a short time before of the same affection. In the present instance, the tumour exhibited all the marks of that frightful malady. It was lobulated, dark, and shining, with purple lumps about it, the nipple was retracted, and there was sharp lancinating pains in it. Pressure, on the plan of Dr. Arnott, was employed, but without benefit. She now came for the purpose of determining on the propriety of an operation. It was determined, in consultation with Mr. Travers and others, that an operation should be resorted to. It was accordingly performed: union took place by the first intention, and in three weeks the wound was quite healed. The countenance, previously pale and cadaverous, had become healthy, and some glands previously enlarged in the axilla, had disappeared. She remains well. The tumour was examined after its removal, and exhibited all the characteristics of cancer. He narrated the case to show that, in some instances, at least, of malignant disease, the knife was the best remedy; for in this case it was evident that life would soon have been worn away, as, in addition to the symptoms enumerated above, the patient was rapidly emaciating, had sleepless nights, and an increasing fever.

Mr. Bishop agreed in opinion with Sir A. Cooper, Mr. Liston, and other eminent surgeons, who declined to operate in any case in which malignant disease was discovered to exist.

Mr. Pilcher could not agree in this opinion entirely. In cases of unquestionable malignant disease, it might be right not to operate; but in cases of a questionable character, it was desirable to give the patient an opportunity of being relieved by operation. The case related to-night proved that the operation had been a boon of the greatest value; it had prolonged life, and made that life one of comfort. He referred to cases of tumours of the breast in women and young girls, resulting from pressure of the stay-bones, and which, if allowed to go on, he believed would become malignant. He threw out this question—Does the primary disease, being local, at last degenerate into malignant disease, and thus implicate the constitution; or is the constitution the first affected, and the local disease a consequence thereof? He thought the former the correct view of the subject. He then referred to cases of "local cancer," in which all the signs and symptoms of the disease were exhibited, but the constitution of the patient did not suffer.

Mr. A. Fisher related a case of scirrhus, situated an inch below the mamma, and making its first appearance at the age of seventy-two. It was of the size of an ordinary marble, and exhibited all the signs and symptoms of scirrhus. It was removed, and under the microscope, gave evidence of its malignant character.

Mr. Bishop had lately conversed with a surgeon who had operated on twenty two cases of scirrhus. In nineteen the disease returned and destroyed the patient. He had determined never again to operate.

Mr. Roberts, to show the difficulty of diagnosis in these cases, referred to an instance of a lady, forty-five years of age, who had a small nodulated tumour, as large as a marble, in the mamma. It gave her no uneasiness; she discovered it by chance. One eminent surgeon advised its removal; another recommended its being left alone; for, if malignant, an operation would do no good, and if not, an operation was not required.

Mr. Linnecar referred to some cases, lately reported in The Lancet, from St. Bartholomew's Hospital, in which small tumours, supposed to be malignant, had been removed, but returned and destroyed the patient. He knew that Mr. Lawrence believed that operations were of little service where scirrhus tumour had attained any size, but if small he removed them. Mr. Linnecar related a case of scirrhus, of large size, which had been under his care for some years, and appeared to be getting somewhat smaller, under the application of a plaster of mercury and ammoniacum. There was little or no pain in it.

Dr. Bennett referred to the influence of mental anxiety and distress on the production of scirrhus. He had noticed the prevalence of this disease in persons whose tone of mind was that of depression, and thought such a cause, by interfering with nutrition, had a great influence in the production of the disease.

Mr. Pilcher referred to some cases, in which the long continued use of tincture of iodine, internally, had produced irritative fever, from which the patients sunk.

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## WESTMINSTER MEDICAL SOCIETY.

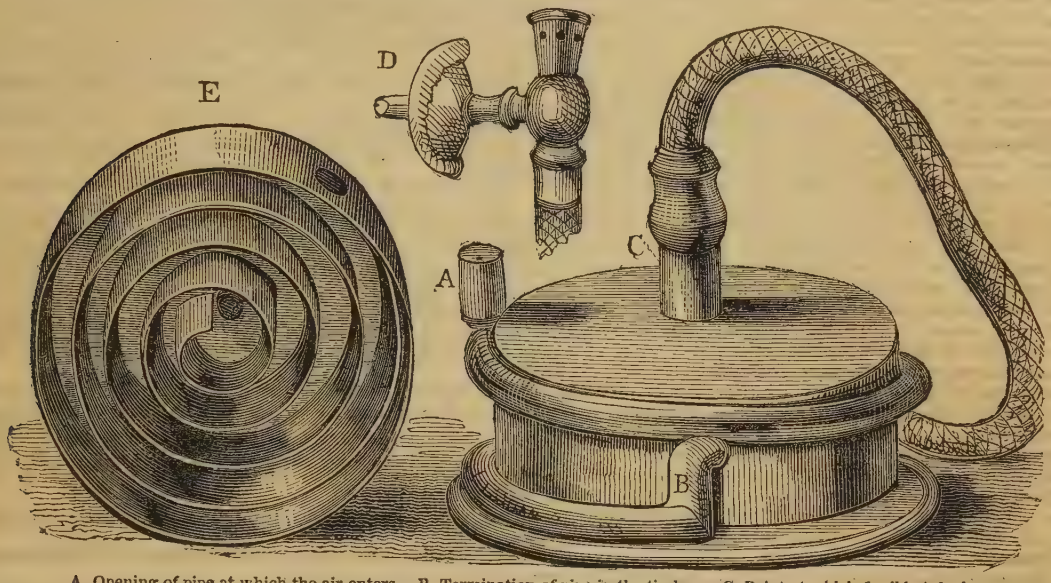
Saturday, January 23, 1847.—Dr. Sayer, President.

Dr. Snow placed on the table an

APPARATUS FOR INHALING THE VAPOUR OF ETHER.

It consisted of a round tin box, two inches deep, and four or five inches in diameter, with a tube of flexible white metal, half an inch in diameter, and about a foot and a half long, coiled round and soldered to it. There was an opening in the top of the vessel, at its centre, for putting in the ether, and afterwards attaching the flexible tube belonging to the mouth-piece. In the interior was a spiral plate of tin, soldered to the top, and reaching almost to touch the bottom. When used, the inhaler was to be put in a hand-basin of water, mixed

to a particular temperature, corresponding to the proportion of vapour that the operator might desire to give; and the caps being removed, and the mouth-tube attached, when the patient began to inhale, the air would gain the desired temperature in passing through the metal pipe; it would then come upon the surface of the ether, where it would have to wind round three or four times before entering the tube going to the mouth-piece, thus ensuring its full saturation, and preserving it at the desired temperature. There was no valve, or any other obstruction to the air, till it reached the mouth-piece, which was of the kind used in other inhalers, and contained the valves necessary to prevent the return of the expired air into the apparatus. Dr. Snow said it had been applied, in one case, at the temperature of seventy degrees, and had produced the effects of ether, very powerfully, in half a minute. In answer to a question, he said that ether, when sufficiently pure o be inhaled, would not act on tin or other metals.




A, Opening of pipe at which the air enters.—B, Termination of pipe in the tin box.—C, Point at which flexible tube is removable by unscrewing.—D, Mouth-piece.—E, Tin vessel, with bottom removed, to show its interior.

Dr. W. Merriman narrated the following case:—A boy of delicate constitution, aged eight, was brought to him to the dispensary, on October 7th, for headach, and was ordered a slight aperient and saline mixture. On Oct. 10th, deafness set in; but he was not seen till the 12th, when confection aromat. was ordered for a diarrhœa. He was very stupid, and passed his motions involuntarily, although this was not stated at the time; he could answer correctly, if spoken to loudly and clearly. Dr. Merriman then heard that he had received a blow on his head about ten days before he became deaf; though the story the patient gave of the manner of receiving the injury has proved to be incorrect, in reality he had been pushed down some steps on September 29th, and was picked up insensible; but this was not known till after his recovery. The diarrhœa continuing unabated, and his strength declining, chalk mixture and kino was given every six hours, and in a week's time had restrained it entirely. On this day, he appeared to revive, as if coming out of a state of recent concussion, but speedily relapsed, and became more and more insensible, accompanied by incessant tossing of the body in every direction, rolling of the head, and screaming, so as to allow no one in the house to get any rest. After clearing the bowels, calomel was assiduously given every six hours, in doses of two grains, combined with one grain and a half of Dover's powder, for fear of reëxciting the diarrhœa; and after about thirty-six grains had been thus taken, the bichloride of mercury was prescribed, one-eighth of a grain every six hours, for two days, and subsequently one sixteenth, in the almost vain hope of removing the effusion which appeared to have occurred this treatment proved most satisfactory, consciousness returned by degrees, as also eyesight, which remained injured the longest. A relapse took place during the recovery, from the bowels becoming loaded with foul secretions, but was presently removed, and he rapidly regained his health. The case appeared to Dr. Merriman to be continued fever, with aggravated head symptoms, on account of the concussion, and he asked the Society's opinion upon this point, as also if there had been any effusion, or only congestion. A brother of the patient was ill at the same time with fever, and two sisters had subsequently been seized. The house they lived in was most offensive, from want of proper drainage. He was also confirmed in his opinion by the return to consciousness three weeks precisely after the deafness first showed itself.

In the discussion which ensued on this case, it was generally considered that the symptoms clearly indicated it to be one of concussion of the brain. Some comments were made by several speakers on the mode of treatment employed, and the evening was concluded by remarks on the treatment of concussion generally.

## PATHOLOGICAL SOCIETY OF LONDON.

January 18th, 1847.—Dr. Williams in the Chair.

Dr. George Johnson exhibited

### A SPECIMEN OF DISEASED KIDNEY.

The subject of the disease was a cat, and the following was the history of the case:—The animal had for some days been inactive and drowsy; she was then seized with convulsions, followed by coma and death. The kidneys were about twice the normal size, much congested, and presented to the naked eye an abundant yellowish white deposit in the cortical substance. Under the microscope, the urinary tubes were seen to be uniformly and greatly distended with oil globules. Dr. Johnson stated that he had frequently examined specimens of fatty degeneration of the kidneys from this class of animals, and he had found the microscopical examination of them very easy and satisfactory, on account of the delicacy and transparency of the tissues. He invited any members of the Society who were interested in the subject, to take portions of the kidney for microscopical examination, and he did not doubt that such an examination would satisfy them as to the essential nature of the disease.

In answer to questions from Mr. Toynbee, Dr. Johnson stated that he had not an opportunity of examining the urine of the animal; he examined the bloodvessels of the kidney; they were much congested, he believed in consequence of the compression to which they were subjected by the dilated urinary tubes; from the same cause, some of the Malpighian vessels had given way, and the tubes had become filled with blood. He had frequently examined the healthy cat's kidney, and found in it a minute quantity of oil, but infinitely less than in the disease in question.

Dr. Bentley then read a communication from Mr. Francis Adams, of Banchory,

ON THE EXTRACTION OF A LARGE CARTILAGE FROM THE KNEE-JOINT.

The cartilage was exhibited to the Society. The following are the particulars of the case:—A farmer, aged twenty-five, came under the care of Mr. Adams, about two years and a half ago, on account of a slight contraction of the left leg, at the knee-joint, of several years' standing. In the course of ten or twelve days, the deformity was remedied by the compound splint and screw, and the limb continued free from uneasiness till last June, when violent pain, heat, and swelling, suddenly supervened in the knee-joint; a hard body near the head of the fibula was soon afterwards observed, which, on slight pressure being applied to it, slipped into the joint, and completely disabled him from walking for the time. Its mobility being such that it was impossible to secure it in such a position as not to impede the motion of the joint, it was removed by an incision made by a bistoury through the integuments, near the tendon of the biceps, in which situation the loose body had been previously secured. It was the size of a large flattened bean, and appeared to consist of cartilage with one smooth side, and another rough, where it seemed at one time to have been connected with one of the bones of the leg. It weighed one drachm, eight grains. No unfavourable symptom followed the operation.

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Mr. Cæsar Hawkins exhibited a specimen of

RUPTURE OF THE DIAPHRAGM.

The specimen was taken from a man, aged twenty-four, who was admitted into St. George's Hospital, having fallen from a height of about twenty feet. He had fractured both arms, and sustained other injuries. On the day after admission, he complained of a fixed, defined pain on the left side, a little below the hypochondrium; this was accompanied with slight hæmatemesis, and inability to take food. He appeared to progress favourably till the ninth or tenth day, when sudden prostration supervened, from which, however, he rallied. Similar collapse, after a few days, again returned, and continued to do so, at two or three distinct periods, till about the tenth week, when he was seized with pain in the abdomen, and constipation, followed by diarrhœa, and the passage of blood by stool. This was succeeded by an acute attack of pleurisy, from which he died in the thirteenth week after admission. He was nourished with enemata from the time of the injury to his death, the incapability of taking food by the mouth continuing without intermission.

The entire surface of the abdominal cavity appeared, on the post-mortem examination, quite black; and at the lower part was observed a large cyst among the convolutions of the intestines, which contained pus and fæcal matter, and communicated with the lower part of the colon. The left pleural cavity presented evidence of very acute inflammation, there being two distinct circumscribed effusions, the one at the upper and the other at the lower part of the cavity. The latter was situated between the lower portion of the lung and the diaphragm, which presented a distinct laceration of about an inch across; and through this opening, the abscess communicated with another in the abdominal cavity behind the stomach, and bounded also by the spleen and kidney. It contained about half a pint of pus. There was a further laceration, of about six inches in length, in that part of the diaphragm forming the wall of the abscess, which, however, did not appear to have been perfect.

Mr. Cæsar Hawkins remarked, that the symptoms exhibited by the patient had led him to a correct diagnosis of the injury sustained, and thought that the case was of great interest as regarded the period of time the man had survived it.

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Dr. Williams related the particulars of a case of

RUPTURE OF THE ŒSOPHAGUS AND DIAPHRAGM,

induced by violent vomiting, and in which case, the contents of the stomach were poured into the pleura, producing inflammation and death. The vomiting came on suddenly, and in the act the patient fainted. He rallied, and was again attacked with fainting, accompanied with a great desire to vomit, which, however, could not be accomplished. The ordinary symptoms of perforation came on with great intensity thirteen hours after the attack, and the patient soon sank. Dr. Williams, in reply to a question which was suggested by a similar case in the knowledge of Dr. Norman Chevers, did not think that the perforation was a post-mortem result, as there was unequivocal evidence of very acute inflammation in the pleural cavity, which had not been affected prior to the attack of vomiting.

Mr. Toynbee communicated the result of his

DISSECTION OF THE CONGENITAL MALFORMATION OF THE EARS OF A CHILD,

which dissection he had made at the request of Dr. Lloyd, who exhibited the case at the last meeting of the Society. The external ear consists of a fold of integument, having much the same shape and size as the ordinary lobe, but containing no cartilage. The external meatus is wholly absent; there is no membrana tympani, the cavity of the tympanum being a mere fissure in the bone, and containing two bones, the analogues of the stapes and malleus, the Eustachian tube opening in its anterior part. The cochlea, vestibule, semicircular canals, and auditory nerve, appear perfectly healthy.

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Dr. Norman Chevers exhibited the heart of the fœtus which had been examined by Mr. Toynbee, and which presented

A REMARKABLE CONTRACTION OF THE DUCTUS ARTERIOSUS.

This vessel was almost closed, being but one-twelfth of an inch in diameter, and capable of admitting only the shank of a large pin, its coats exceeding in thickness those of any other of the large vessels; the interior of the vessel was rugose, and presenting a series of small pits, which gave evidence of the process which had gone on, it not having been recent. The state of the duct proved, in the opinion of Dr. Chevers, that its closure commenced, and might have been entirely accomplished, before birth, had the child lived to the full period. The contraction of the vessel was uniform. The pulmonary arteries were wide and well developed, equalling, in fact, the size of the same vessels in a full-grown fœtus. The fœtus was seven months and a half, and lived fifteen minutes after birth.

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Dr. Bence Jones exhibited a specimen of

SCROFULOUS TUBERCLES IN THE PONS VAROLII AND CEREBELLUM.

The man, who was under the care of Dr. Jones, in St. George's Hospital, lived six days after admission, a month prior to which he stated his illness to have commenced with a cold, followed, in about three weeks, by weakness in the legs, without any decided paralysis, and slight wandering. On the day of his admission, there was no paralysis; the tongue was furred; pulse 96; pupils small and sluggish. He could give no account of himself, his whole manner appearing dull and slow. He answered with difficulty; had, however, no headach. On the following day, the motions passed involuntarily; delirium increased. This was succeeded by the left pupil becoming more dilated than the right; slight strabismus; strong pulsations in the carotids; and death by coma, without convulsions. The arachnoid was observed on inspection unusually dry; the convolutions flattened; the veins much gorged with blood; small flakes of lymph beneath the arachnoid in the pia mater of anterior part of cerebral lobes. Substance of brain firm, excepting the walls of the third ventricle, and of the cerebral substance around the canal, between the third and fourth ventricle, where the brain was completely softened. Ventricles distended with clear serum. Base of the brain had a light sub-arachnoid deposition of lymph. Left lobe of cerebellum contained several scrofulous tubercles; two, large as a bean, in the pons Varolii; one also grew from the dura mater, on the left side of the posterior fossa. Lungs permeated with miliary tubercles; small vomica in left apex. Small tubercle in each kidney.

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Dr. Macintyre exhibited two specimens.

PREPARATION OF AN ABSCESS IN THE CEREBELLUM, CAUSED BY EXTENSION OF DISEASE OF THE TEMPORAL BONE TO THE MENINGES.

The patient, a man, had been totally deaf on the right side for sixteen years, and the greater part of that time subject to a discharge from the right ear, trifling in amount, but continual. For the last two years of his life he was troubled with headaches. In August last, he was seized with one of these attacks, in which the pain was infinitely more intense, he said, than on any previous occasion. When seen, he was found labouring under unequivocal symptoms of acute meningitis and cerebritis. He was treated actively by sanguineous depletion, mercury, blisters, and cold applications to the head, but without success. In about a week, paralysis of the right side of the face, and distortion of the mouth to the left, were observed, stupor followed, and went on to coma and death. On dissection, universal cephalitis was disclosed. The mem-

branes were found intensely inflamed, the substance of the brain softened throughout, particularly around the ventricles, which were amazingly distended and dilated with serum. The abscess, which was situated immediately under the sensorium, in the substance of the cerebellum, communicated, by the meatus internus, with the ear, and by numerous carious perforations in the pars petrosa of the temporal bone, with the mastoid cells, which were broken down and soaked with purulent matter. Dr. Macintyre observed, that diseased pieces of the temporal bone illustrate the devastation frequently committed among the osseous structures by this dangerous, but insidious, malady, and attest its claim to our attention in its early and remediable stage. It was rather remarkable that, two days before this man's death, when the coma was profound, and the brain probably much disorganized, he all at once recovered his senses, and for some hours conversed coherently, and tolerably distinctly, about his affairs; then, as suddenly lapsed into coma, in which he shortly died.

COLLAPSED APOPLECTIC CELL IN THE CENTRE OF THE RIGHT HEMISPHERE OF THE CEREBRUM.

The patient died while under treatment for delirium tremens. This singular affection was only one consequence of a long course of habitual indulgence in the use of intoxicating liquors. Gastric, hepatic, cardiac, and pulmonary disease existed to a great extent, on a post-mortem examination, and were the determining causes of death. There were no signs of meningeal or cerebral inflammation, but the brain was of remarkable firmness throughout, resembling, indeed, a brain which had been macerated in alcohol. The cell was organized, and was lined by a delicate membrane, fine as the hyaloid or chorion. It presented nothing very unusual, except that the cyst was found fully formed and nearly empty, thirteen days only after the apoplectic seizure. Dr. Macintyre observed that this rapid disintegration and absorption of the red coagulum was of rare occurrence, but not unprecedented, and he thought the case of peculiar interest, as suggesting the grave consideration—how far the special treatment of delirium tremens adopted (that by opium) was concerned in the attack, or may be, perhaps, in other cases, where a predisposition to apoplexy exists. In the instance before us, Dr. Macintyre was inclined to think the seizure was not attributable to the medicine, for it did not take place till forty hours after the administration of one dose of a single grain of acetate of morphia; the patient having slept soundly after it, and awoke tranquil and in his right mind, and continued, till his death, free from drowsiness, contracted pupil, or any other circumstance which could lead us to suppose that the drug acted otherwise than medicinally.

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Dr. Lloyd exhibited the heart of a child, thirteen months old, which had been affected with

ENDOCARDITIS, COMPLICATED WITH AN ORIGINAL MALFORMATION OF THE AORTIC VALVES.

The child had been feeble from birth, and had suffered for some length of time from dyspnœa and cough, which abated after it had been under treatment for eight weeks. This first attack was followed by bronchitis and pneumonia two weeks before it came under the care of Dr. Lloyd, who remarked pallid countenance, great anxiety, rapid breathing, hurried cough, dulness at the back part of the chest, much tubular breathing, accompanied with crepitation. On listening to the heart, the sounds of which were but slightly audible, from the mucous râle which pervaded the anterior part of the lungs, a distinct, direct, and regurgitant bruit was remarked. The child soon sank; and on inspection after death, two aortic valves only were remarked; the one of the ordinary character, and the other equal in size to two, an indistinct ridge intersecting its middle. Both valves were very red, rough, hard, cartilaginous on their surface, and puckered.

HEART AFFECTED WITH MITRAL AND TRICUSPID DISEASE.

The patient, a woman aged twenty-seven, was affected two years ago with cough, accompanied with purulent and bloody expectoration. The apices of the lungs were dull on percussion, and there were turbulent respiration and bronchophony. A bruit at the first stroke of the heart was heard below the mamma. She was emaciated and hectic. After having been under treatment for a year and a half, she became, to all appearances, perfectly convalescent, and continued so till within four months of her death. The effects of interrupted pneumonia were observed in either lung, and the mitral orifice, from disease of the valve, was so contracted as not to admit of the introduction of the little finger. The tricuspid valve also was fringed with large adventitious deposits.

Mr. Edwin Quekett exhibited a specimen of

DEFICIENCY IN THE BONES OF A CRANIUM OF A FŒTUS.

The upper portions of the frontal, parietal, and occipital bones were wanting; the brain, with its investing membranes, protruding loosely from the opening. The fœtus was of the full period, and survived its birth but a few minutes.

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## THE LONDON HOSPITAL MEDICAL SOCIETY.

December 11, 1846.—Dr. Little in the Chair.

Mr. P. Gowland read the following case of

FALSE ANEURISM FROM A WOUND OF THE FEMORAL ARTERY.

Denis H——, aged twenty-six, a cook at the Sailors' Home, of an unhealthy, bilious appearance, was admitted into the London Hospital, under Mr. Luke, on Sept. 25th, having received a wound of the femoral artery by a stab from a boy. The knife with which the stab was inflicted penetrated the back part of the thigh, below the middle, in an oblique direction forwards and inwards, having traversed nearly its entire diameter. Hæmorrhage, to the amount of about two quarts, immediately followed the receipt of the injury, and was stopped by plugging the wound with lint.

When brought to the hospital, the patient appeared in an almost dying state from extreme collapse. Stimulants, consisting of brandy, with ether and ammonia, were administered at intervals. A tourniquet was kept round the limb, to be in readiness in case the hæmorrhage should return; a bandage applied round the limb, and a compress to the wound.

Reaction took place very slowly; and on the second day after the accident, a slightly discoloured pulsating swelling appeared at the anterior and inner part of the thigh, in the situation of the anterior termination of the wound. There was observed coldness and numbness of the limb, and an absence of pulsation in the anterior and posterior tibials.

On the following day, the man having sufficiently rallied from the immediate effects of the accident, Mr. Luke determined to lay open the tumour, in the expectation that the femoral artery had been wounded, and to tie the vessel should such supposition be correct.

A tourniquet having been applied to the upper part of the thigh, an incision four or five inches in length was made along the centre of the tumour in the long axis of the limb; and from the inferior extremity of this incision, a smaller one was carried in the direction of the inner condyle of the femur. A coagulum of blood, about equal in amount to the size of a fist, having been removed, the surrounding muscles were observed much altered from their natural condition. This circumstance, together with considerable venous hæmorrhage after the removal of the coagulum, obscured somewhat the different steps of the operation, and rendered it impossible for Mr. Luke to determine whether the femoral vein had been wounded or not. The femoral artery was found completely divided at its lower part, the two portions having considerably retracted from each other. A probe having been passed into either open extremity, a ligature was applied to each in the usual manner. The edges of the wound were brought together with plaster, and the patient carried carefully to bed. Opium was given, and the limb thickly encircled with wool.

Warmth gradually returned in the limb. The ligature came away on the tenth day. The wound healed but slowly; stiffness of the knee-joint resulted, but gradually subsided under passive motion; and the patient is affected, at the present time, from dropping of the foot, apparently from a weakened condition of the muscles.

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Mr. Critchett then read the following case of

SEROUS EFFUSION INTO THE ANTRUM MAXILLARE.

Sarah C——, aged thirty-nine, of a sanguine temperament, came as an out-patient at the London Hospital, under my care, on the 20th of November last. She presented a considerable swelling on the right cheek, rounded and ill-defined, but evidently connected with the antrum or maxillary sinus. The right malar bone was more raised and prominent than the left, and measurement from the ala of the nose to the external ear, across the most prominent part of the tumour, showed an increase on the right side of about two inches. There was no swelling perceptible either of the hard or soft palate, or any displacement of the septum of the nose; but upon raising the upper lip on the right side, the bone presented a distinct elevated ridge, jutting out from the upper part of the alveolar

process, and a distinct rounded swelling evidently continuous with that to be felt on the cheek.

On making a further examination, the swelling on the cheek was found to be smooth, firm, and unyielding, like a shell of bones; but on making pressure with the finger on the centre of the projecting part within the mouth, it yielded slightly, and gave to the touch a peculiar crackling sensation, like pressing a dried bladder or parchment. The teeth of the upper jaw on the right side were very much diseased, and there were two stumps.

It appears from the brief history that was taken at the time, that about four years ago she was struck violently on the right cheek by a saucepan, which broke a gum-boil from which she was at the time suffering, and to which she had been for some years subject. About two months afterwards, she felt a hard substance on the same cheek, about the size of a nut, not painful to the touch, but having what she described as a creeping sensation. From that time to the present, it has gradually increased in size, (swelling more,) and becoming slightly inflamed whenever she caught cold: it had increased very rapidly during the last month. The patient in other respects seemed in tolerable health.

After examining the case, and hearing this history, I felt it was a somewhat doubtful and difficult case to diagnose. Mr. Luke and Mr. Curling examined the case with me, and at once pronounced it to be a closure of the natural opening of the antrum, with an accumulation of its natural secretion pent up, and thus expanding and thinning the outer wall. I proceeded, at their suggestion, to remove a portion of the anterior wall within the mouth, where it appeared thinnest. I found it very tough, particularly near the alveolar process, grating against the scalpel. I removed a circular portion, about the size of a sixpence, with a view to establish a patent aperture. The portion thus removed presented many of the characteristics of fibro-cartilage, with small fragments of bony matter scattered through its texture. A considerable quantity of fluid escaped, of a viscid character, very much resembling the contents of a ranula: there was a quantity of cholesterine mixed with the fluid, the exact amount of which it was difficult to estimate, owing to a quantity escaping from the mouth. I should think it might have been three ounces. Some little hæmorrhage followed, and I then filled the aperture with a piece of lint. The patient came to see me again in three days, with the lint still remaining in the opening. Upon removing it, a quantity of very fœtid discharge escaped, and the tumour seemed somewhat diminished. I passed a probe into the cavity, which is still much beyond the normal size, the probe passing about two inches before it struck against the side of the cavity, whereas about an inch is, I believe, the utmost extent of the diameter of a healthy antrum. I directed a weak solution of chloride of lime to be injected into the cavity with a view to cleanse it, and also to maintain the patency of the opening. I also directed the teeth to be extracted, which were diseased; but this she has at present refused to have done. When I last saw her, the tumour had diminished more than one half, and the discharge was less, though still rather fœtid.

I shall be happy to communicate to the Society the further progress of the case on some future occasion. I have been induced to bring this case before the Society from a consideration of its infrequency, and the possibility of its being mistaken for fungoid disease of the antrum.

The principal points that appear to me to be worthy of notice in the case are—a diseased condition of the teeth, and a liability to gum-boils, as its predisposing causes.

2ndly. Its slow growth, occupying a period of four years, and the absence of all pain in the tumour, even from its earliest formation.

3rdly. A very peculiar and characteristic feature—namely, the crackling sensation under the finger. This symptom is mentioned by Baron Boyer, in his account of this disease, as occasionally occurring.

Mr. Curling has kindly favoured me with the account of a case which occurred in his own practice, of which the following is a brief outline:—James M——, a labourer, aged thirty-four, came under his care, at the London Hospital, in Sept., 1838, with a considerable swelling on the right side of the face; it had been coming eight months; it had increased very rapidly during the last few weeks, and had become very painful; it had a distinct feeling of fluctuation. There was also a considerable swelling in the mouth, behind the upper lip. He passed a lancet into the swelling, and a considerable quantity of glairy fluid, mixed with pus, escaped,—about half a pint. The swelling immediately subsided, and the cheek presented a curious appearance, in consequence of the flaccid integuments falling into the hollow of the antrum. This man never returned to the London Hospital.

Sir Benjamin Brodie briefly mentions a case of this kind, in which he made an opening with a knife in the swelling above the gum, which opening continued to discharge for ten years afterwards, the patient wearing a plug in it.

Baron Boyer, in his treatises on surgical diseases, gives a very interesting account of this affection, and mentions three cases that came under his observation. Of these three, the eldest was under twenty years of age, differing, in this respect, from the cases I have just related. The Baron recommends the same treatment as I followed.

In the French "Dictionary of Medical Science," a remarkable case of this kind is mentioned, as occurring in the practice of Monsieur Dubois. The patient was about eighteen years of age; the tumour had been gradually increasing for about ten years; the floor of the orbit was raised, and the eye thrust upwards; the arch of the palate was pushed downwards in the form of a tumour; the cheek was very prominent, while the nose was thrown towards the opposite side of the face. The upper lip was drawn upwards, and the gums of the lips were observed to project, as in my case. The case was thought so obscure that a consultation of four of the most eminent surgeons of the day was called, and it was unanimously pronounced to be a case of fungus of the antrum, and an operation was recommended; in proceeding to which Mons. Dubois thought he felt a fluctuation under the upper lip and gum: having made an incision in this place, an immense quantity of a glutinous substance, like the contents of a ranula, escaped.

This disease appears, upon further investigation, to have resulted from the irritation of a tooth which had grown in an abnormal position. In the course of about a year and a half, every vestige of deformity had disappeared. From a review of the foregoing cases it would appear that the exciting cause, in the majority of them, is inflammation of the lining membrane of the antrum, produced either by a blow or diseased teeth, and that, the communication between this cavity and the nose becoming thus closed, an accumulation of the fluid, modified and increased by inflammation, takes place. Unless the anterior wall shall have become so far thinned and changed in character as to present some fluctuation, it is doubtful whether it would be desirable to interfere with the case, unless there were severe pain; but when such change has taken place, it is desirable to make such an opening as will not widely close, so as to supply the place of the normal opening into the nose, and a probe should be passed from time to time, to keep the opening patent. If any doubt exists as to the nature of the disease, the peculiar crackling sensation I have described would be a strong indication, and a grooved needle would set all doubts at rest.

## British & American Medical Journals.

### ON MECHANICAL DYSMENORRHŒA.

Some months ago, we noticed in The Lancet a communication of Dr. Simpson's on the relief experienced in certain cases of dysmenorrhœa by artificial dilatation of the os uteri. To the late Dr. Mackintosh belongs the merit of suggesting this practice, and of applying it successfully. A late number of the *Medical Gazette* contains some observations by Dr. Oldham on this subject. It is interesting to watch the progress of our knowledge of the physical conditions of disease—to observe how more accurately symptoms are connected with certain structural changes. Leucorrhœa, as a functional disease, is scarcely thought of now-a-day; and painful menstruation finds its origin in a mechanical cause which mechanical means can alone remove. Dr. Oldham illustrates his remarks by cases, but they are too long to be extracted, and do not admit of being condensed. He concludes—leaving still the membraneous form, dysmenorrhœa, to be described,—

"1. There is a form of difficult menstruation which depends on some morbid contraction of the sexual passages, which may be either congenital or acquired, and affect either the os uteri internum or externum, or the upper part of the vagina.

"2. That this form of dysmenorrhœa is usually accompanied with a scanty flow of the menses, and sterility.

"3. That a great practical distinction is to be drawn be-

tween a womb which is altogether small, being imperfectly developed, and in which the os and cervix are also small, and a womb which is well developed, but with a morbidly contracted orifice. The former cases are allied to amenorrhœa; the latter are essentially cases of difficult and impeded menstruation.

"4. That in this latter class of cases, which in practice will be found to be *very rare*, a perfect cure may be obtained by opening and dilating the cervix.

"5. That division of the cervix, and the passage of a metallic dilator, affords an easy expedient for this purpose.

"I would add only to this summary two observations: first, that I believe the imperfect state of the internal organs of generation which has been referred to is by no means rare. I have often met with it in the ordinary run of inspections, where, besides the general smallness of the womb, there has been seen, on opening the cavity, some elevated ridges, which are directed towards the angles of the womb, showing still the uneffaced traces of the original duality of this organ.

"Secondly, I think this division of the cervix worthy of attention in cases where a form of hysterical epilepsy prevails, coming on with the pelvic pains either preceding the monthly flux or attending the first day or two of its flow."

### ON THE OXALIC ACID DIATHESIS.

Mr. Bartrum, from personal experience, writes as follows, in the *Provincial Journal*, on this subject:—

"While passing the smaller oxalates, and then partaking freely of rhubarb, the first effect was generally to increase the size and quantity of oxalates thrown down, with the occasional addition of some of the reniform bodies; the diet being continued, the crystals of all shapes increased in size, especially the latter, till on two occasions they almost solely were passed. However, after a day or two the oxalates diminished, and then disappeared, although rhubarb was still partaken of; this may probably be explained, by having regarded the appearance of the oxalates as a sure warning that I must give myself more relaxation. The results have been similar on two or three occasions, when, from continuous exertions, I have expected their presence, and found them; but I have never been able to induce their appearance by the freest use of rhubarb, except in the very fine cuboid forms, for a day or so, unless they were previously present.

"That any article of diet, adding to the irritability of the kidneys and bladder, will induce an additional secretion of the oxalates; for I always found, that partaking freely of water-cresses added materially to the quantity of oxalates, provided I were already passing them, from the irritation of the bladder, caused by the abundant secretion of free lithic acid. Whether the elimination of oxalates, as well as of lithic acid, was due to the water-cresses, or the common salt accompanying them, I cannot say. That must be left for future investigation.

"It will be found almost universally, that cases characterized chiefly by deposits of oxalates are combined with an asthenic condition of the assimilating organs; some of them corresponding closely with those caused by the excretion of an abnormal amount of urea, the urine then being dense, and loaded with lithates; while others, from the excessive excretion, give rise to a suspicion of diabetes mellitus, so much so, that of the many specimens sent me for examination, where a large quantity of urine is voided, the greater proportion are of low specific gravity, with some few small oxalates, and often swarms of vibriones. These latter cases, however, are essentially cases of want of nervous power without any specific ailment, sometimes passing phosphates, sometimes oxalates, according to the varying condition of the system, which always displays a very reduced vitality."

### THE CONDITION OF CRIMINAL LUNATICS.

A perusal of some late numbers of the *Veterinary Record* has afforded us gratification. It is agreeable to perceive the progress which veterinary science is making. The various communications here presented treat of almost every subject which a science devoted to the study of beings of a higher order in a state of health or disease had long made its own. The physiology of digestion, and the structure and function of muscle; the action of croton as a purgative; of lead and colchicum as poisons; surgical operations, from lithotomy to subcutaneous "nicking;" veterinary auscultation and veterinary jurisprudence, are a few of the many subjects treated of at greater or less length. There is here, it is true, a coarseness too evident to those accustomed to a higher order of practice, but which more careful education and greater experience will, it is to be hoped, remove. We extract a few paragraphs of analogical interest.

### FATTY DEGENERATION AND RUPTURE OF A HORSE'S HEART.

Mr. Kent having described the symptoms of an obscure chest affection, proceeds thus to relate the autopsy of the case. It presents an interesting example of a very similar affection in man; but here the left ventricle is the most usual seat of rupture. A striking imperfection will be noticed in the details—viz., if hæmorrhage had taken place through the rupture.

"The right ventricle was to an amazing degree dilated, and the wall scarcely more than three-eighths of an inch thick. In fact, so much was this ventricle enlarged, that it quite altered the form of the heart, the whole structure of which was softened. The lungs were congested, but presenting no appearance of inflammation. However, on cutting into them, he found clots of coagulated blood, which, upon section, presented a beautiful scarlet appearance. The auricles were both peculiarly fatty in their structure, and the musculi-pectinati of the right auricle in parts seemed to be wholly converted into adipose matter. The tricuspid valves were much thickened. The pericardium was adherent to the heart. This led him to infer that the disease had existed for some time; since pericarditis often terminates in adhesion, and, for months, the animal may show no alarming symptoms. He therefore inquired of her owner if she had been attacked with any serious illness since he had her, and ascertained that last year he rode her severely one day after the hounds, and that the following day she was very unwell. The farrier was sent for, who said it was a case of diseased lungs, and, as such, apparently successfully treated her. Since that time she had done only very slow road work, and the only illness she has subsequently evinced, was one day, when she suddenly stopped, and fell as if shot. In a few minutes, however, she arose, and was ridden gently home again. This, the farrier said, was megrims; he bled her for it, and she again got well.

The writer adds,—

"This statement at once convinced me that the over-exertion of that day's hunting had brought on inflammation of the general structure of the heart. At the apex of the right ventricle, which had become quite rounded, I found a triangular ragged opening, or rupture, extending, of course, through the pericardial sac, for, as I have before stated, this membrane was in close approximation with the organ; and this, doubtlessly, was the immediate cause of death."

### LITHOTOMY IN THE HORSE.

"Mr. Folks had been frequently called in to alleviate the sufferings of the animal; but being convinced that a calculus existed in the bladder, he requested permission of the owner to extract it; and having obtained his consent, the animal was removed to his infirmary, to be placed under preparatory treatment. On the operation being performed, a calculus was extracted, which weighed eleven ounces, four drachms, and two scruples. A watery solution of opium was injected into the bladder immediately after the operation, the edges of the incision in the perinæum were drawn together by sutures, a free use of demulcents was subsequently had recourse to, and the patient never evinced one untoward symptom after the operation. He left the infirmary perfectly well within a month, and is now performing his usual work."

Intra-uterine pathology finds in veterinary practice some valuable illustrations. The following case of

### PLEUROPNEUMONIA IN A FŒTUS,

though it be of a cow, will form an interesting subject for reflection by those who attend to this subject—that is, if the case is correctly reported:—

"Another cow was killed, and the autopsy showed the right lobe of the lungs to be in a complete state of hepatization, with adhesion of the pleuræ, and traces of inflammation were also found in the abomasum, principally towards the pylorus. In the womb of this cow was a dead fœtus, which was opened, and the right lobe of the lungs found to be hepatized, and adhesions of the pleural covering, the same as in the mother."

THE LANCET.

LONDON, SATURDAY, JANUARY 30, 1847.

The programme of Medical Reform, as far as the English medical bodies are concerned, may now be considered as pretty nearly arranged for the present year. The publication of the Medical Registration Bill brought out the Memorial of the President and Fellows of the College of Physicians, which had been slumbering for some months in the bureau at Pall Mall, but which was forthwith put into circulation. The College Memorial has been followed by a Memorial to Sir George Grey, from the President, Vice-Presidents, and Council of the National Institute of Medicine, Surgery, and Midwifery. This Memorial may also be considered as the manifesto of the Apothecaries' Society. There only remains the College of Surgeons, and the Council will, probably, as they have been peculiarly unfortunate in their proclamations, issue nothing of the kind for the present. At the approaching Hunterian Oration, Mr. Green, who distinguished himself in the theatre of the College last year, by his applause of the Lawrence Oration, may be expected to indulge in as much contempt as he dares for the great body of surgeons in this country. Otherwise, the College will most likely preserve, throughout the year, its previous slumbering, heavy inactivity, and indifference.

It is to the Memorial presented from the National Institute that we have to direct the attention of our readers on the present occasion. The positions stated in this document may be reduced to four heads:—

1. That the great bulk of the medical faculty in this country is composed of general practitioners in all the different branches of the profession.

2. That the division of the profession into the ranks of physicians, surgeons, and general practitioners, is merely a conventional division existing in large towns, and to a limited extent elsewhere, for the convenience of the public; but that the faculty itself, "in a scientific and educational point of view, is essentially one and indivisible."

3. That the interests of the public health, and the interests and respectability of the general practitioner, demand a separate College to conduct examinations, and grant diplomas, and to guard the great body of general practitioners; to constitute, in fact, "a head and home" for this numerous section of the profession. Further, That this College "*shall embrace all "persons possessed of any recognised qualification or licence whatever, and in actual practice as general practitioners at the time "of its foundation.*"

4. Though the President, Vice-Presidents, and Council, are of opinion that a new College is absolutely required, and that the objects of medical reform "can only be certainly "obtained by the establishment of a new College," yet they "would be willing to accept such a modification of either of "the existing institutions, as should make it the head and "home of the general practitioners." And they further proceed to "pray that no Bill affecting the medical profession "may be brought into Parliament, which does not recognise "the general practitioners as a class, and provide for them "an efficient control over the education of the members of "that class."

Such are the ends and aims of the memorialists. We have a few remarks to make upon their propriety and practicability, and upon certain points in the Memorial itself.

And we have, in the first place, to charge the memorialists with what is, in fact, a gross perversion of truth, as far as the apprehension of the Secretary of State is concerned. In their first paragraph, they state their credentials to Sir George Grey, by setting forth, "That the National Institute "is a voluntary Association of General Practitioners in Me"dicine, Surgery, and Midwifery; that your memorialists "have been duly elected the representative Council of the "National Institute, and that *they represent the opinions of "above four thousand of the general practitioners of England "and Wales"!!* What will Sir George Grey think of the faith of this Memorial and of the memorialists when he is told, as an incontrovertible fact, that in the advertisements of the Institute, dated Dec. 8th, 1846, only a fortnight before the date of this Memorial, the number of members is set down at *thirteen hundred* instead of *four thousand!* It is idle to talk about the merging of the National Association in the National Institute, and thus to attempt to trade on an association which has no real existence,—which, as the *Times* emphatically said, failed of its object, and has become extinct. The Committee of the National Association know that the members of the Association, and the bulk of the profession, were so dissatisfied with them, to use no stronger word, that in the latter meetings of that body, the persons present were numbered by tens and twenties, and consisted of the Committee and their immediate friends and partizans. The present Council have published to the world, that with the utmost blandishments, and the most profuse promises of future benefits, only thirteen hundred out of the four thousand could be found to join the new Institution. It is an idle deception, therefore, to talk of their being the representatives of a body, which has no existence, save in theory; and this attempt to hide their paucity of numbers in a subterfuge can only destroy their influence with the Minister, and with all honest men!

But we maintain, that besides not being the legitimate representatives of four thousand general practitioners, they are not in spirit the representatives of the members of the late National Association, nor even of the Institute. The President and Council of the new body humbly "pray that no Bill "affecting the medical profession may be brought into Parlia"ment which does not recognise the general practitioners as a "class, and provide for them an efficient control over the mem"bers of that class;" in other words, which does not provide posts, and the pay and paraphernalia of office, for some at least of the metropolitan members of the Council of the Institute. This is the prayer of the Council; but is it the prayer of the thirteen hundred members of their society? Certainly not: hundreds of these gentlemen desire the passing of a Registration Bill which shall at once draw a cordon round the whole profession, and separate it from the whole host of extra-professional quacks. Numbers of them petitioned, last year, for the then registration measure; numbers of them, we trust and believe greater numbers, will petition in favour of the present Medical Bill. And thus we shall have the spectacle of a society and its professed representatives in open opposition to each other upon this most vital point.

The profession has had experience enough, that new colleges

and the powers wielded under new charters become but foci for professional jobbery, having reference to the interests of the few, rather than to the welfare of the many. He who runs may read, that the metropolitan Council of the present Institution, to which we emphatically deny the term National, are not the parties to be trusted with collegiate power. The elements of trick and deceit are too rife in their past and present doings for the most sanguine to hope they would prove a whit more loyal to the interests of the general practitioners than the College of Surgeons and Apothecaries' Hall have done. Their whole actions forebode that it would but be an exchange from King Log to King Stork.

To confine ourselves to the document before us. We have already touched on the gross deception involved in its impudent description of the Council of the Institute, as the representatives of four thousand general practitioners; and upon the dog-in-the-manger meanness of the Council in crying out against any Bill, however beneficial to the whole profession, which does not furnish them with pay and place.

But other things remain to be censured. The Apothecaries' Hall, the Committee of the late National Association, and the Council of the present Institute, have by their proceedings identified themselves as one and the same junta; or, at all events, they seem in a singular way translatable one into the other. In the first instance, indeed, the late National Association, when it really deserved the name, existed as an independent body; but as soon as it received the favours and patronage of Apothecaries' Hall, it surrendered this independence to the meanest power which existed in the profession. The ruling powers in Blackfriars and the court of apothecaries straightway became the ruling powers at Hanover-square and Regent-street, and this admixture of rhubarb and rose-water soon destroyed the wholesome professional tonic which the Association might, and would otherwise, have proved. Then we had next in succession the twin spirit of the Apothecaries' Society and the dying Association, languishing from the embraces of the Hall, transmigrating itself into the miscalled National Institute to save itself from annihilation, and a rapid ebbing away of its supporters; for the *de facto* destruction of the National Association by its Committee was nothing but the cowardly and desperate act of the suicide, who destroys himself to avoid a disgraceful death. While the National Association existed, after it had acquired the abominable savour of the rose-water and rhubarb to which we have adverted, practices which should never be forgotten by the profession were resorted to by the Committee. The Blackfriars' influence on Regent-street was busily engaged in inviting all men in general practice, possessed of any qualification whatever, to join the Association, promising them, each and all, every advantage to be derived from the new College of General Practitioners, for which they were to contend. The selfsame individuals at Rhubarb Hall were, at one and the same time, offering to surrender themselves openly to the National Association and the new College, and yet were petitioning Government against a registration, because, as they pretended to complain, it admitted Scotch and Irish degrees and diplomas into the same lists with the licentiates of the Apothecaries' Society. In Regent-street the apothecaries were saying "aye" to the principle of the Registration Bill; in Blackfriars they were shouting "no," and pluming themselves on their integrity and consistency all the while—conduct inevitably tending to disgust public men with the subject of medical reform, and degrading the profession in the eyes of all those who observed the hollowness and pretence which were at work.

And so, we doubt not, it will be during the present session of Parliament: the same conduct will be repeated; and we put the whole profession, and especially the general practitioners, on their guard against it. The present Memorial, framed in specious terms, with a desire on the part of its concoctors to hide its real meaning, is nothing more nor less than a manifesto against the new Registration Bill, and a desire to commit the thirteen hundred members of the National Institute against it, though the authors do not dare to express their meaning openly. We have no doubt we shall have the defunct National Association, its walking ghost the present Institute, and the Apothecaries' Society, appearing on the stage one after another, each playing different parts, and each and all, at meetings, public and private, by addresses, deputations, and memorials, stultifying themselves by contradiction upon contradiction, and open violations of every principle of honour and consistency, the Apothecaries' Company being throughout the prime mover of the puppets. That it will be done with some cleverness and cunning we have no doubt, and we shall see the various tricks flying about like so many balls round the head of a juggler, and as difficult to follow, till common sense and honesty, like a ball thrown at random, brings them all down.

The last public act of Apothecaries' Hall, in relation to medical reform, was, to denounce the first Registration Bill, on the plea that it was injurious to the profession to include men possessing Irish, Scotch, and English qualifications in one register, as the British profession of medicine, the argument being, that it was unjust to those possessing the double English qualification, and that it would lower the standard of education for the general practitioner. This argument we could have met by the *impossibility* of excluding men possessing a British qualification from the benefits of *any* medical reform bill, and by the admitted necessity on all hands of conformity of professional education for the future, and for which, indeed, the present Registration Bill provides. But the very propounders of the argument ran away from it, or used it only as a feint. It only takes a walk from Blackfriars-bridge to Hanover-square, to show the dual organization of a master, warden, or assistant of the Apothecaries' Society. The Memorial we have been discussing bears date and place—"Offices, pro tem., Hanover-square Rooms, 24th December, 1846." In this same month, the same parties promulgated, counsel's opinion, and their own warning of illegality, with threats of indictment for misdemeanor, against Scotch and Irish graduates and licentiates, and against members of the English College of Surgeons, with one hand, while with the other they distributed this precious Memorial, in which they lovingly attempt to "*embrace all persons, possessed of any recognised "qualification or licence whatever, and in actual practice as general "practitioners.*" We are profoundly mistaken if the general practitioners of this country will be led by the authors of such cajolery—persons who in one breath flatter the men possessed of the double qualification, by fulminations directed against all their brethren who are not licentiates of the Hall, and at another offer to admit them to perfect equality of privilege; who in one document threaten those who do not possess their licence with prosecutions, in another mock the same parties

by offering them "a head and home" in the New College if they will but assist them in procuring it. Such men, we say, are not to be trusted either as medical reformers, or as the administrators of any Medical Reform Bill. Let every member of the National Institute, when the proper time comes, petition for the passing of the Registration Bill. This should be the mark set by the great body of general practitioners upon the double dealing of Apothecaries' Hall.

We shall have to recur to this fertile subject.

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In the last number of this journal we alluded to a correspondence which has recently taken place in the *Halifax Guardian*, between Mr. F. S. Garlick, a medical man, and a schoolmaster, named Harrowby. As usual, eternal truth, the prejudices of the profession, the persecutions of great men, and the rejection of great discoveries, were appealed to in the arguments of the mesmerists. Without an abundant use of these topics, it seems indeed difficult for quacks of any kind to keep themselves swimmingly before the public. In especial, they use up Harvey, Jenner, Galileo, and all other philosophers who met with opposition in their career. Because they, the good and true men, met with opposition, and proved at length the soundness of their doctrines, *ergo*, as Mesmer has met with nothing but opposition, he must be so much the more true and sound. According to the same exalted logic, how abundantly the followers of Johanna Southcote, or of Joe Smith the Mormon prophet, the Mesmers of religion, might prove the truth of their vagaries. In fact, if strong, consistent, rational, and long continued opposition, were to be used, as it habitually is, by the mesmerists, as tests of truth, then, the greater the falsehood, the greater the proof of its truth; the more odious the vice, the nearer its proved approach to virtue; for it must be remembered, that the opposition to the cheats of mesmerism is not a thing of seasons or of years, but of generations of men, succeeding each other, with the same scorn for its pretences. And where, in the history of natural knowledge, did a truth, appealing to facts and evidence, fall to the ground and lie trampled under foot through successive generations of mankind after this manner?

But we wished to advert to the fact, that in the local controversy to which we allude, at Halifax, medical men were freely appealed to by the non-professional disputant, in favour of the gods of his idolatry. Among others, a prominent place is given to Dr. G. Calvert Holland, of Sheffield, who is said to have stated, "on a public occasion," that "there had been a "darkness around the phenomena of the nervous system, which, "as a medical man, he regretted, and which had prevented the "faculty from alleviating suffering, to a degree commensurate "with its prevalence, but he believed mesmerism would lift "up the veil." We can scarcely believe but that this is a foul libel upon Dr. G. C. Holland; and if it be so, it is one that it behoves him to repudiate.

In another instance, reference is made to the mesmeric orator at the College of Physicians; and though the medical mind would be prepared for outrages upon sense and science from such a source, it would scarcely expect such an avowed turpitude as that contained in the quotation we shall produce. In the common acceptation of the word, a physician is a healer of diseases; in the mesmeric code, he is a creator of them; it is his glory to make rare diseases common, and patents to all; disease, not healing, is made the true sign of professional power.

"Though I had lived all my life," says he, "without witnessing sleep-walking at all, or catalepsy more than once, and was as *ignorant of all the most wonderful* diseases of the nervous system *as the rest of the profession, I have now a tolerably good acquaintance with them all, because mesmerism is a mode of inducing these rare states artificially.* The medical profession is rapidly falling behind the public in *this kind of medical knowledge*, because they refuse to mesmerize, and the public are all mesmerizing."

Let our readers mark this specimen of professional ethics. Here we have a man, once a physician, unblushingly vaunting an acquaintance with disease, which, in order that he might study, he had first *created*, or *induced!* Is not such a vaunt the act of a fiend, rather than of a member of our profession? We know that the worst, as well as the most wonderful, nervous diseases, may be *induced* through emotions of the mind—such as strong expectation, fright, or terror; but what should we say of the man who *induced* chorea or epilepsy, that he might get "a tolerably good acquaintance with them"? Such men would be scouted from the profession, and by the public, if the public could understand the matter; and to the same test ought we to bring these men, who occupy themselves, and who teach the public to do the same, in *inducing* "all the most wonderful diseases of the nervous system."

Such is mesmerism as produced at Halifax. At Exeter, it has a different phase: there, for some weeks past, a controversy of the most extraordinary kind has been going on—not, indeed, so much a disputation as an utter rout. While mesmerism chuckles and plumes itself at the mouth of a self-satisfied pedant in Yorkshire, with only a single but stout opponent,—in Devon, a few individuals, with noble energy, have given themselves to the investigation and exposure of a piece of deception and wickedness equalling anything ever recorded in ancient or modern times. To this subject we shall have to direct the attention of the profession: it exhibits the *Zoist*, the mesmeric *ci-devant* medical men, and their non-professional dupes, in a light so odious, that the mind revolts from the contemplation of their cheating, stupidity, and chicanery.

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Numerous correspondents have called our attention to a newspaper article at present going the round of that portion of the press disreputable enough to admit it, in praise of Holloway the quack, and his system of lying advertisements. The puffing article in question emanated from the *Pictorial Times:* it is a mere pandering to newspaper advertisements, and disgraceful to this or any other reputable paper. It describes Holloway as "really a Napoleon in his way," as "expending the enormous sum of twenty thousand pounds annually in advertisements," and as making the entire circuit of the globe with his pestilent ointment and pills. The two illustrated papers are now a noble pair, the one devoted to Holloway, and the other to Old Parr. It seems that, according to the morality of the quackish portion of the newspaper press, to fabricate oaths, testimonials, and cases, and to advertise them in all quarters of the globe, is to exhibit the acme of "knowledge, ability, energy, judgment, and prudence." To sacrifice the health of thousands by a quack nostrum pretending to cure all diseases, constitutes the quack "undoubtedly the greatest man of the day." That which done upon a small scale, or in a corner, would be ridiculous and disgusting, when propagated to the ends of the

earth becomes heroic, makes the doer a hero "calculated "to undertake any enterprise requiring immense energy of "body and mind." It seems that the star of fraud in PARR's Life Pills, and the manslaughter signet of MORISON, must pale before the superior genius of the quack HOLLOWAY, who blasphemously has himself engraved upon his labels as the CHRIST healing the sick. And this is the kind of atrocity otherwise respectable newspapers can dare to place before their readers. They do not blush to give a panegyric of health-destroying quackery in one page, while they bawl for sanatory reform in another. They compound for profitable sins by damning those that are unprofitable. They can make the newspaper columns sewers of poison and filth, which destroy the health and morals of the community; but the sewers underground—bad enough, but a hundredfold less poisonous than the quack sewers—raise their most virtuous indignation. They can comment with offended virtue upon the swindler, the forger, or the burglar, sent to Botany Bay as the reward of their crimes; but the wretched quack, who reaches, as we are told in the present article in the newspapers of "Sydney, Hobart Town, Launceston, Adelaide, and Port Philip," may reasonally indulge in the hope "of making a hundred thousand pounds in six years for his pains!" A somewhat anomalous distribution of pains and penalties, as it strikes us. So it is even with the Government: the ministry which makes sanatory measures one of its great points does not scruple to derive an enormous revenue from quack medicines—a revenue which is nothing more nor less than a premium upon poisoning the public. The very members of the legislature who are most active in promoting sanatory reform, and who will have to bring the measure forward in parliament, are those who, out of doors, give their sanction to quackery. Within the walls of parliament, the public health is a great battle-cry; without, its advocates are the advocates and supporters of the worst description of quackeries at public meetings, in subscriptions, and in quack testimonials.

## A DRAMATIC SKETCH.

*To the Editor of* THE LANCET.

SIR,—Having been eye and ear witness of the following scene, after the manner of the *Diable Boiteux*, I can vouch for its accuracy, and I send it to you for the edification of your readers. That they may understand it the more perfectly, I transmit the *whole* paragraph to which the scene refers, and beg a place for it in the subsequent column. I shall have occasion to refer to it again.—I am, Sir, your obedient servant,

Jan. 21, 1847. A LOOKER-ON.

SCENE IN OLD BURLINGTON-STREET.

*Stranger.* (*Knocks at No.* 12; *the door opens.*) Is your master within?

*Servant.* Yes, Sir; but he is particularly engaged with two gentlemen, and desired that he might not be disturbed.

*Stranger.* Oh, please to tell him that it is a stranger from the country,—a great admirer of the *British and Foreign Medical*.

*Servant.* (*Goes, and returns.*) Walk in, Sir.

*Stranger.* (*To Dr. Forbes.*) I trust you will excuse this intrusion from a stranger. I have been much struck with the "slashing" article in the last number of your able, truthful, and impartial Review, against that egotistical person, Dr. Marshall Hall. I was so enraptured with it, indeed, that I brought the subject of it before our Medical Society at ——, and pledged myself to defend all its allegations *seriatim*.

*Dr. Forbes.* I am greatly obliged to you. (*Aside.*) I fear he has undertaken too much. I do not like to attack when there is an opportunity for reply.

*Stranger.* There happened to be a great admirer of Dr. Marshall Hall and his doctrines there, a young M.D., who opposed me at every point, and I did not feel that I was always successful in my part of the argument. I contrived to get the discussion adjourned, resolving to come to town, and at once congratulate you on your achievement, and to "get up" the subject more perfectly under your auspices. I feel with you the more cordially on this occasion, because I was myself once deceived and led to think that this pretender had really done something for medical science.

*Dr. Forbes.* Pshaw! But first let me introduce you to these gentlemen—Mr. Durancé George and Mr. George Newport. The former is the writer of a splendid paper in the *Medical Gazette*, in which he sets forth the "surprising accuracy" of Prochaska. To the latter we are indebted (I may confide this secret to you) for the unique article in my Review, entitled, "Complete Anticipation of Dr. Marshall Hall's Doctrines by Prochaska."

*Stranger.* Thank you, Sir, for this courtesy—and you, gentlemen, for your efforts in the cause of *truth*. I admire the truth. It is for this reason that I am the admirer, and am become the advocate, of that "slashing" article (as I call it). (*They look somewhat dismayed.*) It has undeceived me. As I love the truth, I also hate a pretender. You, too, are a "good hater," Dr. Forbes, and have a spice of Robin Oig M'Combich in your composition, eh?

*Dr. Forbes.* (*Composes himself.*) Why, I own, between ourselves, that the "cutting-up" department of my Review has always been to my taste, and that I have a special hatred against all who pretend to have advanced our science and raised our profession by their own labours, forsooth. Sheer imposture!

*Stranger.* (*Embraces Dr. Forbes.*) Give me your hand, noble, generous soul! Well, it was a splendid discovery to find all that Dr. Marshall Hall had pretended to claim, in this Prochaska. It is worthy of a wreath at the hand of Apollo!

*Dr. Forbes.* Oh, but I must not take *all* the credit of this discovery to myself. It was rather the result of the combined efforts of these two gentlemen.

*Mr. Durancé George.* Why, not exactly so; it was entirely mine.

*Mr. George Newport.* That's false: that is, it is a "decided misrepresentation"—a "suppression of facts;" the discovery was entirely mine.

*Stranger.* Well, gentlemen, do not dispute; you are "par nobile"—possess and enjoy a "divisum imperium." And now to our subject. Have you a copy of this glorious Prochaska at hand?

*All.* Oh yes; here it is; but it is unfortunately in Latin.

*Stranger.* That constitutes no difficulty with me; I happen to have been relearning my Latin to officiate as tutor to one of my boys.

*All.* (*Aside.*) That's provoking.

*Stranger.* Let us proceed *seriatim*. I have a list of topics; and the time is short, for I took French leave, and must return to —— by the mail-train. Now, just show me the paragraph in which Prochaska speaks of the absolute, and entire, and exclusive distinction and separation of the *spinal marrow*, with its special incident and reflex nerves, in special connexion with it, from *all* the cerebral system, and its *sensorial* and voluntary nerves, and from the ganglionic system. This is the first subject on my list. I have pledged myself to prove (I depended on your assertions, dear Dr. Forbes) that all this is in Prochaska, and my young opponent actually braved me to do it. Do show me the paragraph. I hope it is full and "complete;" for, as I said, I am pledged; and there is a great fuss and talk about it at ——.

*All.* (*A little hesitation.*) Why see paragraph IV. To be

sure, *all* this is not stated in express words, but it is plain—that is, *we* affirm that Prochaska had the idea in his head.

*Str.* (*Staring, and astonished.*) Why, surely this is not the paragraph intended. This does not exclude *all* the *cerebrum;* it does not even exclude the *sensorial* nerves, or, as if this were not sufficiently explicit, nerves *appropriated to sense*, and it speaks of the sensorium commune, as he calls it, as only *extending to* the spinal marrow! This wont go down at ——. My young opponent has an eye like a lynx: he will say that all this, if I should go and state Prochaska's words, is all confusion, instead of being a distinction of "surprising accuracy," as you, I believe, call it, (*to Mr. Durancé George;*) or a "complete anticipation" of Dr. Marshall Hall, as you (*to Mr. Newport*) reported. What do you say to this, gentlemen? Surely, you have some better ground for your assertions?

*All.* (*Confused; great hesitation.*)

*Str.* But let us try another point. I can easily confess my error in one particular. It will appear generous towards my young opponent. The next subject on my list is this: Dr. Marshall Hall speaks of his discovery of an entire new system of incident, excitor, and reflex, motor nerves, in *essential* connexion with the spinal marrow as their exclusive centre, and totally distinct from all *sensorial* and ganglionic nerves; and on this point he is lauded by Baron Flourens. Do show me *all* this in Prochaska?

*Dr. Forbes.* (*To Mr. Durancé George and Mr. G. Newport.*) Do you, my friends, point out the paragraph, for it is you who speak of the "surprising accuracy," and the "complete anticipation" to be found in our admirable author. I confess, for myself, that *I* have forgotten my "humanities," and I must depend upon *you.*

*Mr. Durancé George.* (*Looks earnestly over the pages, on which the Stranger's eyes are fixed, as those of a basilisk.*) I certainly thought there was something of this sort; but I cannot exactly find it now. The work is rather confused, (*snatching the book, and turning over the leaves with agitation,*) and the Latin is rather crabbed.

*Mr. G. Newport.* I wish I had my own copy. It is certainly in *my* copy. But the Latin *is* crabbed. It is German Latin.

*Stranger,* (*again taking the book.*) This Latin seems more German, than germane to the matter in hand. I can read it, however; and I can see absolutely nothing about *incident excitor* nerves, as distinct from "*sensorial*" nerves, which, indeed, are mentioned here expressly: I can discern nothing like an essential connexion of incident excitor nerves with the spinal marrow, exclusively of the cerebrum; and, see, here are the *olfactory* and the *optic* by name! Why, this is precisely what I stoutly denied at ——, over and over again, raising my voice to its utmost pitch, relying upon the "article," and pledging myself, in my confidence in you, Dr. Forbes, to prove my assertions. I insisted, for this express purpose, on a postponement of the debate, for the argument seemed to be going against me. What shall I say on my return? To be worsted by a young upstart of an M.D. just come to ——! There is madness in the very thought!

*Dr. Forbes.* Oh, be not in such haste! We reviewers take things more coolly. Be confident; boldly stand your ground, *as we do.*

*Stranger.* I do not *quite* understand you. Do you advise me to lie? Does Dr. Marshall Hall assert that he has made these discoveries? and are they or are they not in Prochaska? I ask each and all of you?

*Dr. Forbes.* Is there a copy of Prochaska in the town of ——?—it is not very probable—and do any of the medical people there read Latin?

*Stranger.* (*Eyes him with scorn.*) We must proceed. My next memorandum states, that Dr. Marshall Hall has connected with the true spinal marrow, and with its system of excitor nerves, absolutely exclusively of *all cerebrum* and *sensorial* nerves, *all* the *acts* of *ingestion* and of *egestion*, of *exclusion* and of *retention*, in the animal economy, on which, as he asserts, the preservation of the individual and the perpetuation of the species depend. For my credit's sake, for your own credit's sake, show me this, all this, in Prochaska, or we shall have an ill fame at ——, for the young M.D. is vociferous in praise of this splendid *generalization*, as he calls it, and of the distinction between what is physiological and what is pathological, which Prochaska and you, they say, have confounded.

*All.* Oh, certainly! On this point, Prochaska's words *are* of "surprising accuracy," and his "anticipation complete." See here—all about "nostri conservatio," "sneezing," "coughing," "vomiting."

*Stranger.* Very true, very true, (*thinking*)—that is, *if* sneezing, coughing, vomiting, *be* acts of *ingestion*, *all* the acts of ingestion and of egestion, or *physiological* acts, at all; and if these tend, as such, to the preservation of the individual *and* continuation of the species. But where is this *generalization* which they talk so much about, and of which they laud the extent and accuracy to the very skies!

*Dr. Forbes.* What do you say, Mr. George and Mr. Newport?

*Both.* Why, certainly we cannot find the exact words—— (*Aside.*) We dare not now quote those two words, "nostri conservatio," for he is quick, and has Prochaska in his hands, and will soon see *all it* means.

*Stranger.* Oh, never mind the words; I care not for the words; but do show me the *idea*—the IDEA, as Professor Whewell would say, of this great generalization and discovery.

*Dr. Forbes.* (*Appearing fidgety.*) What do you say, Mr. George?

*Mr. Durancé George.* Why, I own I cannot find the idea; I begin to think our Prochaska's "accuracy" not quite so "surprising" as I once imagined.

*Dr. Forbes.* And what do you say, Mr. Newport?

*Mr. George Newport.* I also think Prochaska's "anticipation" less "complete" than it appeared to me formerly. (*Aside.*) We are detected; but we must try some subterfuge.

*Dr. Forbes.* But in what position does all this place me and my Review? Would that Professor Alison, or Dr. Carpenter, were here.

*Stranger.* And in what position does all this place me and my postponed discussion with the young Doctor at ——! But let us proceed. Surely *one* point on which I may declaim may be found. Here I have an account of a system of excitor nerves of Respiration, and especially of *Inspiration*—the *trifacial*, the *spinal*, but especially the PNEUMOGASTRIC, which is besides styled as "*emphatically the internal excito-motor nerve.*" Do show me this; something about the *pneumogastric* nerve, mind. Is it here? Is it *once* mentioned? This is a great point with young Dr. ——. The pneumogastric, I say; *something* about the pneumogastric!

*All.* (*Silent.*)

*Stranger.* (*Waxing warm.*) (*Aside.*) I must control my indignation. (*To Dr. Forbes.*) But, Sir, is there really not one word on this subject—this nerve—this pneumogastric nerve—in Prochaska?

*Dr. Forbes.* Alas! alas! not one. This I read in the countenances of these gentlemen. They have deceived me. They knew my foible,—my hatred of that individual,—and they have pandered to my rancour.

*Stranger.* (*Turning towards Messrs. Durancé George and George Newport.*) By George, or rather, by you Georges, I like not this. But look ye,—you, and you too, Dr. Forbes, must have had great confidence in the ignorance of your readers, and in your own powers of mystification, to write, print, and publish, such an article as that by which I have been so egregiously deceived.

*Dr. Forbes.* (*Aside.*) I begin to feel much annoyed. (*Aloud.*) I am reluctant to interrupt this pleasant conversation; but I have a pressing engagement. One of the maids is taken ill with the influenza, and I must hasten to "the household." When (*to the Stranger*) do you visit London again?

*Stranger.* London? Visit London, did you say? When?

Rather, when shall I leave it? Not, as I intended, by this night's mail-train. Not until I have seen the individual whom you, and whom I, alas! have so much tried to injure. But you *shall* see me, or hear from me, again,—you shall hear of the adjourned discussion at ———. I will examine the subject of this night's conversation for myself, and I will do justice to that physician, who has, as I find assuredly, given us, not only the physiology of the nervous system, but a clue, in his distinction of the spinal system from the rest, to its diseases. Well might he say, this knowledge is, to diseases of the nervous system, what the stethoscope is to diseases of the respiratory and circulatory organs. And this, Dr. Forbes, is *not* in Prochaska! Well; I have done with odious Reviews for ever. Good evening. (*Exit.*)

*Dr. Forbes.* (*To Mr. Durancé George and Mr. George Newport.*) Pray leave me. I am ill at ease, and would be alone. (*Exeunt.*) What will Sir James Clark say? I had better have followed his advice. And then, those quackish articles please no one, and every one is crying out against my Review, as being, forsooth, *un*-British, and *too* Foreign. I wish Mesmerism, Hahnemannism, and Priessnitzism, and Young Physic, were at Jericho. (*Moody.*) My feelings are not enviable. This business of detraction and calumny is odious —that is, when unsuccessful. How could I be so misled by those two ——? (*Exit.*)

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EXTRACTS FROM PROCHASKA, REFERRED TO IN THE ABOVE.

"*Functions of the Sensorium Commune.*—§ I. What are the Sensorium Commune, its functions, and its seat?

"II. External impressions which are made upon the *sensorial nerves* are propagated very rapidly through their whole length to their origin, where, when they have arrived, they are reflected according to a certain law, and pass into certain responding motor nerves, through which they are again propagated to muscles, and excite certain and determinate motions. This place, in which, as in a centre, *the nerves appropriated to sense*, as well as motion, meet and communicate, and in which the impressions of the sensorial nerves are reflected upon the motor nerves, is called the Sensorium Commune,—a term already received by most physiologists.

"III. It is not *one place* in which celebrated men have placed the seat of the sensorium commune. Bontekoe, Lancisie, De la Peyronie, have placed the sensorium commune in the corpus callosum. Willis places the perception of the senses, and the origin of motion, in the corpora striata; Descartes attributed the function of the sensorium commune to the pineal gland; Vieussens to the centrum ovale; Boerhaave considered that collection of points as the sensorium commune, in which all the sensorial nerves terminate, and from which all the motor nerves arise, and places it in the medulla (fornicata) surrounding the cavity of the ventricles. In a later work, however, he placed it in the confines of the medullary with the cortical substance, which opinion the illustrious Tissot regards as the most probable, and proved by the observations of Wepfer. Mayer seems to place the sensorium commune in the medulla oblongata, and of this opinion is Metzger. Camper says,—'If the sensorium commune has any locality, it is in the pineal gland, the nates, and the testes, and that the opinion of Descartes is not a foolish one.'

"IV. The *whole cerebrum* and *cerebellum* certainly do not seem to belong to the sensorium commune. (!) These parts of the nervous system appear to be rather the instruments which the soul uses immediately in the performance of the actions termed animal; but it seems not improbable that the sensorium commune, properly so called, *extends* to the medulla oblongata, the *crura cerebri*, and *cerebelli*, (!) to part of the *thalami* optici, (!!) and the whole spinal marrow; in a word, *to the origin of the nerves*. That the sensorium commune *extends* to the spinal marrow, we learn from the motions which remain in decapitated animals, which could not take place without the consent and coöperation of nerves arising from the spinal marrow; for if a decapitated frog be pricked, not only is the punctured part retracted, but it crawls and leaps, which could not be without the consent of the *sensorial* and motor nerves, of which consent the seat must be in the spinal marrow, *a part* of the sensorium commune remaining.

"V. The reflection of *sensorial* into motor impressions, which takes place in the sensorium commune, does not obey mere physical laws, where the angle of reflection is equal to the angle of incidence, and where action and reaction are equal, but peculiar laws, written, as it were, by Nature, in the medullary pulp of the sensorium, which we can only know by the effects, and not discover by our imagination; but a general law, according to which the sensorium commune reflects *sensorial* impressions, is our preservation; *so that* certain external impressions, hurtful to the body, are followed by certain motory impressions, producing motions tending to remove the source of injury; and, on the contrary, external or sensorial impressions, beneficial to us, are followed by internal or motor impressions, producing motions calculated to perpetuate that benefit. Many examples certainly prove this general law of reflections of the sensorium commune, of which it will be sufficient to adduce a few."

"VI. Irritation of the internal membrane of the nostrils excites *sneezing*, because that irritation made upon the *olfactory* nerves is carried to the sensorium commune, is there reflected, according to a certain law, upon motor nerves going to the muscles appropriated to respiration, and through these, produces a forcible *expiration*, by which the irritation is removed. In the same manner, when any irritation is caused to the larynx by a crumb of bread or a drop of liquid, this irritation, carried to the sensorium commune, and thence reflected upon the nerves appropriated to respiratory motion, excites a forcible *cough*, the most apt remedy for expelling the irritant, which does not cease until that irritant is removed. If a person approaches our eye with his finger, although we are persuaded that no harm will be done to us, yet that impression, carried by the *optic* nerve to the sensorium commune, is so reflected, in the sensorium, upon the nerves appropriated to the motion of the eyelids, that we involuntarily close the palpebræ, so as to avoid the contact of the finger. (!) These, and innumerable other examples that might be adduced, show manifestly how much the reflection of *sensorial* into motor impressions, by the sensorium commune, regards the preservation of our body. On this account, Tissot properly enumerates the action of the sensorium commune amongst those powers which constitute the nature of our living body.

"VII. As, therefore, the principal function of the sensorium commune consists in the reflection of *sensorial* into motor impressions, it is to be observed that this reflection takes place whether the mind be conscious or unconscious of it. The motion of the heart, (!) of the stomach, (!!) and of the intestines, (!!!) certainly in no respect depend on the consciousness of the mind; but as no muscular motion can be excited unless a stimulus applied to the *sensorial* nerves passes by a certain reflection to the motor nerves, and excites contraction of the muscles, so it is certain that the reflection of impressions proper for inducing these motions, if they take place in the sensorium commune, take place without the consciousness of the mind. But it is asked whether these impressions ascend to the sensorium commune, to be reflected, or whether, without making this circuit, they are reflected by the ganglia, whence these parts have many nerves. More on this point hereafter. But that the reflections of sensorial into motor impressions take place in the sensorium commune, we learn from certain actions in apoplectic patients, in whom all consciousness is destroyed; for they have a strong pulse, (!) breathe, and even raise the hand to the part affected (!!) unconsciously. The sensorium commune acts also without consciousness in producing the convulsive motions of epileptic patients, and even those motions which are observed in profound sleep, besides motion of the heart (!) and respiration—viz., of the limbs when slightly punctured, or pricked, or pinched. To these we must add all those motions which remain in the body of a decapitated man, or other animal, and are excited by pinching the body, but especially the spinal marrow, which certainly occur without consciousness, and from the *residual* part of the sensorium commune, which is in the spinal marrow. All these actions arise from the organization and physical laws proper to the sensorium commune, and are, therefore, spontaneous and automatic. Those actions which take place in the animal body with consciousness are such, that the soul has no power over the will, (!) or such as the soul can coerce or impede at will. The former, as they are ruled by the sensorium commune, as far as it does not depend upon the mind, also not less than those which are performed unconsciously, are automatic. Such are sneezing from a stimulus applied to the nostrils; cough, from a stimulus applied to the trachea; vomiting, from irritation of the fauces, or from an emetic; tremor and convulsions in chorea, S. viti, and in the paroxysms of intermittent fever, (!) &c. But the actions which the soul directs and moderates by its power, although the sensorium commune has its part in producing them, we call, nevertheless, animal, not automatic. Of these we shall treat in the next chapter."

## THE CHOLERA AT KURRACHEE, SCINDE.

*(From a Correspondent.)*

The 86th Regiment was encamped on the plain to leeward of the cantonment of Kurrachee, from April 16th to June 15th, 1846, when it was moved to the sea-coast at Ghizree, four miles from the barracks, on account of cholera. During the above period, the weather was exceedingly hot, even in April. In a large double-walled tent, the thermometer ranged as high as 104° at mid-day; and during May and June, it continued to vary from 92° to 106°; at night, it generally fell to 80° or 81°, and the atmosphere being pretty dry, the dew point was 76° or 78°, or from 10° to 12° below the temperature in the shade. The men did not suffer from any great increase of sickness; but a general tendency to derangement of the stomach, liver, and bowels, was evinced by slight attacks of constipation, diarrhœa, and dyspepsia: this was attributable to the effects of sudden high temperature after a long and fatiguing march in very cold weather. The prevailing winds from the sea had been N.W., but about the 4th or 5th of June, the wind changed to S.W., the direction of the monsoon; the weather then became cloudy, and threatening rain, unsettled and close, and muggy at night. The temperature by day fell to 88° or 90°, while that of the night was 86°, and most oppressive; the dew point also rose to 82° or 83°, showing the enormous quantity of aqueous vapour in the air, such as usually precedes rainy seasons in the tropics. This state of the weather was remarkable from the 5th to the 21st of June, when a heavy thunder-storm and fall of rain caused an improvement for a day or two, after which it again became and continued as bad as before, till the 28th, when a heavy gale, with much rain, came on, and continued for several days; the dew point and thermometer fell, and an agreeable improvement took place.

On the 11th of June, the first case of cholera took place in the 86th Regiment; on the 12th, two other cases, and on the 13th, another: of these four, two died. On the 14th,—a close, calm, oppressive day,—two cases were admitted in the morning. During the afternoon, and after the men had dined, cases of cholera of the very worst description began to come into the hospital, at the rate of three or four each hour; and by next morning, from fifty to sixty cases had been admitted. The disease continued to spread with appalling rapidity, intensity, and fatality; so that by the morning of the 18th, there were 313 admissions and 174 deaths. By the 22nd, sixty-eight more cases occurred; and to the 30th, inclusive, eighteen other cases, making in all 399 admissions within sixteen days, of which number 235 died.

Although cholera appeared with great violence in the 1st battalion of the 60th Rifles, and 1st Bom. Eur. Fusiliers, at this station, yet in the unfortunate 86th, there were three times as many cases as in the 60th, and rather more than twice as many as in the Fusiliers; but the proportion of fatal cases to admissions was nearly the same in all three regiments, the 60th being a little above, and the Fusiliers a little under, the 86th Regiment. The first outbreak was in the 86th, which had 100 cases in the hospital before the disease had decidedly set in with the two other corps. The first cases were almost universally fatal, the virulence of the disease having been most concentrated on its first appearance, and becoming less uncontrollable and less general as its progress continued. Thus, of the

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|---|---|---|---|---|
| 1st | 100 admissions, | 79 | died, 21 | recovered. |
| 2nd | 100 | „ 66 | 34 | „ |
| 3rd | 100 | „ 50 | 50 | „ |
| 4th | 100 | „ 40 | 60 | „ |

On the 14th, 15th, and 16th, particularly the 14th and 15th, the cases were generally brought in in a state of collapse, and death followed in three or four hours—indeed, in some instances, in one hour. But the peculiarity in many cases was, that there was neither vomiting nor purging, nor only vomiting or purging, and in the latter cases, by no means profuse. Also, among some of the first cases, before the natural hue had been replaced by that livid look so characteristic of the disease, the pulse at the wrists was almost imperceptible, the eyes turned up, and the voice hollow and feeble; in an hour after, such cases were dead. I should add, that these cases suffered from severe cramp of the lower extremities, seldom extending to the abdomen.

The next class of cases were those where the attack was equally sudden, and the collapse preceded the vomiting and purging of serous fluid, or appeared sinking, with prostration of strength, and restlessness, accompanied by vertigo, deafness, loss of sight in many cases, alteration or hollowness of voice, weak and slow respiration, nausea, and vomiting and purging of serous fluid, intense thirst, and sensation of burning heat in the course of the colon. The circulation seemed as if suddenly impeded, especially in the extreme vessels and capillaries, and collapse quickly followed; the features became shrunk, and the lips and skin assumed a ghastly and livid hue, which often pervaded the whole body; the pulse weak or imperceptible at the wrist; the skin became rapidly cold and clammy, and covered with copious perspiration. The spasmodic symptoms were generally most remarkable in the first stages, assailing the muscles of the lower extremities, and very often the abdomen, arms, head—in fact, the whole body. Although these symptoms were those generally met with, they were not universal, and it was rare to find them all in one individual. The purely pathognomonic symptoms of the disease were, loss of nervous power, weakened circulation, tending in a greater or less degree to collapse, and cold perspiration, to such an extent that the clothes and bed of the patient seemed wringing wet.

In a third class, the patient was suddenly attacked with vomiting and purging of matter like rice-water, cramps of legs, arms, and belly, rapidly inducing prostration of strength, and early collapse, often within an hour or two of the first attack.

Lastly, there was a number of cases in which there was evident signs of reaction, or an attempt of Nature to bring it about; but in many instances, the brief effort was too much for the system, and it rapidly sank: but in general, this class was more manageable than the others, and not unfrequently terminated in fever.

The four types of the disease just alluded to occurred in the order of succession in which they are placed, each predominating in the four groups of cases, which are arranged to show the gradual modification of the disease by time.

In three-fourths of the cases, the attacks were sudden, often within a few minutes; in the other, there were occasional slight symptoms for a few hours, or even a day beforehand. There was often an absence of purging, vomiting, and cramp, but in no case did the skin fail to pour out fluid in large quantity: this might have been called the chief symptom. The mind was usually clear and collected, unless when disturbed by the torture arising from severe and protracted spasms; and in a very few cases, it was observed to wander, as coma, which usually closed the scene, set in.

# Operations Without Pain.

## ST. BARTHOLOMEW'S HOSPITAL.

Mr. Skey, on Monday last, performed the Cæsarian section on a woman whilst under the influence of ether. The patient, about twenty-five years of age, had a remarkably distorted pelvis, and it was thought desirable, when labour came on, that the operation of gastro-hysterotomy should be performed. She inhaled the ether for about five minutes, and appeared to be quite insensible. The operation was begun by an incision down the linea alba, and the commencement of this to the period of extracting the placenta was about six minutes. The child was extracted alive, and is doing well; but the mother died on the following night. The ether was not pushed far, for fear of arresting uterine action. We hear it has been of late employed in a case of abortion, with the effect of completely stopping uterine contraction.

## MIDDLESEX HOSPITAL.

OPERATION FOR LITHOTOMY, BY MR. ARNOTT.

Reported by J. Henry Rogers, Esq., Acting House-Surgeon, Middlesex Hospital.

An Irishman, aged sixty-eight, was admitted into this hospital under Mr. Arnott, Jan. 6th, with all the ordinary symptoms of stone in the bladder, but with more than the usual amount of irritability of that organ. Various remedies were tried, to endeavour to relieve this distressing symptom, but without effect, the urine being expelled as fast as it descended through the ureter. Attempts were made to inject a dilute solution of morphia, which had been found to afford great relief in a somewhat similar case lately in the hospital; but

this occasioned severe pain, and the fluid was immediately squirted out with great force. A calculus having been distinctly detected by sounding,—a proceeding which produced extreme suffering, causing him to toss about in a very violent manner,—it was determined, notwithstanding the difficulties that were foreseen from the contracted state of the bladder, to submit him to the operation of lithotomy, which was accordingly performed on Jan. 25th. The patient was placed on the table, and having been bound in the usual way, he was made to inhale the vapour of ether, from an apparatus contrived for that purpose by Mr. Jacob Bell, who assisted Mr. Tomes in administering it. At first, the ether caused him to cough a good deal; but this soon subsided; and after breathing deeply and tranquilly for about two minutes, his countenance became livid, the muscles of his face and limbs relaxed, and it was evident that he was then, about seven minutes after the mouth-piece was adjusted, in a state of profound insensibility. A catheter was passed into the bladder, and some tepid water injected, but the introduction of the fluid was as strongly resisted now as when it was tried on a former occasion; a great portion escaped when the catheter was withdrawn, and the whole of the remainder was forced out along the groove of the staff, proving, in a most marked manner, that the muscular fibres of the bladder, unlike the voluntary muscles, still retained their extreme irritability. But although the bladder contracted thus forcibly, the introduction of instruments did not produce any evidence of pain, the muscles of the face and limbs being perfectly quiescent. The operation was then performed in the usual manner, with a common scalpel. No fluid escaped when the incision was made into the bladder. The stone, composed of the ammonio-magnesian phosphate, crumbling between the blades of the forceps, required them to be repeatedly introduced; the scoop was also used, and after that several syringefuls of tepid water were injected through the wound to thoroughly clear out the fragments; yet all these proceedings failed to excite the slightest indication of pain.

The operation—necessarily, from the nature of the case, a rather tedious one—having been completed, the mouth-piece of the inhaler, which had been occasionally applied during the whole of the operation, was then finally removed. The patient strongly resembled, in his appearance and manner, a man recovering from a state of profound intoxication: he did not appear to be aware of what had been done to him, or where he was. He was immediately conveyed to bed and wrapped up warm, as he was cold and chilly; his pulse soon became very feeble; brandy and ammonia was given him, and in a short time he rallied, but in about an hour after, he became very sick, and the pulse extremely feeble, but soon recovered its strength. He continued dozing during the remainder of the day, suffering apparently very little pain, much less, according to his own account, than before the operation. He passed a very good night, and has continued going on most favourably up to the present time, the evening of the 27th.

## LONDON HOSPITAL.

### A CASE OF COMPOUND DISLOCATION OF THE ASTRAGALUS; AMPUTATION UNDER THE INFLUENCE OF ETHER.

Jan. 14th.—John T——, an Irishman, aged twenty-nine, was brought into the London Hospital in consequence of an accident received in St. Catherine's Docks. A cask of sugar fell upon the outer side of his left ankle whilst he was attempting to raise it. A compound dislocation of the astragalus was produced, and the head of the bone was forced through his stocking. He was brought immediately to the hospital. The following was the condition of parts when admitted:—There was a transverse wound, of about three inches in extent, over the tarsus, through which the astragalus attached to the lower end of the tibia protruded. The bone was fractured across its neck, and it was somewhat comminuted beneath; the lower end of the tibia was much contused, but not fractured; the upper surface of the calcis was fractured, and the posterior tibial artery completely divided, but no bleeding occurred. The sole of the foot was turned outwards, as in Pott's fracture; no fracture of the fibula could be felt. From the extent of the injury, I had no hesitation in recommending the immediate removal of the limb. He refused to submit to the operation until he was told that it could be done without giving him any pain, and he then readily assented. He was put under the influence of the vapour of ether, and the leg was amputated below the knee, by the double-flap operation. Many vessels were secured, and the flaps were brought together with the interrupted suture. After the amputation, the man, on being questioned, said that he had felt no pain, but that his sensations were of a very pleasant description: and whilst securing the arteries, after the effect of the vapour had somewhat subsided, he begged for another draught to lull the pain thus occasioned. He took a second dose and again became insensible to pain. His remarks throughout were of the most comic and ludicrous description. No congestion of veins was perceptible, but the conjunctival vessels were more distended than natural, and the full influence of the vapour was indicated by the rolling upwards and inwards of the eye. No perceptible effect was observed on the pulse. In the evening, some bleeding had taken place from the stump, and it was requisite to tie three or four more arteries.

*Dissection of the limb.*—The astragalus and lower end of the tibia protruded through the wound, the deltoid and external lateral ligaments being completely torn across. The tendon of the tibialis anticus was much stretched and was displaced to the outer side of the astragalus. The tendons of the extensor proprius pollicis and longus digitorum were also on the stretch, and pushed outwards; a portion of the origin of the extensor brevis was ruptured. The anterior tibial artery, veins, and nerve, were forcibly on the stretch, but entire. The tendon of the tibialis posticus was completely divided, and that of the flexor longus digitorum was ruptured, whilst the tendon of the flexor longus pollicis was much stretched, and thrown out of its natural groove in the astragalus; the peronei tendons were relaxed. The posterior tibial artery and veins were divided, and the nerve much contused, but entire; considerable extravasation of blood extended upwards in the course of the bloodvessels. No fracture of the tibia or fibula existed.

Whatever difference of opinion may exist as to the propriety of attempting to save a limb, under circumstances of a compound dislocation of the astragalus, in the generality of cases, there could be no doubt that, in this instance, the operation of amputation was peremptorily required. To this opinion I was led at once from the amount of injury which the tarsal bones had suffered, together with the general looseness of the foot, which appeared almost dropping from the tibia and fibula, although I was not aware of the laceration of the tendons alluded to, nor did I ascertain by examination the condition of the posterior tibial artery, previous to the removal of the leg.

### SIMPLE DISLOCATION INWARDS OF THE HEAD OF THE ASTRAGALUS FROM THE OS NAVICULARE.

Jan. 18th.—A young man was admitted into the London Hospital under the following circumstances:—A heavy bag of rice had fallen from a large pile, and pitched upon the outer side of his ankle, whilst he was standing near. The head of the astragalus was forcibly driven inwards, and slightly upwards, from its connexion with the navicular bone. He was brought directly to the hospital, and the nature of the accident was at once detected by Mr. Barrett, the house pupil of the week. The following was the position of the foot:—The foot presented very slight apparent deformity, being merely thrust a little outwards, without any eversion of the sole. The head of the astragalus formed an unnatural projection on the inside of the tarsus, and a considerable depression beneath was very apparent. There was no fracture of the fibula; the astragalus appeared wedged firmly upwards between the tibia and fibula. The reduction was accomplished with the greatest facility. The knee being flexed upon the thigh, the foot was forcibly drawn inwards, and with the thumb of my left hand I pushed the head of the astragalus downwards and outwards, and it passed at once into its natural position. A leg-splint, with a foot-piece, was placed outside the limb, and to this the foot was bandaged—a compress being employed over the head of the astragalus.

I know of no recorded case parallel to this one, although I can hardly doubt but that such instances must have occurred. Authors, in speaking of simple dislocations of the astragalus, usually confine themselves to the description of those severe injuries in which the astragalus is wholly dislocated from the tibia and fibula, as well as from the os calcis and navicular bones: these, I need not observe, are most formidable complications, whilst the case now under consideration is exceedingly simple, and would probably be designated by some as merely a partial dislocation. I remember to have seen an instance of dislocation outwards and upwards of the head of the astragalus, the preparation of which is now in the museum of the London Hospital. The accident happened to a man, who, at a fire in Crutched Friars, jumped out of window, and came with great force upon his feet. He died from injury of the skull, and on examining the body, the accident now alluded to was detected.

## EXTIRPATION OF A LARGE TUMOUR.

By John Charles Hall, M.D., M.R.C.S., East Retford.

The Reporter for The Lancet of a case in which an operation was last week performed on a patient under the influence of the vapour of ether, remarked, "All we want at present are facts faithfully recorded, whatever the result." I am quite aware it is impossible to draw a correct conclusion from one or two operations, and therefore feel it a duty I, in common with every other medical man, owe to the profession, to record from time to time the result of our experience. I last week mentioned two operations, performed by myself, on patients when under the effects of this all-powerful remedy. I now communicate the result of another operation, far more severe —an operation for the removal of an enormous tumour, which required a long, difficult, and tedious dissection, and which could only be effected slowly, and with very great care, from the nature of the highly important parts in dire contact with the tumour.

Case.—Mrs. G——, aged fifty-three. I was requested by F. Blagg, Esq., Surgeon, of South Leverton, to give my opinion on the case of a lady who had been under his care for a tumour on the side of the neck. The substance was first observed about fourteen years since, and had slowly increased, until two years ago, when it began very rapidly to enlarge, and appeared, to use the lady's own words, "daily to press more upon her windpipe." It extended from the side of the trachea, downwards and backwards, over the sterno-cleido-mastoideus muscle, its anterior edge, as far as we could ascertain, being in close contact with the carotid artery. As the tumour was rapidly increasing, and as it already interfered a good deal with the comfort of Mrs. G——, I proposed its immediate removal,* and my friend Mr. Blagg agreeing with me, it was fixed that I should remove it, which, with his valuable assistance, I accomplished, without giving the slightest pain to the patient.

January 25th, 1847.—Mrs. G—— willingly consented to inhale the ether, which she did from the apparatus of Mr. Robinson; in five minutes she said she "was going off"—the pulse had then risen from 70 to 100—in eight minutes it was 130—the pupils dilated, the breathing quick, but no stertor. I then pinched the hand sharply, and spoke to her; she appeared insensible to pain; the face was covered with moisture. I now commenced the operation by making an incision from six to seven inches in length through the skin, and then proceeded carefully to dissect out the tumour, a work of considerable time and difficulty, from the firm nature of the adhesions of the tumour to the surrounding tissues, as well as from the very great caution necessary, from the very important parts in immediate contact; the inner borders of the sterno-cleido-mastoid muscle had been partially displaced, and the carotid artery was in close contact with the tumour, and could be felt, both by Mr. Blagg and myself, pulsating at the bottom of the wound. The operation lasted about sixteen minutes, during the whole of which time she only moved twice, when the vapour tube was again placed in her mouth; she answered somewhat incoherently, if questioned during the operation, and appeared perfectly indifferent to, if not unconscious of, what was going on. There was not the least quivering of the muscles on the first application of the knife. Mr. Blagg remarked it appeared as though I was demonstrating the parts on a dead body. She drank a little brandy-and-water twice during the operation, and appeared quite insensible, until three or four arteries, which bled rather freely, had been tied. As there was a good deal of oozing from the whole bed of the tumour, I sponged it with cold water, on which she said, "was I going to do it?" and appeared highly delighted when told by Mr. Blagg it was all over. A better proof cannot be given of the insensibility to pain, during the time she was under the influence of ether, and the return to it when it had ceased, than the fact of her complaining much, on my tying another artery, which began to bleed freely, and I did not think it necessary to place her under the influence of the vapour again.

Mrs. G—— (and I may remark that we have here the testimony of a lady of fortune and high character) declared, "she felt no pain during the operation." She added, "I felt nothing, for I knew nothing. The first thing I remember after I went off, was hearing something fall into a basin." This was the tumour, which I threw down into a vessel near me, as soon as it had been removed. She was very cheerful an hour after the operation, remarking that the wound felt very sore; and I left her in the care of my friend, in a far better state than she could possibly have been had she suffered the usual pain of a severe and protracted operation. That we have at our command a powerful agent for removing human suffering, and disarming surgical operations of half their terrors, I am certain—I do not say in all cases, because in a patient having a tendency to apoplexy, or labouring under disease of the heart, its application might be hazardous, and no prudent practitioner will use it without first making a very careful examination of the condition of his patient. Since the above was written, I have seen Mrs. G——, (twenty-four hours after the operation,) who appears going on as well as possible.

Grove-street, East Retford, Jan. 1847.

* I have often seen these fatty tumours acquire an enormous size. I have one now in my possession that I removed five years ago, which weighed nearly seven pounds. The tumour, in this case also, was many pounds in weight.

## OPERATIONS UPON THE EYE.

*To the Editor of* The Lancet.

Sir,—On Saturday, Jan. 16th, three successive and successful operations were performed at the Kent Ophthalmic Institution, Maidstone, whilst the patients were under the influence of ether, administered by myself, by means of an apparatus obtained from Mr. Hooper, Pall Mall East.

The first case was a labourer, named D——, aged nearly sixty, living at Bransted, a cataract patient, and the operation was the removal of a tumour, about the size of an orange, on the back of the skull, between the vertebra of the neck and the left ear. It required about seven minutes' inhalation before the patient became insensible, when the operator, Mr. Woolcott, made the first incision into the tumour, which was extracted in less than another minute. The patient seemed quite insensible to pain from the use of the knife, and only evinced some symptoms of uneasiness when the sponge was applied. The vessels having been taken up, the patient exhibited symptoms, for about a minute, similar to those of noisy intoxication, which quickly subsided, and he exclaimed, "I'm coming-to now." "You must not come-to yet," was the reply; "we are just preparing. Do you still wish to have the operation performed?" "Yes," was the rejoinder; "you may go on; I wont flinch." He was then shown the tumour, and seemed much delighted to find that the operation had been performed whilst he was unconscious, declaring that he had not suffered the slightest pain. The wound was then strapped, and the patient arose, apparently in an excellent humour, and without exhibiting any symptom of exhaustion or fatigue.

The second case was one of fistula lacrymalis in a middle-aged man, who, in a few minutes, was brought under the influence of the ether. The operation was performed without the least consciousness on the part of the patient.

The third was a case of strabismus in a boy, aged fourteen years. In this case some time was spent before the boy could be rendered sufficiently insensible for the operation. The first effect of the ether was a state of semi-intoxication, attended with a desire to go up-stairs, and it required considerable strength to prevent the patient from making the attempt to do so; but in about ten minutes from the commencement of the inhalation, he was in a profound state of intoxication. The operation having been completed, and as soon as the patient had somewhat recovered, he exclaimed, in a high tone of voice, and with great energy, "I have been going to heaven; I have been seeing the angels, and I don't know what all! I have been going to heaven, that's all I know about it! Angels and trumpets are blowing!" He continued to talk in this strain for ten minutes, after which he became sick and sleepy, as if recovering from a state of intoxication produced by spirituous liquors. The medical gentlemen present at these operations were, besides myself, and Mr. Woolcott the operator, Mr. Canton, of the Charing-cross Hospital; Dr. Huxley, of the County Lunatic Asylum; Mr. Sedgwick, Mr. Dickson, Mr. W. G. Sedgwick, Mr. Gould, and one or two other persons. Mr. Canton, who had witnessed several cases of the application of ether in the London hospitals, stated that these were the most successful cases he had seen.

Nothing could be more satisfactory than the above cases; and from the number of operations already performed in most of the public hospitals of this country and the United States of America, there can be no doubt of its applicability to all surgical operations, however severe and prolonged, not only on the human body, but on the bodies of animals also. Messrs. Staughton and Plomley, veterinary surgeons of this town, have, within these few days, with the assistance of myself and Mr. Woolcott, performed the most severe and difficult operations on dogs, without the least pain; and with a very simple apparatus, suggested by myself, animals can be made to respire the ether more readily than human beings.

I have breathed the ether on several occasions, and think its effects may be divided into three stages or degrees. The first is merely a pleasurable feeling of half intoxication; the second is one of extreme pleasure, being similar to the sensations produced by breathing nitrous oxide, or laughing gas; there exists in this stage a perfect consciousness of everything said or done, but generally an incapability of motion; in this stage, also, there is not exactly an insensibility to pain, but rather an indifference, "a care-for-nothing sort of feeling;" and if surgical operations are done in this stage, the patients almost always recover before the operations are completed, and the results are unsatisfactory. There can be no doubt that most of the failures may be attributed to this cause, as occurred to-day in a boy operated upon by Mr. Ferguson, at King's College Hospital.

The third stage, the only one, I think, for performing operations in, is one of profound intoxication and insensibility. The individual is completely lost to pain, and to external impressions; the muscles become prostrate, the circulation lessens, and the temperature falls; but the mind is often revelling in the most pleasurable regions, as in a dream; this, no doubt, depending much upon the temperament of the individual, and probably, also, on the physical effects of the operation on the nerves, as very often there is a considerable moaning, and an attempt to move, when under the influence of the knife.

There appears to be some difference of opinion as to the action of ether upon the system; but there can be but little doubt, that when taken into the lungs, its elements rapidly unite with the oxygen of the arterial blood, rendering it venous, and that it stops the metamorphosis of the tissues, producing a diminution of the temperature of the body, and also a diminution of vital energy, in the same way as the vapour of alcohol, only with greater rapidity.

I remain, Sir, your obedient and humble servant,

Francis Plomley, M.D., F.L.S., &c.

## ETHERIZATION IN TETANUS.

*To the Editor of* The Lancet.

Sir,—I see, by your leader of the 16th inst., that in your remarks upon the utility of etherization you state that "some have thought of its extension to medicine, and tetanus and hydrophobia have been mentioned as likely to be benefited by its use. Any such trials will assuredly end in disappointment; these diseases being diseases of motion, not of sensation," &c. You will perhaps be pleased to learn that this opinion is strictly borne out by fact, as far as the results of a single example can be relied upon. Having recently had a very severe case of tetanus under my care, I thought that I would give the ether a trial; I found, however, what a little reflection might have taught me, that it was even worse than useless, and that the spasms were fearfully augmented by every attempt at inhalation. As the action of ether is strictly, as far as I have been able to judge, confined to the cerebral portion of the nervous system, and as the excito-motory system is known to manifest an increase of action in proportion as volition is obliterated, (witness paraplegia, decapitation, &c.,) it might be predicted that diseases in which the true spinal marrow is mainly implicated would not only not be reached by the ether, but would be aggravated by it. Excuse this hasty note, and believe me, dear Sir, yours obediently,

Bury St. Edmund's, Jan. 1846. W. H. Ranking, M.D.

# Correspondence.

## REPLY TO DR. MARSHALL HALL.

*To the Editor of* The Lancet.

Sir,—In last Saturday's Lancet appears a letter from Dr. M. Hall, in which he endeavours to vindicate himself from the charge, brought against him in the last number of the *Medico-Chirurgical Review*, of unjustifiable cruelty in the performance of experiments upon living animals. One would suppose, from the tone of that letter, and of the accompanying extract from his work, "On the Circulation of the Blood," that the experiment which called forth our censures had been instituted upon an animal that was deprived of sensation. That such was not the case on the occasion referred to is abundantly obvious from the very terms in which Dr. Hall's coadjutor has described the experiment in question.

"In a spaniel dog, a portion of the skull was removed by the trephine; but from the thickness of the temporal muscle, and the effusion of blood, it was very difficult to accomplish; the instrument therefore penetrated through the dura mater into the brain. The immediate effect was paralysis of the opposite side of the body; the animal, when placed on the ground, falling on that side, and being unable to rise. It managed, however, to struggle to the wall and corner, when, on being raised, it supported itself by leaning the paralyzed side against it. On introducing the finger, and pressing on the brain anteriorly, the eyelids closed, and the animal appeared as if asleep, breathing heavily." . . . . . "The cerebrum was next completely broken up and removed, and the top of the skull taken off. The pupil of the eye became very much dilated, and the animal lost all *sensation*."

Can it be conceived that the infliction of such horrible suffering (for the animal, it would seem, was quite sensible at the commencement of the experiment) is necessary for the elucidation of any important truth, or for the advancement of that science on which, according to Dr. Hall, "not only the preservation, but the restoration, of strength and health depend." We cannot believe that even he will give the sanction of his authority to the repetition of so revolting an exhibition.

To base the justifiableness of vivisections on the permission or injunction to "kill and eat," is, to say the least of it, a strange misapplication of scriptural language. He who gave that permission, hath also told us—and how startling is the announcement—that "not even a sparrow falleth to the ground without His knowledge."

It would be easy to show how utterly opposed to the very principles which Dr. Hall has himself laid down in the extract quoted from his work on the Circulation, was the experiment upon which we have commented, not to mention some other experiments described or hinted at in the recently-published volume of the "Practical Observations and Suggestions;" but this is unnecessary at present.

The Reviewer of Dr. Hall's Observations &c. in the last No. of the "Med.-Chir. Review."

*** The questions to be decided are—1. Are experiments on living animals, or vivisections, as they have been nicknamed, justifiable? We suppose there can be no doubt of the affirmative, or else the whole science of physiology falls to the ground. 2. Granting the first position, did Dr. Marshall Hall ever devise and perform an operation without such an end in view as to justify its performance? We believe not. We have ourselves seen Dr. Hall perform a great number of his experiments, and we have ever seen him follow the humane principles laid down by himself in the introduction to the Physiology of the Circulation.—Ed. L.

## MIDWIFERY FEES.

*To the Editor of* The Lancet.

Sir,—Being an honest follower of Esculapius, I am profoundly ignorant of "Secondaries' Court," and hope to remain equally unacquainted with Mr. Secondary James, who estimates very lightly the services of a medical man.

This learned gentleman is made to state, in the *Morning Chronicle* of the 7th instant:—"Two guineas now-a-days appeared a handsome price for an accouchement. He thought few ladies who kept their carriages would give more than 5*l.* 5*s.*" What will Dr. Locock say to this new and legal adjudication of fees? I should like to know, Mr. Editor, what justice there is in Mr. Secondary James fixing in so summary a manner the sum of 2*l.* 2*s.* No fact more than this judicial interference with our fees proves the necessity for an effective system of registration; for upon that will follow a fair system of undisputed remuneration.—Yours truly,

London, Jan. 1847. Adverso Jacobo.

## COURTS-MEDICAL.—WIGAN *v.* GREGORY.

[Letter from Mr. W. Robins.]

*To the Editor of* The Lancet.

Sir,—I cannot help thinking the majority of your readers will be ready to admit that the cause of Wigan *versus* Gregory should be considered in some other light than as a mere personal dispute; and that some more lasting effect ought to be produced by it than by an ordinary nine days' wonder. In my humble opinion, there are, in this case, circumstances which *must* produce, sooner or later, such an impression on the pro-

fession, as to elicit, eventually, some useful and permanent reformation.

In the first place, I think few can deny that both *the necessity and the utility* of Courts-Medical have now been indisputably proved; and with this conviction we ought not to forget the praise due to you, Sir, the first to suggest their adoption.

But for the appointment of arbitrators in this case, swaggering and braggartism might have swept away the silent force of truth and justice; and in all probability, but for the important and impartial statements contained in the report published by Dr. G. Webster and Dr. W. Tyler Smith, some would have been deluded into the belief that Dr. Gregory was an injured man; while others would have remained in the ancient belief that no necessity existed for any new institution: that the profession was nicely governed, and that each member of it could protect his own interests without the assistance of others. All these things, however, receive a new light, when viewed by the facts contained in the report to which you drew the special attention of your readers last week.

The gentlemen who drew up that report, and Dr. J. Webster and Sir James Eyre, the appointed members of the court, deserve the best thanks of the profession in having accepted, without fee or reward, duties both unenviable and responsible, for the sole purpose of searching out truth, protecting the honour of the innocent, and denouncing the slighter of professional probity.

The conduct of Mr. Wigan in this case deserves great praise, and its chief features, in my opinion, ought not to be lost sight of, for they would form a bright example to all those who, in valuing their own reputation, seek the welfare of the profession.

"Thrice is he arm'd who has his quarrel just."

It would be the most agreeable thing to one's feelings to pass the defendant's conduct by without remark; but this ought not to be done. In charity, one would also have been inclined to seek for some excuses for the opening scene; for patients and their friends are apt to misunderstand and misstate the medical opinions they may have heard on any particular case; but here Dr. Gregory stands self-condemned. And for one who could give "too strong" an apology, with a view to stay examination and detection,—who could appear straightforward in his words, but evasive in his actions,—who could be ready, with his assumed superiority, to browbeat one he assumed to be his inferior,—I fear no apology could be attempted, even by Clemency herself. And this gentleman, Sir, occupies a grade in the profession considered the highest, which surely makes the disgrace attached to his conduct the more potent; for if such examples are set by men who take upon themselves to lead, what are we to expect from those who are considered followers.

"And he's but naked, though locked up in steel,*
Whose conscience with injustice is corrupted."

Dr. Gregory's conduct at the house of Mr. Wigan's patient does not, unfortunately, stand alone in its notoriety, or the one example might in itself be of sufficient importance to be used as a wreck-buoy to guard the unwary from the destruction awaiting the careless use of the unruly member. Your pages, Sir, can testify that our profession is far from exempt from the baneful influence of those who require *written laws* to restrain their conduct from being as injurious to others as it is discreditable to themselves; and that *the law* which ought particularly to influence our era, it being called the Christian, is not so universally adopted for our rule of action, as to render the knowledge of a punishment and the dread of detection unnecessary among us. But where, Sir, in our profession, is the established court before which to prefer a charge of improper professional conduct, of underhand and unfair dealing? Where is the power to punish on conviction? The absence of such a tribunal would speak well for us was not the necessity for it proven. But now, when all doubt is removed, when the want is obliged to be acknowledged and proclaimed, shall we any longer suffer from the increased misfortune of such a want? The first law of animal existence will at length force the recognition of Courts-Medical upon us, and nothing but arguments convincing to the reason can prevent their establishment.

It is admitted that good lessons are sometimes learned from evil examples when honied phrases are not used to bedizen them; I hope therefore, Sir, you will continue to retain, as long as it is required, a black page for gibbeting the actions of evil doers, whether quacks or regulars; and let us hope that with the lesson afforded to others, the culprits themselves may not be beyond a penitent amendment.

In this letter I intend no personal affront; it is the public discussion of a public question; and if I have been too energetic in my language, or lengthy in my remarks, my apology must be that I have myself felt the influence of unfair remarks.

I remain, Sir, obediently yours,

Paddington, Jan. 1847. WILLIAM ROBINS.

* Did I possess the power requisite, I would, for the nonce, transmute this metal into gold, as in this instance an armour of that metal seemed to be preferred.

[LETTER FROM DR. W. TYLER SMITH.]

*To the Editor of* THE LANCET.

SIR,—I regret that the document, published in the LANCET of last Saturday, contains an error respecting the residence of Mr. Eyre; it should have been Mr. Eyre, of Harewood-square, instead of Mr. Eyre, of Fitzroy-street. Mr. Eyre, of Harewood-square, has recently removed from Turnham-Green, and his name and address did not appear in the last year's Directories, and hence arose the mistake. I have written a note of apology to Mr. Eyre, of Fitzroy-street, which I trust has been satisfactory to that gentleman.—I am, Sir, your obedient Servant, W. TYLER SMITH.

Bolton-street, Jan. 1847.

[NOTE FROM MR. S. A. EYRE.]

Jan. 25, 1847, 3, Fitzroy-street, Fitzroy-square.

SIR,—I beg leave to request your inserting, in the next number of THE LANCET, a positive refutation of a paragraph in that of the 23rd inst., in the report of the arbitrators for Mr. Wigan, relative to the conduct of Dr. Gregory towards him—viz., page 104, first column:—

"In his visit to Dr. Gregory, Mr. Wigan was accompanied by Mr. Eyre, of Fitzroy-street, the gentleman with whom he had served his apprenticeship," &c.

That Mr. Wigan is totally unknown to me, I trust you will allow me to add to this unqualified denial of any acquaintance with Mr. Wigan, that I have waited till to-day for some communication from him for this unjustifiable use of my name. None having reached me, I am reluctantly forced, against my inclination, to adopt this means of setting myself right with strangers; to those to whom known, after having been out in the world, either in the public service or private practice since 1812, with, it is hoped, an unblemished character, such is not requisite.

Regretting thus trespassing so long on your valuable time, with a subject concerning myself,

I am, hastily, Sir, your obedient servant,

To Thomas Wakley, Esq. S. A. EYRE.

## THE BRITISH AND FOREIGN MEDICAL REVIEW.

*To the Editor of* THE LANCET.

SIR,—Is it possible that the injured, the persecuted, the maligned Dr. Marshall Hall is willing to submit to a court-medical? Will that great man, whose reputation is coequal with that of Harvey, of Haller, or of Bell, condescend to appear before any court and submit his claims to its decision? Let me tell Marshall Hall that his trial has already passed; that the jury consisted of the scientific world; and that the verdict was to the effect—that Dr. Marshall Hall's discoveries were unparalleled in their value, in their importance, in their extensive physiological relations, and in their application to the practice of medicine.

Would either of Dr. Hall's malignant enemies make the same offer, or submit to the test he has voluntarily proposed for himself? What labours have they to submit? True, the editor published, for the information of the world, that he had detected some charlatan mesmeric impostor, but, even in that case, the credit was really due to Dr. Sharpey; but what else has he done for science? What have either of the known contributors or editors of the *British and Foreign Medical Review* done for the medical profession? Nothing: for what, in reality, is the intrinsic value of a few manuals for students, in which the art of indirect plagiarism and direct paraphrasing are perhaps the chief objects of admiration? But, Mr. Editor, who are these malignant enemies of Dr. Hall? Who are these wholesale condemners of the truly great men of the profession? Who is this editor, who, on the cover of every number of his Review, parades himself with no less than seventeen high-sounding and magniloquent titles? Is this the man to intimate that Dr. M. Hall resembles quack advertisers, because he quotes legitimate and valuable cases? But see how, in the excitement of revenge, the critic loses his judgment. After telling

Marshall Hall, that his citing cases resembles a quack advertisement, we find this immaculate gentleman saying, in the very next page, because Dr. Hall did not deem it necessary to cite cases in support of his opinions on another point, "All this is apparently theoretical; if Dr. Hall can produce cases in which he has so applied the stays, and successfully, we trust that he will do so:" and, as though he feared the public would not sufficiently appreciate the unjust and ungenerous insinuation, he adds, "A reference to the general practitioners in attendance, whom he is always so careful to name, will suffice"! Did this gentleman ever read the fable of "the old man and his ass"?—if not, I take the liberty of directing his attention to it, as well as to that of "the dog in the manger," or "the fox and the grapes." The false reviewer absolutely condescends to write an essay on Dr. Hall's temper; did he ever study his own? I can fancy what were the feelings of delight in the editor, when the article on Dr. Hall's "Observations" was brought to him, but I do not envy him his enjoyment while gloating in private over this production; and let me tell him, it will blast his scientific character for ever. If he had conducted his Review impartially, and with a due care to the honour of his profession, he and it would have lived revered. But what now is the case? He is despised for his partiality, disliked for his ungenerous and shabby conduct, and necessarily regarded in the provinces as a mere tool for those behind the curtain to work by. It would have been far better for Dr. Forbes, "far better for *his* happiness" had he never emerged from the situation which he held in his youth; it would most assuredly have been far better for his reputation and his finances had he never courted courtly favours, or even had he remained contented with his lot at Chichester. What can we expect of such men as the disappointed editors of this Medical Review, but that which they have done by virtue of their Scottish or Clannish connexion? They have published a book, in which they praise abundantly their own writings, their own labours, and their own acts. Witness the superaboundings of praise lavished upon Dr. Carpenter's last student's volume, and compare it with the abuse heaped upon the head of Marshall Hall, or with the stinted meed of praise acceded to Erasmus Wilson and others. I believe it would be a rare thing for a person not connected with the clique to have his work reviewed impartially; but as to their *own* works, *they* are always puffed as nonpareils. Before the sheets of the books are dry the laudatory articles are ready; and why? Because they have been prepared beforehand. Let them answer to the world who wrote the article on Mr. Noble's work on the Brain, in which Dr. Carpenter's opinions are quoted, supported, and maintained? Look at the review of the book of another of their writers, Dr. Walsh, on Cancer. This was actually lauded in three laborious articles in three successive numbers of a Quarterly Review. Dr. Walsh positively had his trumpet sounded in a blast of three quarters of a year's length! Surely such a thing is unparalleled in the history of quarterlies. But, Mr. Editor, there is another view to be taken of this matter, and that is an important one in book-making, for it is a pecuniary one; a slashing article is eagerly sought after; they evidently wish "to rise on the great man's shoulder," and then to be able to say, with the fly on the wheel, "what a dust *we* are making." It is said Lord Brougham is worth a thousand a year to *Punch*, and that the Bishop of Exeter is as good as five hundred a year to the editor of a local paper in Exeter, and who knows but that the editor of the Review in question is making a marketable commodity of Dr. M. Hall, seeing that abuse of this great physiologist is one of the constant leading topics in his work, which begins by praising the ostensible editor, and is filled with loathsome adulations of its own contributors, and which has but one end in view, their own personal aggrandizement. Yours, Mr. Editor, very truly,

Plymouth, January, 1847. JUSTITIA.

## THE MAGNETIC POLE.

*To the Editor of* THE LANCET.

SIR,—In your insertion of my communication, in your journal of Jan. 9th, you have appended a note, to the effect that one of the statements therein contained was deficient in positive evidence. This remark was perfectly justifiable, though, at the same time, the position I there advanced remains intact. A misunderstanding has evidently arisen, in consequence of my omission of the word "magnetic." I was alluding to the pole, in reference to the magnetic equator, and therefore it is easy to see that it was the magnetic, and not the terrestrial, pole, which was intended. The following extract from "Sir John Ross's Voyage to the Polar Regions" will show that my assertion was not deficient in either positive or practical evidence:—

"The place of the observatory was as near to the magnetic pole as the limited means which I possessed enabled me to determine. The amount of dip, as indicated by my dipping-needle, was 89° 59′, being thus within one minute of the vertical; while the proximity at least of this pole, if not its actual existence where we stood, was further confirmed by the action, or rather, the total inaction, of the several horizontal needles then in my profession. These were suspended in the most delicate manner possible, but there was not one which showed the slightest effort to move from the position in which it was placed; a fact which even the most moderately informed of readers must now know to be one which proves that the centre of attraction lies at a very small horizontal distance, if at any."

As a want of evidence for any of the facts which form the basis of a theory must materially deteriorate its value, your insertion of this explanation will be esteemed a favour. I am aware that the blame of the misunderstanding must be charged upon my carelessness in omitting to specify the nature of the pole I was alluding to.—I am, Sir, your obedient servant,

J. W. LAKE.

P. S.—The position of this pole is, in lat. 70° 5′ 17″ N., and lon. 96° 46′ 45″ West. Its discovery took place during the reign of his late Majesty, and it was formally taken possession of in his name.

Holbeach, Jan. 1847.

## NARCOTISM FROM SUCKING OPIUM LOZENGES.

*To the Editor of* THE LANCET.

SIR,—On Tuesday evening, the 29th December, 1846, I was summoned hastily to visit Mr. E. R——, the landlord of an inn in this town. On arrival at his house I found him sitting in the bar; his neckcloth had been removed, and his waistcoat thrown open. His countenance was deadly pale—there was extreme somnolence, and it was with difficulty any reply to a question could be elicited. The pupils at this time were contracted, the breathing heavy and oppressed, occasionally stertorous, the pulse small and feeble.

On inquiry I ascertained that at one o'clock in the afternoon he had visited a druggist's shop, and had purchased two ounces of piped opium lozenges, for the purpose of allaying a cough which annoyed him. The lozenges were wrapped up in paper and delivered, without any particular directions or caution as to the mode of taking them. The gentleman repaired to his own house and commenced sucking the lozenges, continuing to do so, without intermission, during the whole of the afternoon, until seven o'clock. It was remarked by one or two friends who sat with him, that he was uncommonly stupid, but they had no suspicion that the lozenges were producing this effect. Eventually, he became extremely sleepy, and ceased to take any part in conversation. At ten minutes past seven, P.M., I was sent for, and found him in the condition above described. In a tumbler glass I was shown the remainder of the lozenges, very few of which were left. He must have sucked about one ounce and a half. At this time I did not know the exact composition of the lozenges, though, from the symptoms, it was tolerably clear that a powerful narcotic had been taken. I took two or three of the lozenges, and went to the druggist whose shop was close at hand: all that I could learn was, that they contained opium, but the vendor did not know how much. He could give me no idea as to the quantity in each, at which I expressed my surprise. On returning to my patient I immediately administered a scruple of sulphate of zinc, and in ten minutes repeated the dose, with free libation of warm water. After waiting a little time, and there being no disposition to vomit, I determined, without further delay, to empty the stomach. I passed the tube of the stomach-pump and drew off a considerable quantity of dark, coffee-coloured fluid; then injected two pints of clean warm water, which returned, still of a brownish colour. The stomach was injected again with water, and this time it returned nearly clear. The tube was withdrawn, and the patient now drank a small basonful of strong coffee without sugar or milk, and this was repeated in smaller quantities at intervals. He took an ounce of the following mixture every half hour for three doses, after this, every two hours: compound spirits of ammonia, three drachms, chloric ether, one drachm, water, for six ounces. The legs were enveloped in flannels wrung out of hot water and sprinkled freely with turpentine. By dint of persevering efforts he was kept awake, and by three o'clock

on the morning of the 30th, there was a decided change for the better. The stupor was much relieved; he began to talk rationally, to take notice of what was going on, and occasionally walked about of his own accord. At four o'clock I left, but the patient was not permitted to lie down or sleep until seven. At this time he lay down for two hours, then got up and came down stairs. During the whole of the day he felt benumbed, but under the exhibition of aperients, he continued to progress favourably.

The foregoing case will serve as an illustration of the folly and mischief of mixing powerful drugs with spice. But, apart from this, I was certainly much astonished that the vendor did not know even the probable quantity of opium which each lozenge contained. At this rate, life must be held very cheap, and the destruction of health of no importance. Both one and the other may be recklessly jeopardized at a very trifling cost. The buyer does not know what he is doing, and the vendor does not seem to care; he apparently deals out, without discretion, and without compunction, anything for which he may be asked. Really, Sir, such a state of things, to say the least, is deeply lamentable.—I remain, Sir, your obedient servant, F. Smith Garlick.

Halifax, January, 1847.

## Medical News.

Royal College of Surgeons.—Gentlemen admitted members on Friday, Jan. 22, 1847:—S. M. C. A. A. Smith; G. Goodlad; J. L. Johnston; E. D. Allinson; T. Bridgwater; A. G. Willington; H. G. Grayling; G. R. Skinner; C. H. Dunhill; J. Hyslop; W. E. Hughes; J. Beecroft; C. W. Wray; W. A. Salmon; W. Weston; W. F. Tomkins; J. H. Tanner.

Apothecaries' Hall.—Names of gentlemen who passed their examination and received certificates to practise on Thursday, Jan. 21st, 1847.—George Wilmshurst, Warwick; William Sutherland Meek, Nantwich, Cheshire.

College of Physicians.—The lectures of the present year will be delivered at the College, Pall-mall East, at four o'clock on each of the following Wednesdays and Fridays.—Gulstonian lectures, Dr. William Baly, Feb. 10th, 12th, 17th; Croonian lectures, Dr. George Budd, Feb. 19th, 24th, 26th; Lumleian lectures, Dr. James Arthur Wilson, March 3rd, 5th, 10th; lectures on materia medica, Dr. Golding Bird, March 12th, 17th, 19th, 24th, 26th, 31st.

Royal Society, Somerset House.—The following is the notice of the special general meeting just issued from Somerset House to the fellows:—"In compliance with a requisition, (duly signed,) the Council have convened a special general meeting, to be held on Thursday, the 11th of February, at two o'clock, 'for the purpose of considering and determining on the legality of the circumstances under which the award of the Royal medal in physiology for 1845 was first recommended by the Physiological Committee, and under which it was actually made by the President and Council.'

"Charles Richard Weld, Assist. Sec.

"Jan. 25th, 1847."

Royal College of Surgeons.—The appointment of professor of surgery to this institution, vacant by the resignation of Mr. South, from severe indisposition, was conferred, by the council of this College, on Tuesday last, on Mr. James Paget, of St. Bartholomew's Hospital, one of the candidates for the appointment of assistant surgeon to that charity, made vacant by the resignation of the deservedly respected surgeon, Mr. Vincent, who, on tendering his resignation, generously presented the treasurer with the sum of 100 guineas for the funds of the Hospital. A public meeting of Mr. Vincent and friends has been advertised, to make arrangements for presenting him with some appropriate testimonial on his retirement f om the post he has so long and ably filled. A sharp competition is going on for the appointment of assistant surgeon. Mr. Paget is opposed by Messrs. M'Whinnie and Pennington.

A Quack Advertisement.—Drs. Curtis and Co., from London, Professors of Letheonic Surgery, (or the new method of performing all surgical operations without pain, whether amputating limbs, extracting teeth, cancers, stone in the bladder, &c., &c., which they have already exhibited, and are prepared to repeat the same in any public hospital, or in the presence of any of the faculty,) have the honour of announcing that they have commenced their annual tour, and may be consulted on all disorders of the human body until the 1st of April, either personally or by letter, at No. 3, Church Plain, Great Yarmouth.—*From a Cambridge newspaper.*

The Stethoscope.—Mr. Shillitoe, of Hertford, ingeniously suggests that the following very curious extract, from No. 201 of the *Philosophical Transactions*, contains the germ of Laennec's immortal discovery:—"A ready way to find a leak in a ship, is to apply the narrow end of a speaking-trumpet to the ear, and the other to the side of the ship where the leak is supposed to be; then the noise of the water issuing at the leak will be heard distinctly, whereby it may be discovered."

Physiology.—*Rejections at the Royal College of Surgeons.*—We are informed, on good authority, that one candidate was rejected, and another admonished, by Mr. Lawrence, at the Royal College of Surgeons, a short time ago, for their ignorance of the True Spinal System.

Royal Free Hospital.—The nineteenth annual general meeting of the governors and directors of this hospital was held in the board-room, on Tuesday the 26th instant. Among those present were, Thomas Wakley, Esq., the Rev. E. Rice, D.D., F. P. Walesby, chairman of the Middlesex quarter sessions, Charles Curson, Esq., the city solicitor, William Pritchard, Esq., high bailiff of Southwark, William Ward, Esq., and other influential gentleman. In the unavoidable absence of Lord Robert Grosvenor, Thomas Wakley, Esq., M.P., was unanimously called to the chair. It was stated that during the past year the patients admitted to the benefits of the hospital was 35,507, and since the foundation, 231,275. The receipts for the past year were £6,650, and the expenditure £6,200. The meeting separated at a late hour, after the usual vote of thanks to the founder, W. Marsden, M.D., and a vote of thanks to the chairman.

Obituary.—On the 14th instant, at Warwick, aged 79, William Blenkinsop, Esq., a member of the Council of the Provincial Medical and Surgical Association, and more than fifty years an eminent and highly respected medical practitioner in the above-mentioned town.

## CORRESPONDENTS.

*A Lover of Fair Play.*—The opponent may be *duly* qualified, but, according to the present state of the law, certainly not *legally* qualified to engage in general practice.

*Detector.*—The excellent and searching series of letters under this title shall be continued forthwith.

*Western Times.*—We are much obliged to the correspondent who has so regularly forwarded this spirited and impartial newspaper during the mesmeric exposures that have occurred at Exeter.

*Quillson.*—Our correspondent had better not trust the self-dubbed "consulting surgeon" referred to,

*Accoucheur* is thanked for the hint conveyed in his note.

*Medicus* had better consult Dr. Cooke, of Caroline-street, Bedford-square.

*An Old Subscriber.*—Dr. Fownes's "Manual of Chemistry,"

*A Reader.*—We do not know the office of the Cavendish Society. Our correspondent had better address *The Chemist*.

*Mr. Levison's* letter was acknowledged. His paper is under consideration, and we are obliged for Mr. Levison's hint, though we believe the Bill will be found to contain the provisions he speaks of.

*Mr. Malcolm.*—We are sorry to be obliged to decline the offer of Mr. Malcolm.

*Mr. W. D. Wragge.*—It is impossible that we can answer our correspondent as to the value of the food he refers to, unless its composition is stated. As regards the mode of introducing such preparation, it should be that of any other article of commerce.

*Esculapius Fairplay.*—We suspect "M. D. only," not to be so restricted in his reading as he declares himself to be. We must leave the matter to his own observation and inquiry.

*Mr. Carey.*—The communication shall be inserted in an early number.

If *One Deformed* will send us his address, he shall receive a private note.

*St. Bartholomew's Hospital.*—Mr. Wonnold has written to us to say, that he has *not* resigned his appointment of assistant surgeon to St. Bartholomew's Hospital.

*Dr. Collyer's* letter has been received.

*Mr. Clendon's* letter has been received, and will be attended to.

Erratum.—In Dr. Macintyre's paper, page 86, line 11, *for* "excellent products," *read* "esculent products."

Communications have been received from A Subscriber, (Haverfordwest;) An Old Subscriber; A Reader; Mr. Levison; Dr. J. C. Hall, (East Retford;) Mr. W. H. Quinn; Dr. Wright, (Birmingham;) Mr. Youl; A Constant Reader; Dr. Macintyre; Dr. Carson; Mr. T. F. Sagar; Esculapius; Fairplay; Mr. Craig, (Paisley;) A Lover of Fairplay; Mr. Marston, (Lincoln;) Dr. Wake; Brightonian M.D.; Mr. H. Lee; A Subscriber, (Yarmouth;) Quellson; Mr. Tiffin Iliff; Accoucheur; Mr. J. H. Rogers; Medicus; Mr. Philpott Brookes, (Cheltenham;) Mr. B. Scott; Mr. Rice; A Subscriber; An Ex-licentiate; Mr. Coventry; Dr. Collyer; Mr. Barnard; Mr. Hansby; Mr. Lewis; Mr. Hall; Mr. Eyre, (Fitzroy-street;) Mr. Clendon; Dr. Tyler Smith; Dr. Ranking; Mr. Robins; Justicia; &c. *The Scotch Reformer's Gazette*, and *The Western Times*, have been received.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

### THE LATE CASE OF CÆSARIAN OPERATION PERFORMED BY MR. SKEY.

On January the twenty-fifth, at twenty-minutes before eight o'clock A.M., this formidable operation was performed by Mr. Skey, with the utmost self-possession, dexterity, and skill. The infant was saved, and has been received into the Foundling. The mother survived thirty-six hours, then dying, not so much of physical shock, or from inflammation, as, apparently, from mental disquietude and depression.

The patient, Sarah Bartlett, first consulted Mr. Jolin, surgeon, of Coppice-row, Clerkenwell, on the 3rd of October. She was much deformed, being four feet one inch in height only, and in her thirty-eighth year. The catamenia had been suppressed during six months. Mr. Jolin promptly detected pregnancy, and became alive to the whole extent of her calamitous situation: it was plain that no child could be propelled through the pelvis, the antero-posterior diameter being only one inch and one-third, and evident that no resource remained but the Cæsarian section.

Mr. Jolin lost no time in holding a consultation with Mr. Skey, and the patient was soon admitted into St. Bartholomew's Hospital, under the care of the latter gentleman. Here Dr. Rigby, Dr. Protheroe Smith, and Dr. Ferguson, saw the patient, and confirmed the views of Mr. Jolin in every particular.

The full period of utero-gestation was completed, and labour pains commenced early on the morning of the twenty-fifth. Mr. Skey was sent for by Mr. Haig, at twenty minutes to five, with a message to the effect that she had been in labour for two hours, and that the membranes had ruptured. Mr. Skey reached the hospital by twenty minutes past five, and proceeded to make an examination.

Labour pains were severe, and at intervals of two minutes; the os uteri not very distinct, flabby, and soft; no uterine action was perceptible at the os uteri. The ether was inhaled for about two minutes, to test its influence. Mr. Skey fancied the interval between the pains lengthened immediately after the inhalation; but this was only observed once. Dr. Rigby arrived about six o'clock. She was again examined, and it was agreed to wait one hour, till the os uteri was more dilated. It was apparently soft and compressible, but during labour-pains it did not become more distinct. The thermometer was at 65°. She was brought down stairs upon the stretcher, at twenty minutes to eight, and placed on the operating table. Mr. Tracey administered the ether slowly for seven or eight minutes, the effect not being complete. All the gentlemen then took their stations. There were present—Dr. Ferguson, Dr. Hue, Sir James Eyre, Dr. Smith, Dr. Moore, Mr. Lloyd, Mr. Jolin, Mr. Wormald, Mr. Savory, Mr. Haig, the house-surgeon, &c. The water having been drawn off, Mr. Skey, at twenty minutes to eight, commenced by an incision in the linea alba, beginning two inches above the umbilicus, and continuing it downwards to the hypogastrium, being nine inches in length by admeasurement. The moment the upper part of the incision opened the abdominal cavity, the omentum protruded, which Mr. Skey replaced. Mr. Skey next introduced a deep director, with a large bulbous end, and cut upon it from above downwards, laying open the abdominal cavity. The intestines lay much to the right, and appeared at the wound, but did not escape. Dr. Rigby, standing on the left, saw them very clearly. Mr. Skey then introduced his hand into the abdomen and passed it round the sides of the uterus,—he had previously ascertained that the uterus could be brought towards the mesial line,—and assured himself that he was approaching the centre of the uterus. This being made clear, he then rapidly made a superficial incision down the organ longitudinally. By repeating this rapidly he now opened the uterine cavity, two or three ounces of fluid escaping meanwhile from the abdominal cavity. Aided by the deep grooved director, with a firm handle, he then extended the incision to about six inches in length, and thus the uterus was laid open. The bleeding from the abdominal parietes was inconsiderable; that from the uterus was large, the blood flowing from some great veins upon the surface, but not to such an extent as to prove alarming. The moment the uterus was opened, the fœtus was pushed forwards. The cord lay in front, the head downwards. Mr. Skey introduced the four fingers of each hand, broke the membranes, and raised the child, which he handed to the nurse sitting at the feet of the patient. He immediately removed the placenta, which was planted near the right Fallopian tube, by a slight lateral movement of the fingers; with the placenta the membranes also came away without difficulty. At this moment there was a vigorous peristaltic action of the intestines, the bowels apparently attempting to escape, but they were retained with great skill by Mr. Haig, who succeeded in returning them to the side of the abdomen by doubling back the integuments. Mr. Haig remarked that his fingers were in contact with the aorta, the pulsations of which were perfectly distinct. A good deal of blood flowed, but the uterus began to contract rapidly. As its action became slower, Mr. Skey applied his cold hand to the uterus, and dropped cold water upon it, and finally poured over it a jug of water. At this time Mr. Skey pressed the organ in his two hands pretty firmly. The uterus stood out from the abdomen like a great hernia, so that little or none of the water entered the abdominal cavity. Blood still flowed from the walls pretty freely when the pressure was remitted. The organ was soft and compressible, something like spleen. Mr. Skey continued gentle pressure until, in the opinion of the obstetric authorities present, the uterus had contracted to the natural size after delivery; he then gently pressed it back into the abdomen, the oozing still continuing in small quantity.

The extraction of the contents of the uterus occupied five minutes and a half; the whole operation, nearly an hour.

Mr. Skey next applied a single suture across the middle of the wound, and then drew over the interrupted bandage with threads of silk, through which he sewed up the wound by eleven sutures, and applied broad straps of sticking-plaster over the whole; placing on the abdomen a large mass of wadding, and over this a flannel bandage tied by eight tapes. The patient was then carefully put into her bed, enveloped in a warm blanket, and carried by four persons into her room, somewhat exhausted, but not to an extreme degree. She vomited on her return to bed. During the operation, the state of the pulse was attended to by Dr. Jefferson and Mr. Jolin. The pulse was good during the whole of the operation, the countenance tranquil, and the complexion pale, as natural to the patient. When the child was born, it was put into a warm bath, and began to cry. It proved a fine healthy girl, of about the average size. The child was applied to the breast, when, according to Mr. Jolin's opinion, the pulse flagged, and the woman began to sink as soon as she heard the cries of the child.

On getting her back to bed, Mr. Skey prescribed her half a grain of morphia. During the operation, she had some secale cornutum, but vomited it up. She was subsequently sick while on the table. Mr. Skey endeavoured to pass his finger down to the os uteri, but did not succeed; Dr. Rigby also endeavoured to reach the os uteri, and succeeded. During the operation, she uttered no cry, and only expressed a wish to get to bed.

At one P.M. she had sunk a little, and had taken some brandy and egg, after which she slept for an hour or two. The straps were tightened, but not by Mr. Skey or by his wish; pulse 112, steady and distinct. The lochial discharge appeared by the natural passage at four P.M. Some arterial blood had oozed from the wound, but not sufficient to render it necessary to remove the sutures or dressings. She complained of a great deal of pain, continuous and severe, quite as bad as the labour-pains: pressure on the pubis appeared to relieve them. Mr. Skey ordered the sister to apply her hand over this region for an hour or two, according to the benefit obtained. Mr. Skey prescribed a second half-grain of morphia; pulse 120; countenance pale, but tranquil.—Six P.M.: Pain mitigated; lochia more copious; oozing rather diminished; of arterial blood; pulse 110. Beef-tea ordered.—Half-past ten P.M.: Increase of apparent after-pains, with much thirst; pulse 120. Morphia, half a grain.

26th.—Half-past twelve A.M.: Quiet; countenance pale; sleep from opium, and irregular.—Seven A.M.: Countenance pale, and bedewed with perspiration, and somewhat anxious; pulse fluctuating in point of power, readily arrested by pressure of the finger, occasionally intermitting, at 150; great disposition to sleep, and frequent moaning during sleep; had much thirst, and drank freely of toast-and-water.—Two P.M.: Became restless and sick, (but did not vomit,) with great increase of pain over the abdomen; the pulse, as reported by the house-surgeon, became sharp and wiry. This condition continued for two or three hours, and then subsided. Still complained of pain over the epigastrium, and over both hypogastric regions; sense of painful pressure over the abdomen. Mr. Skey removed nearly all the wadding, and loosened the bandage, which gave her great relief. Has drank copiously of iced water.

At this point, the question of bleeding was entertained. Copious depletion, and calomel and opium, were suggested; but Mr. Skey objected to bleeding, the pulse reaching 150. The case being a puerperal one, she was given up to the care of Dr. Rigby, who also disapproved of bleeding. She was ordered six grains of calomel, with one of opium, and to have an enema.

One P.M.: More restlessness, breathing quicker; she had rallied for a time, and appeared more tranquil; the enema had been administered, but little returned, except the liquid; tongue clean; pulse weaker, occasionally intermitting; prostration; thirst. Ordered, beef-tea injection, with brandy.—Four P.M.: Pulse 160. She gradually sank with considerable pain, and died at eight P.M., thirty-six hours after the operation. Towards the close she was tortured by severe pain of the abdomen, which caused her to throw herself about almost to the extent of attempting to get out of bed, so intense were her sufferings.

*Autopsy, half-past one* P.M., *26th Jan.*—Slight distention of the abdomen from air; the outer wound in the abdomen quite ununited nearly up to the umbilicus; intestine appearing at the upper part of the ununited portion of the wound; eleven ligatures, not one of which had wounded the perinæum. For the space of two inches about the umbilicus, the opposite sides were firmly united, and required force to detach them. On opening the abdomen, and carefully drawing back the abdominal parietes, adhesions between them and the intestines became apparent. Some degree of peritonitis, but no great or severe amount, was apparent; certainly not sufficient to cause her death. The cut edges of the uterus were large and red, *and were directed straightforward against the abdominal muscles.* The cavity was quite open, and contained some coagula; coagula, to the extent of two or three ounces, had escaped into the abdomen. Mr. Skey removed some small residue of the membranes from the cavity, which was of a blood-red colour. The length of the uterus was about five inches. On examining per vaginam, the os uteri was indistinctly felt. The vagina being opened, the os uteri was found perfectly soft and flattened; the cervix uteri, which had extended into the pelvis, was elongated to about four inches, and was found to be quite relaxed in its structure. It did not appear to have entered, in the smallest degree, into the action of the other part of the organ. This explained the difficulty of exploring the os uteri during life, for it could be felt by some, but not by others. The neck appeared to be atrophied. The uterus, with the remainder of the pelvic viscera, being removed from the cavity, and the admeasurement of the naked bones, from the promontory of the sacrum to the centre of the symphysis pubis, (the latter projected a little,) made one inch and about one-third, and between these points were the uterus, with its double walls, the bladder, and other soft structures. The real breadth, therefore, was barely over one inch. The rugæ of the vagina were singularly soft and distinct.

The woman was unmarried, and very anxious about her reputation. She earnestly desired the child should die. She had been two months in the hospital.

It will be interesting to give some particulars respecting the patient before she was admitted into the hospital, and also respecting the state of her mind subsequent to the operation. When she first consulted Mr. Jolin, on the 3rd of October, 1846, she complained of pains and swelling in the abdomen, and told him she had been for five months a patient at the Finsbury Dispensary, but had received no benefit from treatment. Upon being questioned respecting the catamenia, she said they had ceased for near six months. Mr. Jolin proposed seeing her in bed at her house before he would undertake to treat her. On the 7th, Mr. Jolin saw her in bed, in the presence of her landlady. Mr. Jolin listened with the stethoscope, and distinctly heard the fœtal circulation, proving that it was neither a tumour nor dropsy, as she had affected to fear. As she was nervous, a nervine tonic was sent, and she was to call upon Mr. Jolin on the 10th, to let him know how she was going on; she reported herself much better, and had slept well, which she had not done for some length of time. She wished to continue her medicines, but was taxed with being pregnant, which at first she denied. Mr. Jolin impressed upon her mind the necessity of his examining her once more, and that the examination should be per vaginam, in order to ascertain if she could give birth to a child, knowing from her external appearance that she was very much deformed. She was some days before she would consent; but on the 23rd she was examined, and at once told that an operation would be absolutely necessary. Mr. Jolin proposed, if she submitted to the operation, that she should go into Bartholomew's Hospital, and advised her to place herself under Mr. Skey to perform the operation. She readily consented, and wished to be admitted as soon as possible. Mr. Skey saw her for the first time at Mr. Jolin's house, on the 3rd of November, and it was agreed that she should be admitted into the hospital on the 5th. Mr. Jolin met her on that day at the hospital, and placed her in the ward. On the 7th, Drs. Rigby and P. Smith examined her, in the presence of Mr. Skey and Mr. Jolin, and confirmed the diagnosis and opinion of the latter respecting the operation. Mr. Jolin continued to see her from time to time while she was in the hospital. During her stay in the hospital, her health and spirits were good.

According to Mr. Jolin's description, when the child was born, the cries seemed to distress the mother; and when the child was placed at the breast, the complexion immediately changed from its usual paleness, and became flushed. From this time the spirits began to sink lower and lower. She was then removed to the bed-room and did not rally; for the first twelve hours there was no marked change; after that, a decided change for the worse took place. Pulse alternating, quick, hard, wiry, jerking, then soft, slow, and weak. Those changes after the first twelve hours were watched by Mr. Savoury, the dresser, and Mr Haig, the house-surgeon. On Tuesday, Jan. 27th, her sister told Mr. Jolin, that on this evening she had a great wish to conceal the birth of the child, and that on the Wednesday previous she had told her that she believed the child was dead, and wished to pledge her on her oath to be at the hospital at the time the operation should take place; in case the child should be born alive, to take it away immediately to her own house and suckle it, (as she had a child of her own,) and to tell her husband it was a child she had taken to nurse. Her sister refused so doing, fearing that it might disturb her peace at home when her husband should be apprized of such a deception. This seemed to weigh heavily upon the patient's mind.

*Remarks.*—It appears from the facts, that the poor creature entertained the idea that the child would certainly be born dead, and she wished it to be reported that she had entered the hospital for the purpose of having a tumour removed. Throughout, she seems to have been extremely anxious about her character; and Mr. Jolin, who knew most of the state of her mind, was of opinion that the cry of the child had a more depressing effect than the operation itself. The morbid impressibility of mind frequently present in the puerperal state is well known, and this, probably, was one great cause of the fatal termination. There were also present many of the symptoms, particularly vomiting, of accidental rupture of the uterus; and there can be no doubt that the operation of gastro-hysterotomy is analogous to rupture of the uterus from accident. There is great utility in the inquiry into the cause of death in such cases. Now the nerves of the uterus are ascertained, the occurrence of such a case forcibly calls the attention of obstetricians to the relation of such an operation to these nerves. Whatever of physical shock is produced by the Cæsarian section must be conveyed to the centres through the medium of the uterine nervous system. In particular, it must come to be considered what part of the uterus is least supplied with nerves, so that the incision may be made accordingly; and it must also be decided whether the shock of the operation is greater *before* the uterine nervous system has become exalted in function, as occurs in labour, or *at* the time of parturition. Both these points are of the highest importance.

It deserves to be noticed, that the inhalation of the vapour of ether was unsuccessful, or but very partially successful, though, in some accounts of the case which have been published, the contrary has been asserted.

Altogether, the present case, though it terminated fatally, is one of the most interesting that has ever occurred in obstetric surgery.

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## ST. BARTHOLOMEW'S HOSPITAL.

### MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

THE last two papers were devoted to illustration of some of the pulmonary complications of fever, with other peculiarities which incidentally arose in the progress of the cases. An exact analysis of a large number of fever cases shows how one complication after another may be excluded from the definition of fever, till something remains that defies defi-

nition. But such is not our object here; rather, perhaps, the other way, to dwell too much on these complications; yet as fever can only be treated in its complications in our inability to reach the essence of the disease, by them should the arrangement of all we know be suggested, modified by the knowledge that the case may pass from one to another division of any such scheme; that after fever dissections may show the most active disorganization of nearly all the organs of one body, while in another no detectable organic changes may have intervened between the disease and death.

It is, then, sometimes doubtful—for such cases are usually accompanied by severe symptoms of high nervous excitement, or total prostration and coma—whether the disease has been fever at all, whether inflammation of the brain be not its more correct appellation, but there may not be sufficient changes to justify even that supposition, and the history of the case, where the symptoms and the dissection tell us little or nothing, is sometimes the sole authority for the nomenclature. Such is the following.

FEVER, WITH MOTTLED RASH; DEATH BY COMA; DISSECTION.

Case 37.—William G——, aged forty-one, admitted May 21, 1846. John front ward. A thick-set man; had been in the hospital for the previous two months with anasarca and ascites, and their accompaniments, cough and dyspnœa, the urine not being albuminous. All this had disappeared. On May 15, he had loss of appetite, with thirst and some headach, which was relieved by a dose of purgative medicine, and he left the hospital on May 18, taking with him some purgative medicine, which he had asked for on account of the relief before found from its use. He had a little headach at this time, but not enough to constitute a source of complaint in a man who was anxious to return to his work.

He came back, May 21, with a pale and anxious face; respiration hurried, 40; skin warm and moist, slightly mottled; tongue moist, with a thin brown fur on the dorsum, the tip red and clean; bowels much relaxed from medicine. He complained of pain in the head, thirst, and debility. It appeared that the headach had continued after his discharge, but he slept well that night. Next day, having taken some of the purgative medicine, he was violently purged; that night he was restless, the next delirious, and now he is so weak that he can hardly walk.

Ordered, wine, eight ounces; beef, for tea, two pounds; a saline draught, with camphor mixture and half a drachm of compound spirits of ammonia every four hours, and five grains of compound mercury and chalk pill thrice a day.

Eighth day.—Slept quietly and well; he is now drowsy; face slightly flushed; skin hot and perspiring; more distinctly mottled; pulse 128, soft; tongue with a dryish brown fur on the dorsum; the apex red; bowels, four times open; abdomen tolerant; he has less thirst and headach; he vomited once this morning. Ordered to leave off the pill; to continue the rest.

Ninth day.—Restless, but not delirious, during the night; he is now incoherent, and has muscular tremors; face vacant; skin warm and moist; tongue moist, slightly furred; respiration 36; pulse 120, soft; one dark bilious evacuation; abdomen tender. Ordered to continue, to have a linseed-meal poultice applied to the abdomen.

Tenth day.—He gradually awoke from the stupor in which he had lately lain; became watchful and excited; trying to get out of bed; at three A.M. he had an attack of convulsions, and since that time has been lying on his back, moving and throwing his hands about; face pale; eyes dull; teeth and tongue crusted with sordes; pulse 120, small; skin cool and damp; all his evacuations passed under him; he is just conscious, but quite unable to speak. He died the same evening.

*Body examined, fifteen hours after death.*—The limbs were rigid; the posterior part of the body of an uniform deep purple tinge; a few purpura spots existed on the lower extremities; there was a little clear fluid in the arachnoid sac, but except some old thickening of the superior longitudinal sinus the contents of the cranium were healthy; the pericardium contained four ounces of clear fluid in its cavity; there were small ordinary coagula in the heart; the valves slightly thickened, but healthy; the right pleura was free; the left adherent about the apex, which contained several masses of putty-like substance, and much black pulmonary matter; the rest of the lung was very œdematous, with bloody congestion behind; the bronchi were healthy; the mucous membrane of the stomach was slightly injected, there were a few vascular patches in the duodenum and jejunum; the Peyer's glands in the ileum were hardly as noticeable as usual; the colon, examined in the first half, was perfectly healthy, as were also the mesenteric glands; the spleen was large, of a light purple colour, and trembling from its softness, when shaken.

As concerns the anasarca: the capsule of the spleen was thick and white; the liver was chiefly made up of the right lobe, forming a large round lump, coated by a white membrane, about half a line thick, presenting numerous roundish depressions, as though worm-eaten, on the free surface. Beneath, the capsule of the liver was in its normal condition; within, the liver was pale and homogeneous; the gall-bladder was small and contracted; the kidneys were small, soft, granular, the capsule adherent; the cortex shrunk, with opaque deposit; a few small cysts were scattered about the surface; and one larger cyst existed in the right kidney; the omentum was rolled up into a round cord lying between the stomach and colon, with a few strong bands passing to one or the other of these at intervals. A few long cords connected the spleen to the under surface of the diaphragm; the peritonæum of the lower part of the abdomen was healthy.

It would be taking a very imperfect view of the subject to conclude from Case 36, and the remarks upon it, that vomiting is to be connected always with some affection of the stomach in fever. From the morbid anatomy of the last case, that explanation which would refer the vomiting to the condition of the stomach, receives most support; but as it is not certain how much of this injection might have been owing to the irritation produced by wine on the mucous membrane, it cannot be concluded that this vomiting should not be referred to some functional affection of the brain, however induced, to which so many other symptoms point.

Opportunities occur more frequently of seeing the appearance of parts where ascites has not been relieved, than where it has. This fact claims for the morbid appearances a little more attention than would otherwise justify us in lengthening the details of the case by their insertion. The limitation of the results of chronic peritonitis to the upper part of the abdomen, and the comparatively marked degree in which they were found about the liver, agree well with the idea that this organ was most concerned in the abdominal effusion. But though by rest and careful diet it had been brought about that the blood now flowed without interruption through the liver, yet the effect of the call which an attack of fever made on the powers of the patient leaves us to infer that no cure had been produced—merely that a symptom had been suppressed. In this light—namely, the influence of old disease or its effects in determining the issue of recent acute disease—this case is of great interest.

Of 115 cases in which the mode of aggression has been noticed, occurring during the last few years, this was sudden in sixty-four, and gradual in fifty-one, cases. The fifty-one cases number sixteen deaths, the sixty-four, twelve, and this difference is even greater, if we take the smaller number of facts which the last year's practice supplies. Yet this does not differ from what one would expect; the suddenness of the attack, though it may denote greater violence of the fever, causing, indeed, sometimes fatal collapse, yet at the same time denoting in the succession of the early phenomena of disease greater power of resistance. In this man, weakened by long confinement in the hospital and an exhausting disease, the attack was so gradual that it passed unnoticed. A patient, lately in the hospital, well illustrated this:—A weakly-looking man, working hard for his maintenance, had a very severe rigor; then came heat, great and long continued, followed by another rigor; but now there was no reaction. He was shortly after admitted with extensive pneumonia, and a pulse indicating the most extreme debility; his convalescence was lingering.

Perhaps this previous existence of disease of important organs needs less to be dwelt on in connexion with purely medical ailments where all the functions of the body are at once admitted to investigation, than with accidental injuries, where death, rapidly following some comparatively slight injury, is found to be explained by unsuspected disease of the kidneys or liver, which, during the healthy state of the rest of the body, had not betrayed itself by any symptoms.

Lastly, why is this case classed as fever? From the symptoms whose modifications were explained by the previous disease, from the rash on the skin, and from the probability of infection from a patient in the same ward—the last an event which distinguishes the fevers of the early from those of the latter part of the past year. Dissection only tells us that it could not be shown to be anything else. But on this question the facts of the following cases will better enable us to enter.

FEVER, WITH PAPULAR RASH; NERVOUS EXCITEMENT; CONVALESCENCE.

Case 38.—Keziah L——, aged thirty, admitted Nov. 2nd, 1846; Mary front ward. A tall, strongly-made woman; face vacant; eyes fixed; skin cool and perspiring; tongue clean; pulse 120, soft; bowels at present confined; she lies tossing in bed, assuming all sorts of constrained postures, wandering, and quite unable to make any complaint.

*History.*—A servant; generally healthy. For about the last three weeks she has been out of health, sitting shivering over the fire for the first two weeks; but during the last week, she has been laid up with diarrhœa, headach, and occasional noisy delirium. She is said to have had typhus fever eighteen months ago.—Ordered to have her hair cut, to apply eight leeches to the forehead, and to take five grains of mercury with chalk every eight hours.

Twenty-third day.—Noisy at night; face pale, with a vacant expression; tongue dry and streaky; pulse 108, small, soft, sharp; bowels not open; skin warm and moist, with a papular rash on each flank, partially suppurating; she is quite sensible, and makes no complaint of pain. Ordered to repeat the pill, and to take fifteen minims of tincture of opium to-night; to take two drachms of castor oil at once, and to have one pound of beef, for tea, daily.

Twenty-fourth day.—Her bowels were relaxed four times by the medicine. This morning she had a rigor; now her face is flushed, the surface generally warm, but her feet cold; tongue dry; pulse 108, small, and soft; slight muscular subsultus. Ordered to continue; to take six ounces of wine daily.

Twenty-fifth day.—Good sleep; pulse 120, soft, small; tongue dry and streaky; one loose evacuation from the bowels; abdomen hard, and rather painful on pressure. Ordered to continue the wine and beef-tea, and to take ten grains of compound mercury and chalk pill to-night.

Twenty-sixth day.—Some quiet sleep at intervals; tongue clean and moist; pulse 120, small, and soft; skin moist; bowels open twice, once unconsciously; abdomen full and tender. Ordered to take five grains of compound mercury and chalk pill every six hours, to apply a blister plaster to the abdomen, and to continue the wine and beef-tea.

Twenty-seventh day.—The blister rose well, and she slept quietly; tongue less trembling; pulse 120, with more power; bowels not open; abdomen still tense; more abundant papular eruption. Ordered to take two drachms of castor oil, and to continue.

Twenty-eighth day.—Good sleep; three evacuations after the castor oil; abdomen less tense; skin warm and moist; tongue moist, with a thin fur; pulse 112, feeble; an abundant crop of pustules have appeared on the scalp. Ordered to continue.

There is little else in the notes of the further progress of the case, than a description of the gradual return of strength. Her weakness had been very great. She was not able to sit up till the beginning of December, and her first assuming the upright posture was followed by œdema of the feet. The urine, it may be remarked, was not albuminous.

There is little to detain us in the above case, apart from the considerations connected with the following one. The few scattered papulæ on the abdomen are all besides that claim attention. Were there any form of rash as specifically connected with typhus as are the peculiar eruptions of variola, scarlatina, and so on, with these diseases respectively, we should only have to notice the rash in the present case, lest its occurrence should mislead. But as in the few cases already narrated, the rash has been characterized as mottled, spotted, papular, or not existing at all, it is worth while just to call attention to the form here displayed, more especially as Andral, in his description of a fever very analogous to that of the past year, speaks of a varioloid rash having appeared in three cases, apparently quite irrespective of any particular stage of the fever.—(*Clinique Medicale*, tome i. p. 630, 4me. edition.)

Of the next case but imperfect notes have been preserved; but such as they are, they acquire interest from their reference to the two others already narrated at greater length. Our choice is here more limited, owing to the comparative infrequency of cerebral complications during the past year.

FEVER, WITH FAINT MOTTLED RASH; CEREBRAL SYMPTOMS; DEATH BY COMA; DISSECTION.

Case 39.—Caroline S——, aged thirty-five, admitted Oct. 6th, 1846; Hope back ward. A middle-sized woman, of quiet habits, whose only thought was to do good to all about her. Had suffered for some weeks from pain in the head, subsequent to some mental anxiety. Three days ago, rather suddenly, she became light-headed; the next day she was very noisy and violent, but since then has lain quiet. Tongue dry and crusted; pulse 132, small, jerking; pupils dilated, but sight and hearing both remaining, although she will not answer when spoken to. She has had a blister applied to the nape of the neck without effect. Ordered six ounces of wine daily.

Fifth day.—No sleep till morning. Pulse 108, soft, small; tongue with a thick moist fur.

Sixth day.—Noisy and restless at night. She is lying on her back, with her limbs all rigid; her eyes turned upwards, but the pupil, when it can be seen, quite sensible; tongue clean, dry; pulse, 144, small, soft; bowels once open; urine very scanty.

Eleventh day.—She has remained dull and drowsy during the day; noisy at night. Pulse, varying in frequency from 108 to 144, always small and soft; skin warm and moist, and, since yesterday, faintly mottled; bowels not open without purgative medicine; her limbs are generally less rigid; but she clenches her teeth firmly against any attempt to feed her; her urine has to be drawn off by the catheter.

Twelfth day.—She lies on her back, with muscular subsultus, only just conscious. Tongue dry, black, and chapped; bowels not open; skin profusely perspiring; pulse not to be counted, hardly perceptible. Such was her condition till death, on the afternoon of the thirteenth day.

The treatment was throughout stimulant, and from the seventh to the tenth day, purgatives were employed, but in what form exactly no notes have been preserved to show.

*Body examined, twenty-two hours after death.*—Neck relaxed, limbs rigid; blood all fluid; the arachnoid of the vertex was thickened; the brain was naturally firm; about the pons Varolii there was some increased vascularity; the anterior horns of the lateral ventricles were dilated, so as to contain about half an ounce each of clear fluid, and the lining of the body of the ventricles was granular, in patches. The Peyer's glands of the ileum were very distinct, having a dull white colour, studded with black dots, and one of them close by the ileo-cæcal valve, where these appearances were most marked, presenting an old half-healed ulcer. The mesenteric glands were large and very dark, especially those corresponding to the lower part of the ileum. The other viscera of the abdomen and chest were carefully examined, without nothing abnormal having been found, except a small cyst hanging on the extremity of the left Fallopian tube.

Here are three cases of fever distinguished by cerebral symptoms. With regard to the second, it may be doubted whether those symptoms were not referable merely to nervous excitement, consequent on the exhaustion of illness, which had existed a fortnight—analogous, in fact, to delirium tremens; but in the other two, the symptoms appeared earlier, were more prominent, and did not yield to stimulant treatment, as in Case 38. In the first of these, the obvious source of contagion, and the mottled rash, and in the other, only this mottled rash, were the positive grounds for the diagnosis during life. The positive facts obtained by dissection after death are less conclusive than the negative ones. For even granting that, in the last case, the appearance of the Peyer's and the mesenteric glands was that specifically referable to typhus of the thirteenth day, and that, in Case 37, the condition of the spleen is correctly referred to typhus of the tenth day, there are scarcely grounds for considering these as the link between the essence of the disease, and its result—death. Certainly, in Case 37 the cerebral symptoms were independent of appreciable organic disease in the brain itself. The early occurrence of delirium in the last case prevented any accurate examination of those symptoms being made; but slightly increased vascularity of the pons Varolii is not the change one would expect to find twelve days after their appearance in a case of simple cerebral disease. Apparently, judging from cases where similar lesions have been noticed, the cerebral symptoms were independent of the slight traces of organic lesion elsewhere discoverable.

But to class at once together, as instances of fever, all cases where severe symptoms, referable to the nervous system, have been observed, and dissection has not explained them, would be unjustifiable, however true it may be that fever is characterized by no definite organic lesions. The last case, though standing almost alone in the practice of the past year, is connected by gradations with many others in which less severe cerebral symptoms have been observed; and though, judging from the average of the cases, the difference in this particular would seem so striking as at once to exclude it from the definition, yet particular cases, and especially one or two occur-

ing at the same period, would render it very difficult to do so. These are its claims to be presented as an illustration of a class of cases comparatively rare. Of the symptoms, tonic spasm, by which it was so distinctly marked, Louis says, (Fièvre Typhoïde, tome ii. p. 63, 2me. edition,) "In none of the cases which recovered was there any permanent contraction of the muscles of the neck or arms—a circumstance which would incline us to consider this symptom as almost absolutely fatal."

## CHARING-CROSS HOSPITAL.

### CASES OF CONCUSSION.

Case 1.—Elizabeth B——, aged fifty-six, was, at one o'clock on Tuesday morning, October 20th, crossing Greek-street, Soho, when she was knocked down by a man, who, she presumed, wished to rob her. She was immediately taken by the police to the Charing-cross Hospital, and was there found to have sustained a severe blow upon the forehead. Blood was effused under the scalp to some considerable quantity; but the immediate effects of the shock were but slight, as she was able to give her name and address, and recollected all the circumstances attending the fall, and its consequences. She was admitted an in-patient, under the care of Mr. Hancock, and ordered some aperient medicine, and cold lotion to be applied to the head.

20th.—Eight A.M.: Appears much the same.—One o'clock P.M.: Mr. Hancock saw her, and found her comatose, and difficult to be roused; pulse full, hard. Ordered to be blooded to sixteen ounces; to have four grains of calomel directly, and two grains every three hours. No. 1 diet. A lead lotion to be applied.

21st.—Appears quiet; she was bled yesterday, and is now sensible; pulse soft, at 76; complains of pain in her head; mouth rather sore; the swelling of the scalp has considerably diminished. Repeat the calomel; a lotion.

22nd.—Not so well; appears more sleepy; complains of increased pain in head; pulse fuller and quicker; skin hot and dry; bowels have been freely relieved. Twelve leeches to be applied to the head; repeat calomel.—Ten P.M.: Considerably relieved by the leeches; pain in head almost gone; pulse 84, but not very hard.

23rd.—Not so well; pulse fuller and more frequent, and she appears more drowsy; pain has increased. Eighteen leeches to be applied to head; repeat the calomel; to have a cathartic draught.

24th.—Is much better to-day, although weak; pulse 72, soft, and compressible; mouth very sore; very little pain in head. Omit calomel.

27th.—Has gone on well to this date; her mouth is nearly well; her irides act sluggishly, and her pupils are dilated when exposed to light, although they slowly contract when the lid is at first raised. The pill to be taken every night.

31st.—Is much better; complains of sore mouth and throat; irides act naturally; no pain; pulse 76. Omit the pill.

Nov. 6th.—Going on well. No. 3 diet.

20th.—Has continued improving to this date, and is now convalescent.

Case 2.—M. P——, admitted 18th December, 1845, an in-patient of the Charing-cross Hospital, under the care of Mr. Hancock, with amaurosis, resulting from concussion.

States that one Sunday evening, about four months previously, when closing the shutters in the dining-room of her mistress's house, she received a most violent blow upon her head from the cornice and rod of the window. As she was stooping at the time, they struck her upon the back of the head, and she became so faint, that her mistress gave her some wine, and she took a calomel pill at night, with an aperient draught on the following morning. On the Tuesday, she complained so much of pain in the head, and impaired vision, that she was desired to go to the family surgeon for advice, and to request to be bled. She was told there was no occasion for the latter, but had some aperient medicine given to her. On the Thursday, the symptoms increased so much, that her mistress went to the surgeon, and procured eight leeches, which were applied immediately; and on the Friday, as she could scarcely see or stand, the surgeon was sent for, (she having previously seen the assistant,) who at once bled her copiously, and with such good effect, that in the course of a week she appeared nearly recovered, and remained tolerably well for three weeks or a month, with the exception of suffering from pain in her head. At the end of this period, the pain and defect of sight increased considerably; but she delayed seeking relief for two or three weeks, when she was recommended to go to the Eye Infirmary in Moorfields, but as she did not get better, she left.

Upon her admission, she complained of intense pain in her head, and the back of the orbits, and likewise of complete deafness of the left ear. She had cataract in the left eye; the pupil of the right was dilated, the iris acting very sluggishly; pulse full; tongue coated; appetite bad; cannot sleep at night for the pain in her head; has frequent flashes before the eyes, and intolerance of light; cannot lie upon the left side on account of the pain in the ear and that side of the head. To be bled to sixteen ounces; to have purgative pills and draught. No. 1 diet. To have head shaved, and cold lotion applied.

19th.—Is a little better to-day, the bleeding having relieved the pain in her head; vision remains much the same; cannot bear to look at the flame of a candle, which she describes of a bright scarlet; pulse softer; bowels freely open. To have five grains of blue pill every night at bedtime.

25th.—Has remained much the same, without any apparent improvement; to-day not so well; pulse fuller; more pain in head; skin hot and dry; she is very restless and desponding; mouth not affected by the mercury. To be cupped on the back of the neck to eighteen ounces, and continue pill.

26th.—Was much relieved by the cupping, has less pain, and slept for a short time during the night; pulse softer; skin cooler; but she does not find her sight improved. Continue pill.

Feb. 1st.—Has continued the treatment, and says she is better; her mouth is sore; she fancies her sight is less dim, and says that the pain has abated considerably. Continue pill.

6th.—Has progressed favourably to this date, her sight and the hearing of her left ear having gradually improved; says she is now able to lie with the left side of her head on the pillow; but she still complains of lingering pain in the head, of a dull, heavy character; mouth sore; pulse soft. Apply a blister to the head; repeat pill.

13th.—Quite free from pain, and better in all respects.

18th.—Has continued to improve up to this date, and has now entirely recovered the sight of the right eye, as well as her hearing; the irides act with perfect regularity; she has soft cataract in the left eye; but as the sight of the right is so good, it is considered better not to meddle with it for the present. Omit pill; to have a cathartic draught every morning. Fish diet.

23rd.—Is now quite well; mouth not sore; no pain in head; can see and hear well. Discharged cured.

In relation to the above cases, Mr. Hancock observed:—"They are important and interesting, as demonstrating the necessity of careful observation and decided treatment in the earlier periods after the receipt of the injury. Had the latter patient been properly attended to in the first instance; had she been bled when she recovered from the immediate effects of the blow, she would, in all probability, have been spared her subsequent suffering. I cannot too strongly caution you against being deceived by the apparent insignificance of the injury; for you will find in practice that comparatively slight blows upon the head will sometimes be succeeded by the most serious consequences, as in this case. Here the patient received a blow upon the back of her head, which, to a certain extent, produced symptoms of concussion, or, as she describes them, faintness. She recovers from the immediate effects, and walks to the surgeon, whose assistant, misled by her so doing, and the absence of urgent symptoms, orders a dose of medicine, and takes no further notice of the case. I do not wish you to make your patient's maladies unnecessarily serious; but I would advise you, whenever you are consulted for injuries to the head, to watch them for several days with the greatest solicitude, so as to be prepared for any unfavourable symptoms which may arise. Give a very guarded opinion as to the result; for in these cases the patient cannot be said to be out of danger until he is perfectly cured. In by far too many instances the mischief progresses by insidious but unerring steps, so that it may even be weeks before the patient, who has received what to you may appear a trifling injury, will be free from danger of inflammation of the brain or its membranes, with their various results.

"The symptoms presented by the latter case are evidently the result of inflammation, producing thickening or congestion of the membranes, or effusion into the cavities, or on the surface of the brain; and this led me steadily to pursue the course of treatment which proved so successful—viz., the long-continued exhibition of moderate doses of mercury. You will have observed the length of time which elapsed

before any benefit was manifested. It is true that the pain was relieved by the abstraction of blood; but it was above six weeks before the sight improved; and when the improvement commenced, it was so gradual, as certainly to confirm the opinion, that it resulted from absorption of the newly-deposited material, whatever that might be, rather than from any altered action in the part; and, consequently, the exhibition of large and repeated doses of mercury is prejudicial to the patient, as it is unnecessary to keep up profuse salivation for so long a period as that required for cure. I have found much less beneficial and permanent results from active and rapid salivation in these cases, than where the system is slowly and gradually brought under the influence of the remedy, as in the present instance. In some forms of inflammation of the eye, where disorganization of structure is urgently threatened, it is true that the sooner the patient is salivated the better; but you must remember, that in the case under consideration, the amaurosis was more symptomatic or functional than local, depending upon injury of the brain and membranes, and not on any disease of the delicate organ itself; and moreover, that when mercury is administered rapidly, it is not with a view of promoting absorption, but of arresting the action going on, preventing the deposition of adventitious matter, and also preventing any alteration of structure.

"The following case will further illustrate the benefit of the mode of treatment I am recommending to you, and it further shows, that even, under very unfavourable and unpromising circumstances, we ought not to be discouraged from persevering in our endeavours to benefit our patients.

"In October, 1845, I was consulted by the friends of a young gentleman, about twenty-one years of age. It appears that he was always considered of weak intellect, and that, during the summer of 1845, whilst travelling abroad, he was thrown from his horse and received a violent blow upon his head, producing concussion of the brain. He was carried home, and attended by a surgeon, who ordered leeches to his feet, and prescribed some medicine, by which means he recovered from the immediate effects of the injury. After this, I am informed, he was desired to live well, to take wine, and nourishing diet. This certainly does not appear the best mode of proceeding, as was subsequently proved; for, in the course of a few days, he was attacked with acute inflammation, became delirious, and so violent as to require several men to hold him in bed. These symptoms were subdued by bleeding &c., but he sunk into a sullen, drowsy state, from which he could not be roused, and in this condition, after the lapse of a few weeks, he was brought to England, and seen by some of the first physicians and surgeons of London, who considered the case as one of confirmed lunacy, and, consequently, beyond the hope of cure. As I was at the time attending his brother, the latter requested my opinion before any permanent measures were taken. I found him lying upon a sofa, presenting pretty much the same appearances as a person just recovering from the immediate effects of concussion. He was sullen, drowsy, would scarcely speak when spoken to, and then merely 'Yes' or 'No.' His pulse was quiet, face rather flushed, but not particularly so; his conjunctivæ were slightly congested and the irides sluggish; pupil rather more dilated than natural, and if placed in front of a window, and his eyelids closed, when again opened the pupil was at first slowly contracted, but immediately afterwards as slowly dilated, although still exposed to light. By being patient and gentle with him, I at length learned that he suffered a dull, oppressive pain in his head, and that he could not see clearly; there were no signs of paralysis except a sliight weakness of his upper extremities, of which I did not take much notice, as it might have resulted from his long illness. Judging from the previous history, as well as from present symptoms, I concluded that he was suffering from the effects of concussion of the brain, which, having been injudiciously treated, had been followed by inflammation, from the effects of which he had not recovered, and I therefore gave my opinion that he was not a confirmed lunatic, but that by care and proper treatment he might be cured. I heard nothing more of the case for six weeks, when I was again sent for to see him. He was then nearly in the same state as at my first visit. He had, in the interim, been placed under the care of a surgeon, who, I was informed, had coincided in my views, but had ultimately expressed the opinion that nothing further could be done. Upon inquiry into the treatment which had been pursued, I found that it had been confined to the introduction of a seton into the neck, and an occasional aperient, with low diet. I ordered five grains of blue pill every night, to be continued until the gums were affected, when he was to take the medicine every alternate night, (as I merely wished to keep the patient under its influence without producing profuse ptyalism,) and a common black draught, when necessary, and the seton to be continued. By steadily pursuing this plan, in the course of two months there was evident improvement, and after seven months he returned to his home in the country, cured, and I understand that he has lately been taking a walking tour through Wales, in perfect health.

"In conclusion, I would observe, that you may always form a pretty correct opinion of the condition of the brain and its membranes, after accidents to the head, by the action of the irides. So long as that peculiar action which I have here pointed out remains,—viz., the sluggish contraction, followed by equally sluggish dilatation of the pupil, under the influence of light,—so long, you may be assured, that the mischief remains, and that the patient is liable to inflammation and other evils; but when the iris acts freely, and the pupil, when exposed to light, contracts, and remains so under the same influence, and there is no pain, you may fairly presume that you have cured your patient, and have removed all cause for apprehension. I invariably am guided by this sign; all pain may have subsided, but the patient remain very far from cured; but by attending to the condition of the irides, and their modes of contraction, I do not remember a case in which I have had reason to doubt its value in enabling me to form a correct opinion of the case."

## Original Papers.

### THE MANAGEMENT OF LABORIOUS LABOURS.

By JOHN CRAIG, M.D., Paisley.

In The Lancet for 19th December, 1846, under the head "Correspondents," it is said,—"Dr. Craig, (Paisley.)—We do not think the insertion of Dr. Craig's courteous letter would fulfil his wishes; we should prefer a good case, illustrating and enforcing his views."

A few days after having perused the above, a case came under my care, in every respect, I think, fitted to satisfy the most sceptical mind regarding the incalculable advantages to be derived to the parturient woman and her offspring by a thorough knowledge of the causes which obstruct the expulsion of the child, in the usual run of protracted labours, and also, by a full acquaintance with those remedial means which, when duly applied, operate for the removal of these obstructing causes. I have repeatedly noticed, through the pages of The Lancet, and that after long and careful observation in numerous instances, that no case of labour of the description under consideration will continue more than a few hours, unless some considerable morbid cause of delay be present. Now these morbid conditions of the expulsive apparatus, which extend the duration of the labour often for nights and days, are all more certainly removable than in any other severe form of disease, and may, in almost every instance, be so far removed, that delivery may be safely effected in from ten to fifteen hours, even in the most obstinate cases. I shall only notice here what is already known to all those who practise midwifery—namely, that those authorities who have written on the subject of protracted labours have done little more than stated the fact, for, up to the present moment, no authors of any country, to whose writings I have had access, have ever endeavoured to show the true nature of those causes which generally arrest the propulsion of the child; and consequently without a knowledge of these causes they cannot with any certainty prescribe a remedy.

I shall now notice the case which has already been referred to as illustrative of the absolute necessity of obstetricians being well acquainted with the nature of the causes which obstruct the passage of the child, and with the means suited for the removal of these causes, in order to do justice to the parturient woman; and, to all ordinarily well constituted minds, no language ought to be so powerful in enforcing these views, as the verification that unless such knowledge be possessed, and unless such means be applied, the lengthened unassuaged suffering, the mutilations and death, with the accounts of which every work on midwifery is so prolific, must continue to be the fate of thousands of child-bearing women and their infants, which, by a consistent mode of procedure, might be averted.

January 4th, 1847, noon. I was requested, for the first time, to visit Mrs. ——, who was in labour of her first child. She is about thirty years of age, and previous to her marriage had been frequently complaining of a disordered state of her stomach and bowels, but for six months previous to the com-

mencement of labour her health was good, although there was always considerable uneasiness in the pelvic region, and for three days and nights previous to my visit, this state had been much aggravated, and had deprived her of sleep; indeed, from her own account, for twenty-four hours before I was called, she had been suffering under frequent but regular labour pains.

On examination per vaginam, the os uteri was found to be well dilated, but the head of the child had not began to enter at the brim of the pelvis. The pains were frequent and of short duration, but had no effect in advancing the child. The woman's skin was cool, pulse soft, and of the natural strength and number of beats; tongue clean; no thirst; appetite little; bowels open; urine regularly passed. From these favourable symptoms, a speedy labour was expected. After waiting with the patient, however, for two hours, watching the inefficacious effects of the pains on the child, it was evident, from the duration of the labour before I was called, that strong obstructing causes were present.

Although, from the favourable symptoms already noticed, some would maintain that there was no indication which demanded the interference of the practitioner; yet, in this very case, the best of all indications for relief presented—namely, the continued unproductive exhausting pains. As the dilatation of the os uteri, by such pains, was sufficient proof that the woman had been long in labour, I did not hesitate at this period to commence the use of means for her relief, being now fully satisfied that active means would be required. And in such cases, although the bowels may be in a soluble state, still they are often loaded with retained feculent matter. On this account, the first step in the treatment was a strong purgative clyster, administered by myself; for no other than the responsible and anxious practitioner should be entrusted with an operation, so advantageous when properly conducted, under such circumstances. The clyster operated well, which it seldom fails to do when so prepared and administered. The pains after the operation of the clyster were considerably improved, and in less than an hour the head of the child began to occupy the entrance of the pelvis. From this period, however, the pains resumed their former inefficiency, when sixty drops of a solution of morphia were administered. No alteration during the next hour was observable, and other sixty drops were prescribed.

During the next hour after the second dose of morphia, the child was slowly but sensibly advanced. Again, however, the inefficiency and harassing effects of the pains exhibited themselves, when sixteen ounces of blood were taken from the arm. The blood on cooling was dark-coloured, and covered with a slight buffy coat, showing that the obstructing causes to delivery consisted, in part at least, of congestion and inflammation—conditions which, in all such cases, operate powerfully in producing torpor and inefficiency in the actions of the expulsive organs, and named by some powerless labour; but it is labour pains, whose powers are restrained by disease, which may be removed. Up to this period, the woman remained nearly in the same state as when I first called, only she had more thirst, and the pulse was slightly accelerated. As the pains continued frequent, teasing, and very unproductive, a third and similar dose of morphia was given an hour after venesection. I have never, in any case, given a greater quantity of laudanum or morphia, and it is only in the most obstinate cases that so much is required; but when necessary, the dose should never be less than sixty drops.

If this woman had been seen earlier, a more free bleeding would probably have been advantageous; but in so advanced a stage of continued distress, the woman not being robust, and the child no doubt enfeebled, a larger bleeding, in all likelihood, would have endangered its life. About two hours after the third dose of morphia had been administered, the head of the child had advanced considerably within the pelvis, but not yet within reach of the short forceps, as little or no progress had been made during the last hour. The woman on the whole showing symptoms of fatigue, a drachm of ergot of rye in powder was infused for half an hour, and given to the patient. At the end of half an hour after it was administered its effects upon the pains were scarcely perceptible, and now the same quantity of ergot was repeated. Shortly after the exhibition of the second dose of ergot, the pains were evidently more severe, and the intervals of ease between the pains were shorter than before it was given; but it is very seldom we meet with so distinct intervals of relief after such large doses of ergot have been used. When the patient has been treated, as noticed in this case, before the ergot of rye has been administered, it is very seldom that so little effect is produced by it as occurred in this instance; for at the end of six hours after the exhibition of the first dose, the head of the child had not advanced so as to distend and separate the labia. During the last four hours of this period, no sensible improvement took place, and on applying the forceps, the child was, after considerable effort, delivered, fourteen hours and a half after my first visit. I would have delivered the woman at least two hours sooner than it was done, but the relatives were not fully reconciled to the operation until the time it was performed. From the nature of this labour during its whole course—namely, frequently repeated ineffectual pains, in addition to the delay in delivery after the use of the ergot of rye, itself a frequent cause of infantile death, I entertained no hope that the child would ever be born capable of being resuscitated; but the lessening of the obstructions, especially the spasmodic actions of the uterus, before administering the ergot, is favourable to the preservation of the child. On delivery of the head, the scalp was much swollen, and the face had for some time a lifeless aspect; indeed, such is the state of many children when born under the varied circumstances in such labours, that no one could imagine it possible to restore animation; yet some accoucheurs maintain that they are confident, by means of the stethoscope, the lifeless state of the child may be ascertained before birth, when the principal reason against perforating its head is removed. As many children, then, are born without any mark of life, it is impossible, by any instrument, or any means that we are at present acquainted with, to know, before birth, whether really the child may be capable of restoration or not; and as such children are often resuscitated, the absurdity of depending on stethoscopic information on such occasions ought not for another day to be tolerated. Similar observations were made by me, condemnatory of such visionary notions, several years ago, and as the self-evident abuse is again revived, it appears to me dutiful to show its fallacy.

This is the only case in which I have found it necessary to use the forceps, or any other instrument, for several years; and no inconsiderable number of cases have occurred, during these years, which required all the requisite means to effect delivery without instruments, yet all the labours terminated within fifteen hours after my first visit to the woman in labour. This case, then, is one of the most obstinate that occurs in the form of protracted labours under consideration; and even when such cases are actively and appropriately treated, they may be terminated safely in a few hours, both to the mother and her child, by means of the forceps. But I have no difficulty in saying, that if this woman had been seen and actively treated within the first twelve hours of her labour, the forceps would not have been required. There is considerable resemblance in this case to one attended by me several years ago, and is reported at page 234 of the *Accoucheur*, Appendix to Cases. This case, after long-continued labour, was delivered by means of the crotchet; but had it been anything like so actively and appropriately treated as the one of more fortunate termination, it also, I think, might have ended in a similar manner; for subsequent labours proved that the capacity of the pelvis was sufficiently ample to allow a fully matured fœtus to pass. In comparing the case whose nature, treatment, and termination, I have so fully detailed, with many of a somewhat similar description, reported in THE LANCET, but whose nature seemed not understood, and whose inert treatment I loudly protested against, no one can for a moment hesitate regarding the propriety of the mode of procedure pursued in the former in preference to that pursued in the latter.

I shall, for the present, only briefly notice two of the latter cases. In THE LANCET for March 28th, 1846, under the head, "Contributions to Midwifery," by Dr. Hall Davis, is the first case to which I shall advert. In this case, we are told the woman was forty-two years of age, of a stout habit and firm fibre, in labour of her first child. She had enjoyed good health. Dr. Davis was sent for on Dec. 18th, 1845, four P.M. True pains had first set in at three A.M. on the previous day, (Wednesday.) At two P.M. of the same day, the orifice of the uterus had become obliterated. The pains entirely left her at one P.M., (Thursday,) three hours before Dr. Davis's visit, but not suddenly, having latterly gradually lessened in force and frequency. "I found" (says Dr. Davis) "the expression of countenance good; the face congested from the effects of previous efforts; skin moist and hot; pulse 100 and soft; no heat of vagina; a puffy protuberance of scalp; the head impacted, the bones felt slightly overlapping." Under these circumstances, the delivery was effected by the crotchet. This case bears considerable resemblance to the one lately attended by me, and which has been just detailed. In both cases, after the

continuance of a considerable number of hours of labour-pains, the os uteri was found well dilated, but the child was not advancing, showing that the operations of the uterus were only effectual in dilating its outlet, but had no effect on its expulsive efforts. In this way, the bearing-pains were quite powerless, occasioned by restrictive causes, which, when not removed, delivery by the natural efforts is rendered impracticable. In Dr. Davis's case, no active or adequate means were used for the removal of the obstructions, and consequently it was found necessary to destroy the child's life. In my case, as soon as the nature of the labour was ascertained, the most active means were employed for the removal of the obstructions to the expulsive efforts; and in a few hours, such was the position of the child, that by means of the forceps it was safely extracted. In every similarly protracted labour, the soft parts of both the mother and the child become swollen from the congested state of the parts, which occasions a kind of impaction of the child's head; but when the distended condition of the parts is lessened, and the restraints removed from the expulsive organs, the change, in a few hours, is the progressive advancement of the child. The cessation of labour-pains under such favourable symptoms, so well described by Dr. Davis, occasions no necessity for delivery by art. My experience enables me to say, that under such circumstances patience may be exercised for a considerable time; for when the pains return, which they generally do at no very long interval, they are more vigorous; yet at all times it should never be neglected to remove the causes of delay. Neither does the difference between thirty years of age and forty-two create any substantial ground for the employment of instruments in the latter any more than in the former case; the obstructions are as certainly removable in the one as in the other: all that is requisite, in some cases, is to allow a few more hours to accomplish delivery in the older patient.

In THE LANCET for Oct. 3rd, 1846, (p. 373,) it is reported that Dr. Davis was called to Mrs. ——, aged forty-three, in labour of her first child, and at the full term of gestation; pelvis of average size. This labour had lasted forty-eight hours, under the care of a medical friend, before Dr. Davis was called. Although this woman had continued so long under apparently relievable, yet unproductive pains, Dr. Davis reports her symptoms to be of the most favourable kind; still he left her, prescribing only patience.

Up to this period, we are not informed that any means had been used for the relief of this disastrously protracted labour. At the doctor's next visit, he reports the symptoms to be still favourable, and says that anodyne draughts of laudanum had been administered. When this case, too, which terminated fatally to the child, after very long protracted suffering, is compared with my case and its result, it must be self-evident to every inquiring or thinking mind the course which ought to be pursued in every such labour. Although my case is given as "illustrating and enforcing" my views and practice in one of the most obstinate labours of the numerous cases in the class to which it belongs; and although it is contrasted with two labours which were under the superintendence of Dr. Davis, to show the baneful effects of conducting such cases without a knowledge of the nature of the existing morbid conditions, and the suitable application of appropriate means for their removal, yet I never intended my observations to apply to Dr. Davis alone, but to all those who write on and teach the art of midwifery; for as far as my research extends, the same unmeaning mode of procedure is pursued in every country where obstetricy is taught.

Paisley, Jan. 1847.

## ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

# THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from p. 89.*)

*Cathartics, (subject continued.)* Before proceeding with this paper, it is necessary to notice, that in our last one, (at lines 33 and 55, page 89, of THE LANCET for January 23rd, of this year,) elaterine and *croton* oil should be substituted respectively for elaterium and *castor* oil. The dose also for the formula of elaterine, at the same page, was, by mistake, omitted, or rather, by an error, mis-stated. It consists of thirty or forty drops of the formula referred to, which (as stated) will, with some persons, act drastically.

The neutral and other salts, as purgatives, still remain to be noticed. Those principally employed are, the sulphate of magnesia, the sulphate, bi-sulphate, tartrate, and bi-tartrate of potass, the sulphate, potassio-tartrate, phosphate, and acetate of soda.

Saline purgatives have been, and still are, often prescribed in cases not suitable for them. Almost the only cases in which they ought to form the principal component of any cathartic draught or mixture, are those of costiveness in plethoric and robust subjects, with some biliary derangement. In such cases, combined with senna or jalap, they act well, and soon remove the fœtor and accumulations of the prima via. In biliary subjects, of the temperament just described, the bi-sulphate, tartrate, and bi-tartrate of potass, are peculiarly indicated.

But in subjects of phlegmatic temperament and strumous diathesis; in rheumatic, at least, chronic rheumatic subjects; in those with heart-affections, more particularly in those with structural affections of the right cavities of that organ; saline purgatives are always hazardous, often rapidly or suddenly fatal. We have observed cases in which pulmonary tubercles, indolent, and which might have been kept indolent for an indefinite period, have been converted into vomicæ by a week or two of saline treatment. In many cases of recurrence of rheumatism in persons chronically liable to it, I have traced this to two or three saline draughts. Some of the most alarming cases of subsidence of the heart's action, accompanied with a cyanotic hue of face and extremities, I have seen undoubted reason to refer to the same cause. In other cases, interrupted pulse, palpitations, and that peculiar oppression which accompanies defective oxygenation of the blood, have been the results.

Even in cases of gout, and that, too, in robust subjects, saline purgatives seem occasionally to have most questionable effects.

Some scrofulous and rheumatic persons are in the habit of frequently using Seidlitz powders and effervescing draughts, and thus ignorantly do themselves injury.

It may be added, that, in general, when, after surgical operations or wounds, we wish union by first intention, saline purgatives are to be interdicted.

In the list of what may be called *dietetic* purgatives, may be enumerated manna, honey, tamarinds, prunes, figs, peaches, grapes, and raisins, cooked and uncooked apples and pears, strawberries, gooseberries, *et id genus omne*. To these may be added, lettuce, celery, &c. Before quitting the subject of purgatives, we may notice sulphur, which is a very mild evacuant, promoting the mucous secretion of the colon. The quantity of sulphuretted hydrogen gas, however, which it gives rise to in the bowels, sometimes causes a faintness, approaching to syncope, in hysteric and nervous subjects.

*Chlorosis.*—Amenorrhœa and chlorosis are not identical, as some loosely consider them. Nor does the one, by any means, *necessarily* imply the other. They are, indeed, often associated; yet while amenorrhœa may depend on another cause than chlorosis, this latter affection does not involve, as a condition of it, an absolute stoppage of the menses, though it certainly does involve a diminished flow or a change in the quality of that discharge. We have already considered the subject of amenorrhœa at page 611 of vol. 2nd of THE LANCET for last year.

Another relation between chlorosis and amenorrhœa may be noticed. While chlorosis may be, and often is, the cause of amenorrhœa, amenorrhœa, *in ipsâ*, probably never is, or can be, the cause of chlorosis. Chlorosis consists in, or is accompanied by, a deficiency in the blood of red globules, and of fibrin. Now a simple amenorrhœa, far from causing or promoting such a deficiency, would have a directly contrary effect.

In chlorosis, the change in the circulating fluid is probably a secondary one, the *fons mali* being pretty plainly in the nervous system. We can say little more about it, than that a certain inertia, of a simply functional kind, seems to occur in the nerves of the stomach, bowels, and uterus, accompanied, occasionally, with morbid action in the nerves of the organ first named, as manifested in the pica of chlorotic females.

Many reasons exist for suspecting that chlorosis, usually considered as specially a disease of sex, is often not so, but that the torpor of the uterus is *consecutive* of that of the colon, and is propagated, by sympathy and juxtaposition, from the latter organ to the former. In not a few cases it will be found, after the minutest inquiries, that derangements of the stomach and bowels were long antecedent to any appreciable disorder of the uterus. If so, we are not warranted in assigning to the latter priority in the chain of disease.

May we not plausibly suppose that, in *some* cases at least, the amenorrhœa of chlorosis is simply the consequence of a deficiency of the monthly superabundance of blood, which

ought normally (so to speak) to occur in every healthy young unimpregnated female; this deficiency being, in its turn simply due to torpor of the digestive organs, and a consequent defective supply of chyle?

Whatever the nature and origin of chlorosis may be, it is certain that the most successful treatment of it is found to consist of means addressed to the digestive organs, to which, however, is to be added the important means, marriage, which, of course, in cases of chlorosis plainly originating in the want of this, constitutes the natural and radical cure. But, as I have already observed, chlorosis has sometimes other than a sexual or uterine origin, of which a further proof is, that it occasionally occurs in married women apparently attached to their husbands, and having, seemingly, no grounds to complain on their part of the non-fulfilment of marital duty.

Pills or mixtures, including quinine, aloes, and the preparations of iron; gentian, aloes, and iron; myrrh, zinc, and absinthium; canella, cardamoms, cloves, ginger, horse-radish; ergot of rye, savine, cantharides, rue, phosphorus; wine, walking, riding, dancing; scenes of gaiety and excitement,—are some, among the various means, which we must put in force.

*Chorea.*—This is a singular and obscure affection, consisting of an involuntary action of the spinal motor nerves. In a few cases, its *origin* seems to be cerebral and mental, the involuntary action of the motor nerves being at first secondary, though afterwards remaining as a permanent, and as the sole affection. In other cases, it seems attributable to an excitable nervous temperament, coëxisting with muscular debility.

It not unfrequently also arises from chronic irritations of any kind. Thus the irritation of intestinal worms is occasionally propagated, by the sympathetic nerve, to the spinal cord. Prolonged itchy affections about the anus have also caused it.

Such being its various origins, we may judge that the unvarying and routine treatment of it by purgatives, suggested by Dr. Hamilton, of Edinburgh, was irrational and dangerous. It suited, of course, only those cases in which there were intestinal worms or irritating fæcal accumulations, or torpid bowels, but was injudicious and injurious in the cases of feeble, ill-fed, cachectic, and susceptible subjects. In those cases, not uncommon, in which chorea is caused by, or connected with, sexual excitement, the practitioner must of course suggest marriage. Failing this, exercise, restrained diet, and purgatives, may be proposed; but while these, even at the best, are inadequate and unsuitable means, they may, if pushed so as to obtain the end in view, cause greater evils than they remove or prevent.

In chorea, there is generally more or less derangement of appetite and digestion, more or less irregularity in the action of the bowels. Even in cases in which there is no suspicion of worms in the intestines, we have great faith in the use, in draught and enema, of the oil of turpentine. Friction with the same over the abdomen and lumbar spine will be found very useful.

A conjunction of metallic tonics and bitter vegetable extracts, tonic and purgative, should be steadily tried. Seldom, except in chorea, traceable to want of sexual intercourse, should purgatives be employed apart from tonics. We place much reliance in the use of nitrate of silver, combined with nux vomica, and continued for several weeks, purgatives being used or not, according to indication.

*Chyle, chyme.*—These, both alphabetically and physiologically, may be considered in connexion. We purpose not to enter here (having, to some extent, done so elsewhere) into any elaborate chemical disquisition respecting them. It may, in general, be observed, that they are the primary, and therefore the fundamental and most important, processes of the animal organism. Through them are elaborated those fluids and tissues, to whose wondrous combinations, as the condition of such combinations, Life is attached.

It is an observation of Plato, who paid no small attention to medicine, that "an error in the first decoction is never cured in the second." The precise meaning of these words, as understood by him who used them, it is needless to inquire, but it must be admitted, that the remark applies essentially to the relations of the chyme and chyle, it being obvious that the normal constitution of the latter must be principally or wholly dependent on that of the former.

According to the most recent and authentic researches, chyme is a complex fluid. It most probably contains, in *partial* and *only* partial union, with the dietetic ingesta, the various principles forming the gastric juice, such as hydrochloric, lactic, acetic, carbonic, and, it may be, oxalic and butyric acid; and, in addition to these, the principle called pepsin. Though pepsin undoubtedly aids in the chymification of food, yet, as it is certain that hydrochloric, and perhaps one or more of the above-named acids also most materially and essentially coöperate, hence the giving of alkaline draughts immediately before meals, or inconsiderately on other occasions, may do evil, by neutralizing the physiological as well as morbid acids. Dr. Prout judiciously recommends that, generally, the dose of antacids should not exceed ten or fifteen grains of the alkaline salts.

Bentinck-street, Manchester-square.

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ON THE

# CAUSES, PATHOLOGY, AND TREATMENT OF DEFORMITIES IN THE HUMAN BODY.

(WITH CASES AND ENGRAVINGS.)

By JOHN BISHOP, ESQ., F.R.S.,

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## No. VIII.—MECHANICAL AND OTHER CAUSES OF DISTORTION.

*Distortions of the foot, (continued.) — Talipes calcaneus.— Tenotomy. — Calcaneo-metatarsal ligament not instrumental in the production of talipes.— Congenital malformation of tarsal bones.—Its treatment only palliative.—Alterations in the form of the tarsal bones produced by mechanical causes.—Case illustrating this form of distortion.—The hand liable to distortion.—Various positions which it may assume.—Theory of abnormal contraction of muscles.—Power of elongation in the antagonists of contracted muscles illustrated.*

Besides the several forms of talipes described in No. VII., in which the foot, being preternaturally extended, abducted, or adducted, gives rise to talipes equinus,—talipes equino-varus, —and talipes equino-valgus,—there is another form which is more rare, less permanent, and attended with less injurious effects—namely, talipes calcaneus, in which, when the body is upright, the heel only rests on the ground. In this condition of the limb, the action of the flexor muscles of the foot preponderates over that of the extensors, which is contrary to the tendency of the action of muscles in general. This form of distortion is often congenital, but may arise at any period of life, if the motor nerves of the flexor muscles are in a state of exalted action. In the earliest stages of infantile existence, when the spine is unable to support the head and trunk, the body falls backwards and forwards, unless it is supported. Infants are often suffered by parents and nurses to remain with the trunk in a flexed position, by which means the spinal cord is bent, and the anterior column more or less compressed, and forced into a curve corresponding to the flexion of the body. Under these circumstances, in conjunction with various other causes which operate on the nervous system of infants, it is not surprising that the foot sometimes takes the form here mentioned. This may happen either in one or both limbs; but, as the foot can be extended with very little force, and the powerful extensor muscles are ready to aid any mechanical means that may be employed to correct the distortion, whilst the weight of the body tends to bring the foot into its natural position as soon as the patient is old enough to walk, little difficulty is experienced in restoring the foot, by very simple methods, to its natural state. Mr. Tamplin, however, considers the section of numerous tendons necessary in these cases, and gives the following directions.

"The plan I have adopted is the following:—to pass in a small sharp-pointed knife on the inner side of the extensor communis, beneath the tendons of that muscle, and also that of the peroneus tertius, and to divide them; then to introduce the knife on the outside of the anterior tibial and extens or pollicis tendons (which you will find raised from the joint,) pass it inwardly (as it regards the leg) beneath them, turn the sharp edge of the knife to the tendons, and divide them; you will then avoid the risk of puncturing the anterior tibial artery, which, *although it might be compressed easily, had better be avoided.*"*

This passage affords a fair illustration of the general practice of those who believe that the section of tendons is the proper treatment in these cases of infantile distortion of the foot. But, after what has been already stated in No. III., relating to the subject of myotomy and tenotomy, it will be unnecessary

* Tamplin's Lectures on Deformity, p. 89, 90.

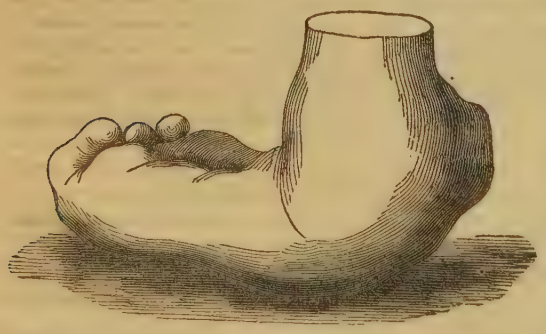
to express any opinion on the treatment recommended by Mr. Tamplin in these particular cases.

Maisonneuve and others consider that the calcaneo-metatarsal ligaments, or aponeurosis plantaris, is instrumental in the production of talipes varus. Delpech, on the contrary, rejects this hypothesis because it is insufficient to explain the occurrence of talipes valgus; but it appears to the author that both the hypothesis and the objection are equally groundless, since a close examination into the relative positions of the several points of attachment of the ligament in question will be sufficient to convince any person, having even a slight notion of mechanics, that its contraction cannot possibly produce abduction or adduction of the foot, much less varus or valgus. The office of this ligament (as stated in No. VII.) is to preserve the longitudinal arches of the foot, and its attachments are arranged accordingly. It may here be observed that the functions of the ligaments have not been sufficiently studied, and that little is known of their pathology. Their extensibility and contractility under ordinary circumstances are confined within very narrow limits; but these properties vary in different persons. Some persons have very little mobility in the joints of the spine and extremities. Others, used to gymnastic exercises, can bend the trunk backwards, and touch the ground with the back of the head, showing a great degree of extensibility, and a diminished force of elasticity in the perpendicular and crucial ligaments of the spine.

When distortions of the foot arise from congenital malformations of the bones, it is obvious that the treatment, although it may often be of great service, can only be palliative. Long continued use of the feet in certain positions will, moreover, so materially alter the figure of tarsal bones originally well formed, as to render the case equally intractable with those of congenital malformation. The following case will serve as an example.

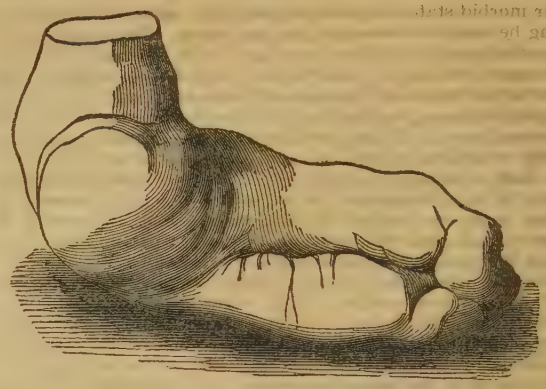
The patient, a gentleman, aged fifty years, living in the country, states that he had enjoyed perfect health until he was six years old, but that in November, 1803, after frequently sitting on the ground, he was seized with a fever, which for a time seriously affected the brain, and was attended with cutting pains in the calf of the left leg, which from that time began to lose a portion of its volume. When the febrile symptoms had subsided, he had recourse to the warm baths at Bath, which were continued for six months. He then began to tread on the external edge of the foot, and had recourse to iron supports. The temperature of the deformed leg is much lower than that of the other, and he suffers much in it from cold and chilblains during winter. Since the first attack he has suffered once from rheumatic fever, owing to lying in a damp bed; and was confined a short time from an injury of the spine, produced by the seat of a mail-coach, which has left a chronic pain in the back. On examination, I found that the astragalus had rotated with the os calcis laterally inwards, the cuboid and internal cuneiform bones nearly approximated, and the five anterior tarsal, the metatarsal, and phalangeal bones, had rotated through an arc of 156°, so that the plantar side of the foot turns upwards, as seen in fig. 1, and the patient walks on the

Fig. 1.



dorsum of the foot. The compression on the side of the transverse arch, produced by the weight of the body, has made a longitudinal furrow in the sole of the foot, (fig. 2.) As the foot, in its present state, is ill adapted to sustain the weight of the body, and the friction incidental to walking on its dorsal surface, the skin formerly became abraded, and the patient walked with pain and difficulty. To remedy this evil, he contrived a boot, which suited the altered form of the foot, and being wadded protected the skin from injury; by

Fig. 2.



which means he can walk as many as twenty miles in a day. The deformity has existed from the period of his sixth year, and the exercise of the foot in the position already described, during so many years, has produced such an alteration in the articulating surfaces, and in the figure of the tarsal and metatarsal bones, that there is no longer any prospect of restoring the part to its normal state, either by mechanical or surgical treatment. The patient is willing to submit to the amputation of the limb; but as he is capable of walking many miles with the limb in its present state, and merely presents a limping gait in walking, I advised him to continue the use of it; and he ultimately agreed with me that an imperfect natural limb is better than a wooden one. This is one of the cases continually presented to the surgeon, wherein remedial measures have been neglected in the early stages of the complaint, when success is scarcely doubtful; and which in the course of time become of so intractable a character, as to render a cure impossible. It appears that during the fever the patient had been delirious for about a fortnight, and at the same time had lost the use of both legs, one of which only recovered. Hence there can be little doubt that, under the attack of fever, the spinal cord suffered some permanent organic lesion. In fact, the majority of cases of talipes proceeds from causes which, as far as observation extends, are not of a purely dynamical nature; but, as is stated in No. VII., are referable to some disordered condition of the excito-motor portions of the nervous system.

When these disorders arise early in life, the muscles affected, not being fully developed, are easily brought into a normal position; but when remedial measures have been long neglected, the muscles not only offer greater resistance, but, according to the principles already detailed in No. III., become contracted. When, for instance, muscles, such as those which raise the heel in walking, and which are instrumental in the production of talipes equinus, are affected in the adult, it may readily be imagined that, owing to the size of these muscles, considerable force would be necessary to stretch them; but it must be remembered that in this case the weight of the body would act at a mechanical advantage in depressing the heel, whilst the muscles would not be opposing the depression with their normal power. When the tendo-Achillis is divided, the distorted limb requires to be kept in the proper position for a considerable time. The author has been called in to complete the cure of cases of tenotomy, which, although the subjects were young persons, required the use of instruments many months after the division of the tendon. This circumstance furnishes an additional argument against tenotomy in general, since in many cases the cure is not hastened by that mode of treatment.

The superior extremities are much less subject to distortion than the inferior, the latter having a far greater amount of labour to perform, in the daily exercise of supporting and propelling the body. The joints of the superior extremity are in like manner less subject to disease than those of the inferior, and paralysis and spasm of the muscles are less frequent, whilst the distortions which do occur are often the result of mechanical violence. Fractures of the clavicle acromion, coracoid process, and neck of the scapula, when neglected, or improperly treated, leave the positions of the two shoulder-joints unsymmetrical, and attended with an impaired range of movement of the arm. Although the shoulder and hip are joints of analogous structure, the former usually escapes those serious affections which so commonly happen to the latter. The analogy between the structures of the elbow and knee joints is not so close, yet the proportion of

their morbid states is perhaps nearly the same with that existing between the shoulder and hip joints. The simplicity of the structure of the elbow, compared with the knee, is among the causes tending to preserve the former from disease; but if we take into account the cases of distortion resulting from mechanical violence, the elbow is, of the two, much the more subject to derangement. When persons fall from a great height, they rarely reach the ground on their feet. In the act of falling the body is usually inclined to the horizon, and the impulse given to it at the moment of departure generally causes it to rotate more or less on its long axis, about the centre of gravity, and thus the head and superior extremities often reach the ground before the feet, and as the arms are naturally extended to break the force of the fall, fractures, dislocations, and concussions, terminating in contractions of the limbs, with diminished range of motion, often result. It is, indeed, very surprising how many of those who fall from great heights escape instant death, or at least the most serious consequences. The nature of the ground on which the body falls produces very great differences in the effects. Thus one person may fall from the top of a cliff, eighty feet in height; but in consequence of pitching upon the loose gravel of the beach, escape with a few trifling bruises; whilst another, in walking along the pavement of London, accidentally slips, falls backward, strikes the occiput against the edge of the curb-stone, and fractures the skull. The latter case is familiar, and an instance of the former happened not long since, at Ramsgate. The following occurred among many similar cases in the author's practice. A painter, standing on a ladder, fell to the ground from the height of forty-five feet, pitched on some soft earth in a garden, and escaped with only a fracture of the coracoid process of the scapula. When it is borne in mind that the force with which the body reaches the ground is as its weight multiplied by the velocity acquired during its descent, it is astonishing that any such accidents should not end fatally; but these occurrences show how beautifully the mechanism of the body is adjusted to resist the severe shocks to which it is liable. There will be found, in Sir A. Cooper's Treatise on Fractures and Dislocations, many examples wherein external violence has injured the mechanism of the joints, and distorted the positions of the limbs; and the nature and treatment of diseases of the joints have been so fully considered by Sir B. Brodie, Bonnet, and others, that it is needless to enter here into any detailed account of these branches of the subject.

Anchylosis of the joints of the superior extremities is not so prejudicial in distorting other portions of the body as when it occurs in the legs. The loss of power to swing the arm, owing to an anchylosed state of the shoulder-joint, tends to occasion twist of the trunk; but fortunately these cases are of rare occurrence. Anchylosis of the elbow-joint would not have the same tendency to alter the figure of the trunk. The forearm and hand may be fixed in a state of pronation or supination, either from an altered state of the joints, or from contraction of the muscles. The structure of the wrist allows it a greater freedom of motion than the tarsus, the bones being smaller and weaker, and endowed with a greater degree of mobility, so as to enable the hand to perform its various movements. By means of injections, M. Bonnet has shown the various positions which the hand may assume in cases of effusion within the joints. He states that the frequent participation of the second row of the carpal bones in the diseases of the first is owing to the prolongation of the synovial membrane from the first to the second. The hand is liable to distortions of the same nature as the foot;—that is, under those pathological conditions of the nervous system which, by producing spasm and paralysis, disturb the equilibrium of the muscular forces. The hand may be retained in a state either of transient or permanent flexion, extension, abduction, pronation, or supination, according to the class of muscles involved in the malady. In the majority of cases, the influence of the principle already mentioned is observed; namely, that the greater amount of action takes place in the most powerful muscles, rather than in the weaker; only in the hand the flexors are more powerful than the extensors, an exception to the rule observed in other parts of the body. When the extensor muscles are paralyzed, their antagonists draw the hand into a state of permanent flexion; for these muscles, having lost their normal tension, become permanently contracted, and the limb, not being exercised, becomes more or less atrophied, as may be observed in many cases of club-hand.

Pathologists do not appear to have observed with much attention the changes which muscles undergo when released from the tension and action to which they are subjected in their normal state. Abnormal contraction, as well as elongation, takes place slowly and gradually through minute spaces. If a limb, such as the arm, is kept bent during twenty-four hours, there is a sense of distress when it is again extended; but, if the period of its being retained in a bent position is prolonged to some weeks, the limb cannot at once be perfectly extended. Or let us suppose the period of continued relaxation of the extensor muscles of the leg to be six weeks, and the consequent contraction during that time to be an inch, which agrees with an observed case in an adult, then since the contraction is gradual, if we also suppose it uniform, $\frac{1}{42}$th of an inch will be the contraction each day, and the muscles will require time to recover their normal length, resisting any sudden elongation with an energy proportional to their masses. Since then the law of elongation is similar to that of contraction, we see why persons who attempt suddenly to elongate a muscle must fail, although the desired effect may be easily accomplished by promoting the gradual restoration of muscles to their normal length. A man who had fractured the patella of the right knee stated that, in the treatment of this injury, both legs had been kept in an extended position for several weeks, that when he was released from this position, the range of motion of the sound leg was much reduced, and that it was some time before he could flex that leg at right angles with the thigh. The right leg had lost the power of rotation beyond about 45°, an effect which most probably depended, partly on distortion of the patella, and partly on contraction of the extensor muscles, and not on any elongation of the flexors; for on that supposition, the limb might have been fully bent by the aid of the hands, which in this case was impracticable. The unsound leg was unable to support the weight of the body steadily, so that he had recourse to the use of crutches for a long time. The gradual restoration of the sound leg to a normal range of motion, by mere exercise of the limb, proves beyond dispute the possibility of muscles becoming elongated simply by the action of their antagonists, whenever the nature of the case admits of the adoption of this principle. This is, however, a subject which will occupy particular attention in a future number.

*Errata.*—In No. VII., page 638, Fig. 4, *for* "*x*, the axis of motion of the astragalus," *read*, "axis of the horizontal movements of the foot," and in column 2, line 59, *for* "cerebral," *read* "central" portion of the nervous system.

## Reviews.

*Clinical Facts and Reflections. Also, Remarks on the Impunity of Murder in Some Cases of Presumed Insanity.* By Thomas Mayo, M.D., F.R.S. London: Longman and Co., 1847. pp. 217.

This volume consists, for the most part, of a collection of papers already published in the *Medical Gazette*. Their publication in a collected form may be taken as an indication of the value set upon them by their author. There is a number of cases, some of them highly interesting, narrated with care, but with a little inclination to prosiness and the establishment of nice distinctions rather than bold practical guiding. Considering the age and standing, they must be held in the light of *nugæ medicinæ* rather than as the fruit of earnest labour.

In the treatment generally adopted, there is nothing remarkable; it is good, without being striking enough to enable us to make any very advantageous selections. There is a tendency to profusion and lengthiness of prescription which occasionally reminds us of a former day. Thus a patient who had been relieved of gastrodynia, but had become affected with a relapse, was prescribed for to the following extent:—

"Extract of opium, two grains; extract of aloes and gentian, of each ten grains; calomel, three grains: to be divided into twenty pills; one, twice a day.

"Calomel, five grains; compound soap liniment, and compound camphor liniment, of each two drachms: one half to be rubbed upon the epigastrium twice a day.

"Infusion of cloves, four ounces; pimento-water, an ounce and a half; solution of potash, a drachm; tincture of hops, three drachms; syrup, a drachm: a mixture; two tablespoonfuls to be taken frequently."

Of this plan, the author naively remarks, that it "was entirely unsuccessful. It obviously wanted simplicity." Then why prescribe or record it?

In another patient suffering from gastrodynia, Dr. Mayo takes note of an interesting fact:—

"His diet meanwhile was simple, and very moderate; vegetables not allowed; a small quantity of sherry taken daily. It was observed by himself, that the taking of food was effected with least pain when his body was placed at an angle of 45° on the couch; and it was remarked, that in that attitude a considerable hardness and fulness of the liver became observable to about two inches below the right ribs, which was totally unobserved in any other attitude."—p. 23.

Some excellent remarks are made on the necessity of a correct diagnosis between the hysteric diathesis and hysteria; between the symptoms of hysteria and the symptoms of organic disease arising in, and masked by, the hysterical diathesis. After describing some cases in which doubtful diagnosis had been made, and doubtful practice followed, the author continues—

"Similar doubts may, I apprehend, be entertained as to the propriety of designation in the following case, classed by Sir Benjamin Brodie under the head of 'Various forms of local hysterical affections:'—

"'I was consulted,' he observes, 'respecting a young woman, who complained of severe pain and morbid tenderness of the knee, in the first instance attended by no perceptible enlargement of the joint. The remedies which, with as much knowledge as I then possessed, I was led to recommend, gave her no relief, and after some time a degree of slight tumefaction took place, depending, as it seems, either upon fulness of the small vessels, or effusion of lymph or serum into the subcutaneous cellular tissue. She had been in this state for a considerable time, when she was seized with a succession of violent paroxysms of hysteria, which terminated in a state of hysterical affection of the brain, in which she lay in a state approaching to coma, with dilated pupils. She was attended by Dr. Babington and myself. I do not undertake to say whether the disease yielded to the remedies employed, or reached its natural termination, but from one or other of these causes the patient recovered, and from that time she never complained of her knee.'

"Now the evidence that this affection had been a local hysterical affection of the knee is surely defective. It was such, because the patient was afterwards attacked by a succession of paroxysms, terminating in an hysterical affection of the brain, in which she lay comatose, with dilated pupils. But paroxysms terminating in coma and dilated pupils themselves require the evidence of coëxisting hysterical symptoms to entitle them to the character of hysteria, unless, indeed, they have yielded to a treatment decidedly sedative and antispasmodic: now in this instance the treatment is not communicated to us; the argument, therefore, runs in a circle.

"Much loose language respecting the proteiform nature of hysteria, and its tendency to simulate other diseases, has been led to by the confusion of disease with diathesis, above illustrated. But I am disposed to think, admitting the objectionable nature of such terms, that more valuable practical results would be gained from an hypothesis of palsy simulating hysteria, than from the (present) reverse hypothesis. Cases of both kinds may be found in the valuable posthumous medical writings of Dr. Parry, of Bath; and Dr. Billing has recorded a case, in which globus hystericus, with palpitation, ensued in a young man, upon a violent strain of the spine, resulting from a fall under a heavy weight. I have known no instance in which the treating a 'local hysterical affection' as humoral or inflammatory, would have been so mischievous, as the contemplating that globus hystericus, and the accompanying affection, in the light of hysteria.

"But the following passage, in which Dr. Abercrombie reviews the 'phenomena which have been observed to accompany disease of the spinal cord,' might almost be taken as a catalogue of symptoms often imputed to hysteria, and too often treated conformably.

"'In the parts connected with the head, we find,' he observes, 'distortions of the eyes, convulsive affections of the face, difficulty and loss of speech, loss of voice, contraction of the jaw resembling trismus, and difficulty of swallowing, which is said, in some cases, to have nearly resembled hydrophobia. In the viscera of the thorax, there has been observed oppression, palpitation, and strong and irregular action of the heart, painful sense of stricture in the region of the diaphragm, and difficulty of breathing, which, in some cases, has been permanent, and in other cases has occurred in paroxysms resembling asthma. In the muscular parts we observe convulsions and paralysis; the convulsions, in some cases, resembling chorea; in others, tetanus.'*

* Researches on Diseases of the Brain and Spinal Cord. Third edition, p. 389.

"I have pursued the above inquiry without any intention to use the terms hysteria and hysterical diathesis, in reference to any other subject matter than that to which I believe these terms are ordinarily applied by the profession, and without any desire to establish new definitions. My object will have been accomplished, if I shall have succeeded in establishing the importance of keeping in mind such practical distinctions as these terms suggest, by glaring instances of mischief resulting, or liable to result, from their neglect. The practitioner who is anxious to escape the mistake of treating indications of the hysterical diathesis as if they involved the presence of hysteria, will consult with advantage the work of Mr. Louvel Villermay, in which the genuine varieties of the disease are admirably portrayed. Of the whole subject no better account can be found than that of Sydenham, in the Dissertatio Epistolaris; with this drawback, that he entirely confounds those two points of view which I have endeavoured to keep asunder."—pp. 98—101.

In different parts of the volume, the question of the real influence of mesmerism, homœopathy, and the *vis medicatrix*, are touched upon. As regards mesmerism, Dr. Mayo is favourably inclined, and calls for investigation; he considers the present an excellent opportunity for instituting a commission to inquire into its reputed powers. For the evidence upon which such an easy leaning to this form of quackery is yielded to, Dr. Mayo only gives, in the present work, an account of a case of presumed double consciousness, in which, upon the author's own showing, there is presumptive evidence of malingering and deception on the part of the patient. Against homœopathy Dr. Mayo is decided, but his decision is of the gentlest kind. On the subject of the *vis medicatrix*, ranked as so omnipotent by Dr. Combe and others, he does wax a little warm, and confutes the absurd dogma, that we should be careful, in the treatment of diseases, not to *thwart* Nature, but to act according to her *natural laws*, with spirit and ability. The following passage will show this:—

"When pneumonia proceeds from its congestive to its inflammatory stage, then onward into hepatization and purulent infiltration, can anything be more natural or more fatal than its progression? As a disease in which the so-called natural treatment is applicable—that is, in which most of those resources must be excluded which thought has elicited from the stores of Nature, Dr. Combe has most unhappily selected pleurisy; and here, supposing the exciting cause not to have been violent or long continued, he recommends the absence of medicinal agents. He even argues in favour of effusion being allowed to take place. The possible slowness of its unassisted absorption, its injurious influence upon the investing membrane of the thoracic cavity, the gradual substitution of a purulent for a serous effusion, where bloodletting and the use of mercury might have forbidden that event, is left unheeded. Surely these are contingencies not to be hazarded, with a view to follow laws of disease which lead to structural disturbance. The laws and history of ague have been most attentively and wisely studied for many ages; not in order that our practice might be in unison with those laws, but that it might interrupt and break the sequence of phenomena which would take place under them."—p. 183.

In the concluding part of the volume, the subject of insanity in relation to criminal trials is canvassed; Dr. Mayo, who has written on the subject of insanity specially, considers that a too great leniency has recently prevailed in our courts of justice, in relation to this question.

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*Rapport a l'Académie Royale de Médecine sur la Peste et les Quarantaines, fait, au nom d'une Commission,* par M. Le Dr. Prus. Accompagné de piéces et documents, et suivi de la discussion dans le sein de l'Academie. pp. 1056. A Paris: chez J. B. Baillière, &c. 1846.

*Report to the Royal Academy of Medicine on the Plague and Quarantines, edited, on behalf of the Commission,* by Dr. Prus. Accompanied by documents and papers on the subject, and followed by the discussion in the Academy, &c.

(*Continued from p. 97.*)

There are certain terms used in our descriptions of disease which, we fear, rather tend to darken than to enlighten our profession. Amongst these is the word epidemic—a term innocent enough when employed in the vague sense which it

etymology would lead us to assign to it, but totally unfit for purposes requiring scientific exactness in their nomenclature. Literally, it is applicable to any disease prevailing amongst the many—the people. Most absurdly it has been used in contradistinction to contagion, whereas it by no means expresses the mode in which the disease is communicated, but simply the fact of its extensive prevalence. This meaning has been given to the word from the idea, that in an epidemic the very diffusion precludes the possibility of individual infection; that it supposes an agency resting on broader foundations—one involving the condition of the air which is breathed by, or the food and water supplied to, the sufferers.

Still our charge of *vagueness* against this term is fully substantiated by enumerating a fraction of the diseases which it qualifies, nay, of which it forms the chief character in many nosological systems. By it is designated the influenza of our own country, appearing simultaneously in places remote from each other, and most dissimilarly situated as regards soil and atmosphere, attacking communities most unlike in their social position; some plunged in excessive misery, and others enjoying all the comforts and luxuries of affluence. It is used to express that plague continually brooding over the Delta and Lower Egypt, when about every tenth year it reigns with more than usual fury; and it is employed as an appellation for the disease which swept with wide and "continually spreading range, from the shores of Calcutta to the coast of Bombay," crossing the Indian empire contrary to the wind's usual course, in exactly one year. We need not give more examples of the unprecedented latitude allowed to this term. It is employed as a designation in the most dissimilar complaints, and we are equally contented with our knowledge of the progress of a catarrh, or the career of a pestilence, when we are able to denominate either of them "an epidemic."

We were therefore pleased to find that the Commission endeavour to give us the characters of an epidemic disease before answering the question—"If the plague has exhibited that character when it has raged with violence in Africa, Asia, and Europe?" It, however, seems apparent, that a vicious mode of determining the matter has been resorted to, for they have evidently taken the plague as their type, and from it they have drawn five categories, as applicable to epidemic diseases generally. These they have based on no extended observations, and have then tried the plague by the very results derived from it alone, and have pronounced it in all respects "an epidemic." This is "reasoning in a circle"—a most illogical proceeding, even when resorted to by French savants. In their opinion, therefore, the chief characters of an epidemic are included in the five following categories:—

"1st.—Epidemic diseases have a special progress; we generally recognise three periods,—that of commencement; that of the "acme," or greatest intensity; and a third, of decline or termination. These three periods often exhibit the disease with different symptoms, and varied severity.

"2nd.—During an epidemic, other diseases are less numerous, and present the character of the prevailing affection. In other words, there is an epidemic constitution.

"3rd.—During an epidemic, the healthy generally feel more or less the influence of the disease. (Thus, diarrhœas are said to be common during an epidemic of cholera; and in the plague, a trifling wound in the axilla, or groin, will speedily inflame, and become very painful.)

"4th.—Epidemic diseases frequently appear, and cease about the same season of the year, and generally last about the same time.

"5th.—An epidemic is often preceded by other affections, more or less severe, and more or less general, which serve, in some measure, as its *avant-coureurs*."

In the discussion in the Academy, M. Dubois objected to most of these characters. We have not space to notice the remarks of the various speakers *seriatim*. One, however, we must touch on. To the observation, "that during an epidemic other diseases are less numerous, and present the characters of the prevailing affection," he opposes the fact, that during the epidemic of the cholera in Paris, no diminution or change in the progress of other diseases occurred. The mortality in 1832 was, as is usually the case, about 22,000 from ordinary diseases, and if we add the 18,000 victims of the cholera, the mortality for that year would be about 40,000. Equally opposed to this assertion of the Commission is a fact mentioned by Dr. Hartley Kennedy, in his notes on epidemic cholera. When this disease occurred at Surat, the ordinary fever was more than usually prevalent and fatal. "Although the epidemic cholera was not carrying off its thousands, still the endemic fever, which always prevails towards the termination of the rains in Guzarette, was more than usually destructive."

In fact, the members of the Commission seem themselves doubtful of this conclusion, for in the Report they subsequently observe, "However great may be the influence exercised by the plague on other diseases, during its epidemic prevalence, we must not consider the mortality as depending on it alone. In the plague which raged at Alexandria in the years 1834, 1835, we can compare the mortality from the plague, and that from other disorders, month by month." To this the Commission annex some statistics, which we lay before our readers in a tabular form.

| | Mortality from ordinary diseases. | Do. from plague. |
|---|---|---|
| December, 1834 | 250 | 109 |
| January, 1835 | 292 | 151 |
| February „ | 483 | 821 |
| March „ | — | 4,329 |
| April „ | — | 1,897 |
| May „ | 102 | 312 |
| June „ | 124 | 41 |

If we drew any conclusion from such a table as the preceding, it would be, that up to a certain period, the mortality from ordinary diseases augmenting with that from the plague, some general cause of disease produced both. From December to February, the general unhealthiness is indicated by the gradual increase of the deaths from both sources. But in March a singular phenomenon presents itself to our notice. The plague, like Aaron's rod, suddenly and completely swallows all the minor sources of destruction. General disease, which, gradually augmenting, had, in the previous month, contributed 483 to the bills of mortality, ceases, as by some incantation, and the plague reigns not only paramount, but alone, carrying off more than 4000 victims. Now, we can hardly credit this; we, at least, require more facts to convince us. In this country, during the prevalence of cholera, the most dissimilar diseases were grouped under that appellation. Thus diarrhœa, peritonitis, and fever, were alike honoured by the name of the dread destroyer. In one case a strangulated hernia was discovered by a medical man in a patient abandoned by his friends. The influence of fear is sufficient sometimes to warp the judgment of even the most calm and penetrating; and when, in the city of Alexandria, the weekly mortality exceeded one thousand, it is not a matter of astonishment if the terrified survivors reported the causes of death incorrectly, and ascribed dissolution from every source to the prevailing pestilence. We cannot here enter on the discussion of the causes assigned by the Commission to epidemic plague. With respect to its periodic return in Egypt about every tenth year, no explanation is attempted. If permitted to assign any cause for what is denominated epidemic plague, we should consider it simply an aggravation and extension of those conditions which produce the endemic variety, or that which is erroneously denominated sporadic, in the French report. We say erroneously, for probably the plague is never, in the strict sense of the term, "sporadic"—that is, independent of a special external influence. The Commission have endeavoured to prove, that the so-called sporadic plague differs in many characters from the epidemic. With the exception of the assertion, that the sporadic species is not contagious, all the other differential characters may be explained

by supposing the same cause acting with variable intensity. The assertion, that the sporadic, or, more properly, the endemic form of the disease, is not contagious, is hardly based on sound reasoning. To the very limited extent assigned by the Commission to epidemic plague, we think we are justified in pronouncing the endemic also contagious; at least, if we allow for the minor intensity of the latter, a fact which would probably modify it in this, as in all other respects. We cannot here omit the insertion of a short narration, which goes far to prove how far good food and the ordinary comforts of life will modify the effects of even the epidemic plague.

"Upon the banks of the canal, leading from Alexandria to the Nile, there is a property belonging to M. Tortizza, the Greek consul, who received it as a present from the viceroy. The Fellahs working on this property, better fed and clothed than those in the surrounding villages, have lost in the epidemic of 1835 only twelve out of a total of 400, whilst the neighbouring villages, placed in the same relations as to free communication with the infected, and atmospheric influences, have lost half their population."

Whatever, therefore, may be our difference of opinion as to the causes of plague, it is gratifying to observe that it may be rendered comparatively inert by extending to all classes the advantages of food and clothing.

The Report concludes its review on the epidemic nature of the plague by attempting the solution of the question—"If the plague be propagated in the manner of other epidemics, by the migration of certain atmospheric influences, and independently of any influence exerted by the infected themselves?" A long chapter, containing many interesting facts on this point, concludes by answering the question affirmatively. Some of the statements here made are of a most anomalous and contradictory character. Thus the citadel of Cairo has never been attacked by the plague, even when it has prevailed most fearfully in the city below. Malta possesses a spot inaccessible to it, and which has hence received the name of "pure," (safi.) Yet opposed to these facts are the opinions of Clot Bey and Aubert Roche, who, from their experience of the character of the disease, believe it possible that it may pass over the Mediterranean from Alexandria, and alight on Marseilles. For this extraordinary belief no facts are assigned, with the exception that the plague has appeared frequently in places very distant from each other, and that it has been known to pass over intermediate villages to attack others more remote. These circumstances would be certainly more in accordance with the belief, that certain atmospheric changes, extending over a greater or lesser area, induced an endemic constitution in localities favourable to the development of morbific agencies. The idea of a mere migrating atmospheric influence leaves two-thirds of the facts totally unexplained. In spite of the labour here expended, the result is unsatisfactory. We can arrive at no conclusions. With respect to epidemic diseases, their true history is yet to be unfolded. Not by partial observations on one disease of this kind, but by a general survey of the class,—from the slight catarrh to the deadly plague,—shall we be able to form safe and permanent opinions.

We shall, in an early number, briefly examine the most practical portion of the report—viz., that which investigates its alleged power of transmission by individual infection, by clothes or merchandize.

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"Thick darkness besets the subject of etiology. Not unfrequently causes are found for diseases, which, after a time, are found to be completely false. How often are colds and wettings cited as causes of disease! In the course of the musical festival which took place in the Palatinate, under the direction of Hofzollmeister Frank Lachna, a party of at least twenty thousand was assembled near the ruins of Magdeburgh Castle. The whole of them, with scarce an exception, were wet through without any disease ensuing, as many feared there would."—*Pauli.*

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 27, 1847.—Mr. Liston in the Chair.

OBSERVATIONS ON A CASE OF SPONTANEOUS GANGRENE OF THE LOWER EXTREMITIES, ARISING FROM THE FORMATION OF COAGULA IN THE LOWER PART OF THE ABDOMINAL AORTA, IN THE ARTERIES GIVEN OFF BELOW THE SUPERIOR MESENTERIC, AND IN THE ARTERIES OF THE AFFECTED LIMBS. By Henry William Fuller, M.B. L.M. Cantab., Medical Registrar at St. George's Hospital.

The author related the particulars of a case of spontaneous gangrene, which fell under his observation at St. George's Hospital about the middle of last year. The patient, a thin, but tolerably healthy woman, thirty-seven years of age, was suddenly seized, on the 8th of June, with most acute pain in the right foot, which shortly afterwards extended up the leg. She was immediately subjected to medical treatment, but without relief; and when admitted into the hospital three days afterwards, her right leg was so exquisitely tender, that the slightest touch caused intolerable pain. Her extremities, however, were neither discoloured nor œdematous. With the exception of albuminous urine, there was no evidence of constitutional disturbance, or of any real mischief at the seat of pain. Various means were adopted to relieve the pain and obtain rest, but without effect, her sufferings being most acute. On the 18th inst., ten days after the commencement of her illness, the superficial veins on the right foot and ankle became rather more distinctly marked than usual, and the foot perhaps rather cooler than the corresponding extremity; and on the 22nd, the coldness became so manifest, and the foot at the same time so decidedly mottled in appearance, that there could no longer be any doubt on the matter. The gangrene which had thus commenced continued to spread till it had involved the whole of the right extremity. On the 30th, the left foot began to mortify, and ultimately the left leg and part of the corresponding thigh. The affected limbs presented excellent examples of gangrene sicca. For the first five or six days, the parts affected became gradually darker and darker, until they assumed a perfectly black appearance; this blackness was then replaced by a brilliant scarlet colour, which in its turn yielded, shortly before death, to an inky-black hue. The parts throughout remained icy cold. The treatment consisted of the exhibition of iodide of potassium, opium, and stimulants, internally, while the limbs were wrapped up in carded wool; but everything failed to afford relief, and she sunk on the 15th of July.

The following is the result of the post-mortem examination:—Every organ in the body was perfectly healthy, with the exception of the kidneys, which presented a well-marked specimen of granular degeneration. The heart and large vessels were most minutely examined, and neither in the heart itself, nor in the aorta, nor in the vessels of the affected limbs, was there the slightest trace of inflammatory action, or of osseous or atheromatous deposit. Indeed, the bloodvessels, both arteries and veins, presented a remarkably healthy appearance. But the lower part of the abdominal aorta, the arteries given off below the superior mesenteric, and the arteries of the affected limbs, together with their corresponding veins, were completely blocked up by firm fibrinous coagula, which were in great measure discoloured, and slightly adherent to the internal coat of these vessels. Some of these coagula, on being cut into, were found soft and cream-like in their centre. In the right auricle and left ventricle of the heart, in addition to the ordinary coagula commonly met with after death, were two coagula, precisely similar to those above described.

The author observes, that from first to last this case presented the ordinary features of senile gangrene; yet none of the usually alleged causes of that disease were present. The heart and bloodvessels were perfectly healthy; she had lived regularly, was in the prime of life, in comfortable circumstances, and in tolerably good health; and as during life there had been no symptom of arteritis, so after death was there no evidence of such inflammatory action.

Having thus shown how unavailing are the commonly alleged causes to explain the formation of coagula in cases like the one under consideration, he proceeded to explain his own views as to the cause of obliteration of the bloodvessels. Admitting that it might sometimes result from arteritis, and sometimes from excessive osseous deposit and consequent interruption to the arterial circulation, he stated it as his belief,

that coagulation is not unfrequently due to a peculiar condition of the blood itself. He illustrated this point by reference to facts which have lately been brought under the notice of the profession, and expressed his conviction that the partial ossification of the vessels, occasionally met with accompanying mortification, should in most cases be regarded as a simple coincidence, and by no means as the cause of the formation of coagula.

The author next remarked on the medical and surgical treatment of such cases, and entered particularly into the question as to the propriety of amputating during the spreading of spontaneous gangrene, pointing out the circumstances which have probably led to the difference of opinion expressed on the subject. He then concluded by drawing attention to the curious variations in colour exhibited by the parts in process of mortification—a circumstance which he did not remember to have seen mentioned in any works on the subject.

Dr. Snow was of opinion that the disease of the kidneys was the cause of all the other mischief. In granular disease of the kidney, the urea, not being excreted in sufficient quantity, was detained in the blood, which was so vitiated by it, that it passed with difficulty through the capillaries, as was proved by the circumstance, that patients with this disease were liable to hypertrophy of the left ventricle, without alteration of the valves to account for it. Now he believed this obstruction to the circulation through the capillaries might proceed so far as to detain the blood till it should coagulate in the vessels, more especially as the presence of urea in the blood caused, in many cases, an increased tendency to its coagulation. In the renal affection which followed scarlet fever, the patients sometimes died from coagulation of the blood in the cavities of the heart, as he had seen; the increased quantity of fibrine in the blood, in many of these cases, was apparent in the tendency to pericarditis, pleurisy, &c., which existed.

Dr. Fuller had not heard before that urea had a tendency to produce coagulation of the blood. Generally, indeed, the blood was thin and liquid in albuminuria. The albuminuria in the case detailed to the Society was, he believed, a mere accidental circumstance, for he had seen precisely similar cases in which there was no symptom whatever of kidney disease. In senile gangrene, generally, the kidney was unaffected, and if affected, it was merely accidental, and had no relation to cause and effect.

Dr. Snow replied, that he was aware that the blood was often thin and watery in disease of the kidney; this arose from the aqueous part of the urine, as well as its other constituents, being detained in the blood, but there were undoubtedly many cases of just the opposite kind.

Dr. Burrows inquired the condition of the uterine functions in Dr. Fuller's case, and having received for answer, that they had not been particularly alluded to, but were probably healthy, proceeded to say that the case in many respects bore a remarkable analogy to a class of cases familiar to practitioners, and occurring in unmarried females who entered our hospitals suffering from amenorrhœa accompanied by anæmia. In these cases there was a kind of phlegmasia dolens resulting from spontaneous coagulation of the blood in the extremities; the disease first affecting one leg and then changing to the other, in the manner that phlegmasia dolens was accustomed to do. This disease, under proper local and general treatment, usually got well. Now, if there had been any irregularity of the uterine functions in Dr. Fuller's case, the analogy between that and those referred to would be still more striking. Dr. Bright, in *Guy's Hospital Reports*, had recorded a series of cases of extensive coagulation of blood from debility; in many of these the spleen was found to be congested, but, like the affection of the kidney in Dr. Fuller's case, this was only an accidental circumstance. The author of the paper before the Society had thrown out a question respecting the use of the preparations of steel in these cases. He (Dr. Burrows) had usually found these medicines of the greatest service; they were not contra-indicated by any evidences of inflammation. In fatal cases, the knife did not reveal any signs of such a state having existed. He agreed with the author respecting the cause of the affection, but he had never seen any instance of coagulation to the same extent as in the case under discussion.

Mr. H. Lee said, that if the view taken by Dr. Fuller of this disease was correct—if it arose from spontaneous coagulation of the blood, the affection could not be attributed to any one organ or set of organs, but must be looked upon as a result which might be produced by any cause which would tend to deprive the blood of its vitality. There were some experiments of M. Cruveilhier, which he thought tended to throw some light upon this point. M. Cruveilhier found, that by injecting ink into the femoral vein of a dog, he produced patches of congestion in different parts of the limb. He also found, that by introducing mercury into the cancellous structure of a living bone, similar livid patches of congestion were produced in other organs, especially in the lungs, and in cases of secondary abscesses, the livid, circumscribed patches of congestion we well know, as the commencement of the secondary abscesses, must be attributed to the effect produced upon the blood by the absorption of pus, or of some other diseased secretion, into the circulating system. If, then, in these cases, the properties of the blood were so altered as to produce patches of congestion in internal parts, might not the similar effects be expected in other cases with regard to the skin? Mr. Lee agreed with Dr. Fuller in his explanation of the pathology of this disease, but thought that the congestion and coagulation of the blood commenced in the capillaries, and not in the large vessels of the limb.

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WOUND OF THE EXTERNAL CAROTID ARTERY, TREATED SUCCESSFULLY BY LIGATURE OF THE COMMON CAROTID. By F. Le Gros Clark, Assistant-Surgeon to St. Thomas's Hospital.

Benjamin W——, a policeman, aged twenty-nine, of bad constitution, was brought to St. Thomas's Hospital on October 14th, at a quarter before two o'clock. A quarter of an hour previously, his wife hurled a sharp-pointed table-knife at him: it entered his neck on the left side, just below the angle of the jaw, making a clean wound about an inch in length. He staunched the blood, and ran to a surgeon close at hand, who placed a compress in the wound, and immediately brought him to the hospital. An ineffectual attempt having been made by Mr. Tolly to secure the bleeding vessels, by dilating the wound, and as arterial blood continued to be poured out in profusion, it was determined, on the author's arrival, that the common carotid should be at once secured. He accordingly performed the operation, whilst Mr. Solly retained his command of the bleeding vessels by his fingers in the wound. Not a tea-spoonful of blood was lost during the operation, and when the pressure was removed from the upper wound, not a drop of blood escaped. The lower wound was closed, and a compress placed on the upper, consisting of a piece of sponge wrapped in gauze. On the following day, (15th,) the compress was removed from the upper wound, and no bleeding followed. He complained of difficulty in swallowing.

16th.—Had a quiet night; no head symptom, nor loss of temperature or sensibility on the left side of the head; branches of the external carotid, on the same side, pulseless; great difficulty of deglutition, and accumulation of mucus in the air-tubes; throat much inflamed.

From this time he continued to improve, and no ill consequence followed the repeated and forced expiratory efforts which were essential to clear the air-passages and fauces from the accumulated viscid mucus. On the 29th, the ligature separated from the artery without the employment of any force, and on the 31st he left the hospital well.

The author remarks thus:—"The interest of the foregoing case is principally of a negative kind, consisting in the entire absence of any untoward symptom associated with, or arising from, the operation. It would seem, therefore, to confirm the opinion, that in similar penetrating wounds in this situation, followed by arterial hæmorrhage threatening life, it is better at once to place a ligature on the common carotid, than to waste time in searching for the bleeding vessels. The bronchitis was a serious complication after the operation. The absence of cerebral symptoms illustrates a remark of Dr. Burrow's, in his recent work on 'Disorders of the Cerebral Circulation,' that such rarely occur where much blood has been previously lost. In the present instance, the external carotid could not have been tied without extending the original wound, and being most likely obliged (supposing the internal carotid to be intact) to apply the ligature close to the point of bifurcation of the common trunk.

Mr. Bransby Cooper believed that the best practice, in cases similar to the one related, was at once to cut down upon the common carotid artery, and secure it. Time was lost, and great risk incurred from hæmorrhage from looking about for the ends of the divided vessels.

Mr. Solly remarked that it would be desirable to ascertain the opinion of surgeons respecting the advisability of securing the common carotid in cases of wounds similar to the present. Generally speaking, in wounds of the external carotid he thought it was better to find the divided ends of the vessel and tie them. But in this case he dared not remove his fingers from the wound for fear of the hæmorrhage proving fatal. While still keeping up pressure in this manner, Mr. Clark

came in, and secured the vessel below in a very dexterous manner. If Mr. Clark had come in before, he (Mr. Solly) thought that he could have so commanded the hæmorrhage by pressure on the vessel, as to have enabled him (Mr. Solly) to have searched for, and secured, the ends of the divided artery.

Mr. B. Cooper meant his observations to apply only to cases precisely similar to the one under discussion. If only the branches of the external carotid were wounded, it might be better to secure the ends of the divided vessels; but here the wound was of the external carotid itself, and therefore it was necessary to secure the common vessel.

Mr. Solly referred to the great loss of blood in the case related, as the cause of the very little head excitement which followed the employment of the ligature. With regard to the mode of treatment pursued in this case, it must be recollected that there was some question as to which vessel were really wounded. The man had been brought to the hospital all the way from Gracechurch-street, and the wound had ceased to bleed, the hæmorrhage returning after his admission into the institution. Mr. Solly referred to a case admitted some years since, under the care of Mr. Travers, of a man, who, whilst incarcerated in a watch-house, stabbed himself with a penknife just under the lower jaw. For this wound, Mr. Travers tied the common carotid. A few days afterwards, suppuration took place in the wound made in the operation, bleeding came on, and the man sunk.

Mr. Le Gros Clark had guarded himself in his remarks on this case, by saying that he should pursue the same treatment in cases of a precisely similar character. In this case, it was probable that the external carotid was wounded, or, at least, some of its branches, and perhaps the internal carotid also. Under these circumstances, it was best to secure the common carotid. He thought, however, that even when the wound was confined to one or two branches of the external carotid, and hæmorrhage occurred to a great extent, a ligature of the common vessel might be required as urgently as though the external carotid itself had been divided.

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SOME INSTANCES OF THE CONTRAST BETWEEN DELIRIUM TREMENS AND INFLAMMATION OF THE BRAIN AS REGARDS THE QUANTITY OF PHOSPHORIC ACID EXCRETED BY THE KIDNEYS. By H. Bence Jones, M.D., F.R.S., Physician to St. George's Hospital.

Phosphoric acid is excreted combined with the earths and with alkalies. From one-fourth to one-eighteenth of the phosphates in the urine are found to be earthy, and from three-fourths to seventeen-eighteenths alkaline phosphates. Hence, the sum of the alkaline and earthy phosphates must be determined by analysis. The following cases of delirium tremens present the lowest limit to the amount of phosphates, in an extended inquiry published in the *Philosophical Transactions* for 1845 and 1846. In the lowest instance, the total phosphates equalled only ,06 per 1000; urine, specific gravity 1017,9; whilst, in the cases of inflammation of the brain, the highest limit found for the total phosphates equalled 13,38 per 1000; urine, specific gravity 1031,1—that is, 223 times less in the former case than in the latter disease. In the three cases which are here related of inflammation of the brain, the average quantity of phosphates is 8,26 per 1000; urine, specific gravity 1025,3. During the acute stage of the three cases of delirium tremens, the average quantity of phosphates is only ,67 per 1000; urine, specific gravity 1020,4. Hence, then, sometimes at least, an analysis might determine whether delirium tremens or inflammation of the brain was present. But it is not every case of delirium tremens which exhibits this diminution, and it is not every case of inflammation of the brain which shows an increase of the phosphates. For if food can be taken in delirium tremens, the food furnishes phosphates which hinder the diminution from being apparent; and if the inflammation of the brain be slight, the limits of variation in the healthy state rise so high, that the slight increase, if present, cannot necessarily be considered as the result of inflammation: so that the chemical analyses can only be regarded as an assistance to the diagnosis, and not as alone sufficient to determine in all cases what the disease may be.

The first case of delirium tremens was that of a young woman, aged thirty-two. On the sixth day of the acute attack, the total phosphatic salts = 1,07 per 1000; urine, specific gravity 1028,7. She recovered.

The second case of the same disease was that of a man, aged thirty-five. On the fourth day of disease, the total phosphatic salts = 2,40 per 1000; urine, specific gravity 1019,1. On the fifth day, the total phosphatic salts = ,15. A second experiment gave ,12 per 1000; urine, specific gravity 1019,3. On the sixth day, the total phosphatic salts = ,06 per 1000; urine, specific gravity 1017,9. In the evening of the same day, the total phosphates = ,24 per 1000; urine, specific gravity 1019,7. The seventh night, the patient died.

The third case of delirium tremens,—that of a man aged thirty-five,—on the fifth day of the disease, gave total phosphates = ,10; and in second experiment with the same urine, ,09 per 1000; urine, specific gravity 1018,0. The sixth day, he took his food, and the total phosphates = 6,10 per 1000; urine, specific gravity 1022,5. He rapidly improved, and left the hospital well.

The first case of inflammation of the brain was that of a young man aged twenty-eight. On the

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| 16th day, | total phosphates | =6,83 per 1000; | urine, sp. gr. | =1025,3 |
| 17th | ditto | =9,79 | ditto | =1028,1 |
| 19th | ditto | =8,43 | ditto | =1024,8 |
| 20th | ditto | =5,77 | ditto | =1021,2 |
| 21st, morn. | ditto | =4,25 | ditto | =1016,9 |
| 21st, night, | ditto | =7,08 | ditto | =1024,6 |

22nd day of disease he died.

There was lymph in the sub-arachnoid cellular tissue at the base of the brain. The ventricles were distended with fluid; the septum broken and flocculent; the fornix and corpus callosum not softer than natural.

The second case of inflammation of the brain was that of a man, aged thirty-six, with much more acute symptoms than in the previous case.

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| 12th day, | total phosphates | =13,15 per 1000; | urine, sp. gr. | =1029,7 |
| 14th | ditto | =12,11 | ditto | =1033,0 |
| 16th | ditto | = 9,53 | ditto | =1030,0 |

18th day of disease, he died.

The ventricles of the brain were much distended; the walls of both lateral ventricles much softened; fornix and septum lucidum different; softening of the lower part of anterior lobes on both sides; arachnoid membrane at the base opaque.

The third case was that of a man, aged thirty-six, with acute symptoms supervening on chronic disease.

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| 21st day of severe symptoms, total phosphates..... | =13,38 per 1000; | urine, sp. gr. | =1031,1 |
| 23rd, much relieved, ditto ..... | = 6,03 | ditto | =1022,9 |
| 30th, improving rapidly, ditto ..... | = 2,79 | ditto | =1016,3 |

Five weeks after this, he left the house in his ordinary state of health.

Such, then, is the contrast which delirium tremens and inflammation of the brain sometimes exhibit, as regards the amount of phosphates excreted.

The excretion of the excess of phosphates in these last cases may be considered as resulting from inflammatory action going on in the brain, whilst the diminution of the phosphates in delirium tremens is probably caused by the positive hindrance of that process of formation of phosphoric acid, which, in the healthy state, is continually taking place in the body.

The excess of action, or the want of action, of the so-called vital gas, may, possibly, ultimately be proved by the balance, not only to be traceable by its effect on the nervous tissue, but other tissues may give a corresponding result.

Dr. Mayo inquired, whether it had been ascertained, in the cases detailed, if the quantity of phosphoric acid found in the urine had been influenced by the quantity of opium given.

Dr. Bence Jones replied, that we knew that opium had a tendency to diminish the quantity of urine secreted; but he was not aware that it diminished the quantity of the salts found in that fluid. It would seem, indeed, from the third case, in which no opium was given, that it was not an agent in hindering the quantity of phosphoric acid.

Dr. F. Chambers inquired if there were any easy and short mode of detecting the quantity of phosphoric acid in the urine.

Dr. Bence Jones was unacquainted with any easier mode than that by the balance.

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## British & American Medical Journals.

INCONTINENCE OF URINE IN CHILDREN.

In a former number of The Lancet, it was suggested that the most successful method of counteracting this troublesome affection, was to prevent the child from lying on its back—a remedy not very easily applied. Dr. R. Chambers makes some observations on the subject in a late number of the

*Provincial Journal*, which may be usefully referred to. He says—

"No fluids are to be taken within three hours of going to bed. The bladder is to be emptied immediately before going to bed, and, in about three hours after, the patient is to be awoke, and the contents of the bladder are to be again evacuated. A blister is to be applied occasionally to the sacrum: this answers a double purpose; it acts as a stimulant to the bladder, and it prevents the patient from sleeping on his back, and thus keeps the urine from gravitating to the most irritable part of the bladder—its trigone. To restore the tone of the bladder, he gives a combination of equal parts of tincture of cantharides, and the muriated tincture of iron, in doses of twenty drops thrice a day; and in some cases he uses the cold dash to the genitals, or the cold shower-bath.

"There is, however, at this time, in the hospital, a girl, aged seventeen, who has been the subject of the disease from infancy, and in whom the above treatment only produced a temporary alleviation; the case is one of unusual severity and obstinacy, and has resisted every effort towards its removal. As the girl was rendered incompetent of undertaking a situation, and had become a burden to her friends, he felt unwilling to dismiss her till he had exhausted every resource. On reflecting upon the case, it occurred to him that if he could render a portion of the urethra excessively tender, the passage of the urine over it during sleep would awake her, and that, by breaking through the habit, eventually the disease may be cured. With this object, he had the orifice of the urethra cauterized with the nitrate of silver. It is now eleven days since the operation was performed, and up to the present date, there is no return of the incontinence."

### METHOD OF SUPPRESSING HÆMORRHAGE FROM THE NOSE.

Mr. Oke, in the same Journal, details two cases, in which the following simple, though perhaps not very novel method, of arresting nasal hæmorrhage, was successfully applied,—

"When, then, the hæmorrhage continues to be so profuse as to peril the life of the patient, let the lesser finger be introduced up the nostril, and pressed upon its base and sides till the bleeding is stopped. Having kept up the pressure for a few minutes, a small compact dossil of lint, made wet with cold water, and rolled upon powdered alum, (if at hand,) is to be carried up to the point which had been compressed with the finger, and held there by the same pressure; after this, other little compresses of the same kind are to be successively laid on by the handle of a teaspoon, or some such means, till the roof of the nostril is made to supply the pressure of the finger."

The same gentleman suggests

### A NEW METHOD OF APPLYING THE LIGATURE IN CASES OF UTERINE POLYPUS.

The instruments are the same in principle, although more simple in construction, than those already in use.

"The instruments are to consist of three metal tubes, two of which are to be of the length, shape, and size of a number eight male catheter, except that their sides are to be flattened, and that there be no rings at their lower ends. The curved extremities are to be rounded, each having an orifice in the centre, with smooth edges, and large enough to admit a strong ligature. The third is a stouter tube of the same diameter, eight inches in length, and straight to within an inch of its upper end, which is to be slightly bent and bulbed. A short transverse bar is to cross its lower end, at about an inch from the extremity.

"*Mode of application.*—The two curved canulæ, containing a well-oiled ligature, and exactly fitted together at their flat sides, are to be introduced into the vagina, with the concave surface to the pubes, their curved ends being directed to the anterior part of the stem of the polypus, by the forefinger of the left hand. An assistant takes charge of the left tube, and the ligature being reflected, and held between his finger and the canula, he keeps the instrument fixed in its position by pressing it steadily against the arch of the pubes. The right canula, with the ligature lying loose in the tube, is carried round the stem of the polypus, and brought again into position under the arch of the pubes, at the left side of its fellow. The canulæ are now to be cautiously withdrawn, by depressing their handles towards the abdomen, and as their points are quitting the vagina, the ligature is to be caught between the finger and thumb, and held tense till the canulæ are completely clear of it; it is then, by means of a hooked wire, to be drawn through the third tube at its bulb end, which it guides to the root of the polypus. Having ascertained that no part of the os uteri is included within the noose, and the bulb of the tube being turned to the polypus, the ligature is tightened, and secured upon the cross at the foot of the instrument.

"The advantages of this method of tying uterine polypi are—first, that it establishes a fixed point for the ligature, close to the os uteri, and which was scarcely attainable by any former method, on account of the unsteadiness and mucosity of the surface of the polypus. Second, the length and curve of the canulæ, by which the ligature can readily be slipped round the root of the polypus by the second canula, from the fixed point established by the first. Third, the curves of the canulæ taking the course of the pelvic outlet, give a freedom to the operation, of which, by the means hitherto employed, it has been comparatively deprived. And, lastly, there is also an advantage in the bend and bulb of the third tube; the former allows a direct action to the ligature, the latter prevents, in great measure, all danger of the uterus or vagina being injured by any incautious movement of the patient."

### THE EMPLOYMENT OF THE INSANE.

The following satisfactory observations are from the report of Dr. Ray, in the *American Journal of Insanity*, to which we have already, on one or two occasions, referred. The writer here alludes to the asylums of Great Britain, but reports in equally favourable terms of those of France and Germany. In the former, an improvement much required is of modern date.

"The employment of the patients in some form of useful labour is practised in all the institutions I visited, and in some to an extent quite unparalleled, I apprehend, in this country. It is stated by the metropolitan commissioners, that at the Wakefield Asylum, 120 out of 208 male patients, and 135 out of 190 female patients, were employed in various ways, and in several more, I should think the proportion of labouring patients was equally large. At the last-named institution, I was shown piles of fancy articles made by the female patients, sufficient, with similar accumulations at Hanwell, to set up a respectable shop in Broadway. Such exhibitions were frequent, especially in asylums situated in the manufacturing districts, and in passing through their workshops, I often thought that a stranger would require farther proof before he could believe that he was not rather within the walls of a factory than of a hospital for the insane. At Belfast, for instance, it was quite a sight to behold the number of old women spinning flax with their little foot-wheels, and the rows of looms at which a set of cheerful-looking men were making every kind and quality of linen. No factory presents a scene of busier activity than is daily witnessed in some of the English establishments for the insane. In one room may be seen a party making mats; in another, a corps of basket-makers are plying the osiers into fanciful or useful forms; farther on is a knot of shoe-makers, and in the building across the court, a joiner's shop gives employment to those who have a fancy for edge-tools. The blacksmith, the mason, the painter, the weaver, may also find their representatives within the same institution, and in the Surrey, where almost everybody seemed to be doing something, I observed a couple of men very demurely knitting stockings. Agricultural labour, I found, was a favourite kind of employment, and the insufficiency of the land a frequent source of complaint."

### "BLASPHEMIES OF THE QUACKS.

"The following is a specimen of a description of self-recommendation resorted to by this fraternity to ingratiate themselves with 'nervous' persons inclined to religious melancholy:—

"'And when that day shall arrive, which shall summon me to an eternal world, to render an account of the time and talent with which my God has honoured me, may I be found clothed in that perfect robe of righteousness in which alone I can appear before God. Then may I hear the Judge of all the earth say, 'Well done, good and faithful servant, enter thou into the joy of thy Lord.' Matt. xxv. 23.'"

"This, we can assure our readers, is decent compared with some of the allusions and quotations to be found in the disgusting productions advertised so freely in our newspapers. Pious ejaculations, religious exhortations, and texts of Scripture, are found mixed up in the same page with the most detestable details and the most pointed obscenities; while mock appeals to conscience are accompanied by suggestions of the most flagrant indelicacy."—*Idem.*

# THE LANCET.

LONDON, SATURDAY, FEBRUARY 6, 1847.


We have long meditated a series of articles, the subject of which should be, the direction of the studies of the rising generation of practitioners.

While we have been giving our best energies to the elevation of the profession above quackery, whether within or without, we have felt that all our labour will be but in vain, unless we insist on the necessity of a good general and professional education for medical students, and those who are intended to become so. In the same sense as that "the child is father to the man," the students of this generation are the fathers of the next; and it is upon them that the honour and duty of upholding the rank of the profession will devolve. We conscientiously believe that, looking solely to the general and professional acquirements of the present race of medical men, the medical faculty holds a lower position in the state, and in the public mind, than is rightly due to it and them. We know of a surety that the British practitioner of the present day is before the practitioner of any other age or country, and that there are amongst us men of great learning and varied acquirements in branches of knowledge not directly allied to medicine; but we are also bound to say, that the average *general* education of medical practitioners is below that standard which would be desirable in a profession which should and must, if a profession at all, be a learned one. Various causes produce this. The absence of all but a nominal compulsory education as a preliminary to the study of medicine; the apprenticeship system, in which the faculties of the young medical mind are generally allowed to become torpid, or are exercised only in the very lowest departments of the profession; the excessive competition, in consequence of the lax discipline enforced by the governing bodies, and the vast array of irregular and unqualified persons permitted to engage in practice, to the detriment of the whole profession, and particularly of the young medical man:—these and a variety of other causes, the sources and effects of which might be easily traced, render the general acquirements of the medical practitioner, we fear, less than those of the members of the law or the church. If such be the case, it is of no use to disguise the matter, but a true wisdom to look the evil fairly in the face, with a view to its amendment. We must advance the honour of the profession by two routes; one, by claiming for the medical practitioner that rank and privilege which are justly his due; and we must, at the same time, attempt to push on our students, so that they may be as much in advance of the present, as the present is of the past, race of practitioners.

The study of the medical sciences is a subject too difficult to be entered upon by minds unprepared by previous discipline and study. Students should not educate themselves upon and in, but *before* they enter upon, strictly professional studies. Great exceptions will always arise, in which men of vast but untutored powers, such as John Hunter, will triumph over all difficulties, and arrive at eminence in spite of them; still they are exceptions, and are no argument for the general introduction of undisciplined minds to the profession. While we lament the want of initiatory and general knowledge in our students, we are fully persuaded, that with a very little effort, and with much resultant benefit, they might be imbued with knowledge which would fit them for a higher grade in society than that which they at present occupy.

If the practitioner of medicine, or the medical student, be found in the society of the clergy and of the gentry, ignorant of all but the names of such a book as Euclid, such a thing as algebra, such writers as Cicero and Virgil, they must become objects of contempt with these persons of university education; for the time is rapidly passing away when it can be believed that an ordinary man may be wanting in general information, and yet learned in his profession. Even the moderately well-informed among the laity are too conscious of the mutual relation which exists between all the physical sciences and the cultivation of mind necessary to their prosecution, to admit of this. And this state of things must inevitably go on: the more scientific, medicine and the sciences collateral to medicine become, the more imperative will the trained and disciplined mind be, for their study and advancement.

Superior knowledge in physics and chemistry may do much to maintain the status of our students, but it cannot compensate for utter deficiency in other branches of knowledge. Now with a very little effort, say the first book of Euclid, a book of Virgil, an oration of Cicero, might be mastered. And as, according to the celebrated Jacotot, "tout est dans tout," more would be easily acquired if this were first accomplished, and if such were the tastes of the individual. To medical ears it may seem pedantic to talk of Cicero or Virgil; but why should students from generation to generation stick fast by Celsus and Gregory. We believe, if these two writers, so excellent in their way, could be taken out of the student's track, and other and different classical authors placed before them from time to time, an immense impulse would be given to the advance of the profession. We have always maintained that classics should, in a science like that of medicine, hold a subordinate place; but we would not, therefore, banish them altogether: and while Latin authors are read, we would extend the reading beyond those which are merely medical. There is something positively contemptible in the continual limitation of our students to so many books of the "De re Medica," or so many chapters of the "Conspectus;" as if they were never to venture out from the shores of medical Latin.

We would not be thought to wish any addition to the labours of the medical student. They are heavy enough, if properly fulfilled. But we would wish him to come to his studentship with an adequate preparation, and then his student-labours would be the lighter. Our young students might, at least, come to the hospital or the lecture-room, knowing the meaning of the words postulate, datum, axiom, problem, proposition; and having accomplished this, the comprehension of an equation, proportion, ratio, &c.; and the a, b, c, of grammar, and of classical knowledge, would be desirable; so that if his acquirements did not excite admiration, his ignorance might not subject him to contempt. A copy of Euclid, Bridge's Algebra, the Orations of Cicero, Virgil, and perhaps Horace, should constitute the early part of the medical student's library, and in these—the first parts of them, we mean—he should be expected to matriculate on coming to London.

A certain knowledge of the French language should be

added, as of the classical TELEMAQUE. Then should come, physics, chemistry, botany: some trustful elementary books on each should be written for this express purpose. Then should follow the elements of anatomy and physiology.

It must be remembered that we are speaking of the preparatory studies of the medical pupil. Thus *prepared*, the young student would enter on his London career of studies with confidence: anatomy, physiology, therapeutics and medicine, surgery and obstetrics. The actual and sinuous part of these studies would be comparatively easy to him, and he would be equal, and he should be at liberty, to devote himself to them. So much for the present: we shall take occasion to expand these hints. We are sure that the subsequent career of any student will be the more brilliant for such preliminary discipline and enriching of his mind. His usefulness would be more recognised, and he would be better fitted for maintaining the honour of his profession. He would not then be abashed in the presence of those who, after all, are but his peers in society—the clergyman and the country gentleman.

We want in medicine some man to arise, like the enthusiastic and finely-tempered ARNOLD, who made education a chivalry, and teachers a legion of honour, to improve the tone of medical education. Such a man would be as important in his influence as half a century of legislation.

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AT the commencement of the present session of the Central Criminal Court, the Recorder, Mr. LAW, made a very remarkable charge to the grand jury, the object of which was, to cause them to ignore the bill affecting a hydropathic doctor, named LOVELL, against whom a verdict of manslaughter had been returned by a coroner's jury. The evidence adduced upon the inquest went to show that a patient, in delicate health, suffering cutaneous disease, had been subjected to the hydropathic treatment, and that she had, while undergoing it, had a metastasis of disease to internal organs, and died. The learned Recorder could not, evidently, comprehend that merely wrapping a delicate female up in cold wet sheets, at this season of the year, should produce any mischief to the internal viscera. He is quite indignant that a jury should allege "a charge of manslaughter against a medical gentleman named LOVELL, and a woman named BETTS, for having placed wet sheets and wet clothes upon the body of the deceased person, and she being, at the time, suffering under a dangerous disease, causing her death." Mr. LAW takes the wet sheets and bandages under his especial protection, and again and again returns to their defence. He repeats—"*All* that was proved against the accused persons was, that they had placed the deceased in a tepid bath, and that some wet bandages had been placed upon her person." That a "medical gentleman" should, upon such slight showing, be accused of manslaughter, is shocking to the quackish sensibilities of the judge. He reduces the matter to the following difficulty—namely, that "it really appeared to him that such a verdict went to this extent—that a medical man who might be called in to prescribe for a disease of a dangerous character, would be liable to a charge of manslaughter if he did not succeed, or if any of the remedies adopted by him should by possibility have hastened the death of the party."

He is equally energetic in defence of the woman BETTS—"He must say, that it did appear to him very alarming, that an aunt, who appeared in this case to have acted with the greatest kindness towards her niece, and to have assisted the medical men who had been called in at her request to attend upon the deceased, by doing all in her power to relieve her, should have been subjected to a charge of manslaughter, for merely placing her niece in a bath, which was the extent of the evidence against her; and he could not help observing, that if coroners' juries, generally, were to pursue such a course of proceeding, all their interests would be in peril."

The whole charge is conceived and expressed in the same spirit as the charge of the learned brother, PLATT, in the trial of ROWE, the druggist, for manslaughter, at Exeter. It seems that, according to some members of the bench, men may be murdered wholesale if they be but killed with "good intentions." The man who discharges a gun accidentally and carelessly, so as to kill another person, is punishable. If a coach is upset, or a railway train is off the line, and passengers are killed, heavy deodands, and even verdicts of manslaughter, are commendable; but if an ignorant druggist, pretending to be a doctor, should kill his poor dupe by sins of omission, or if a lace dealer, pretending to a medical degree, should kill his dupe by sins of commission, judges shake their grave wigs, and make a glorious stand for the rhubarb and magnesia of British children, and the liberty of death by hydropathy. We may append to this case a good outline of the relation of the law to the preservation of human life against ignorance and quackery under the guise of medical care and medical skill. According to the present state of the law, any one may call himself a physician or surgeon, and act as such. Neither the College of Physicians nor the College of Surgeons will interfere, if, indeed, they have the power to do so. The state of the public mind is such, that any quackery is swallowed, any humbug believed, and any ignoramus implicitly received and honoured, as a legitimate medical person. And when this ignorance and this impunity meet together, and loss of life is the result, the law steps in and says, that if the medicine ordered and voluntarily taken was prescribed and taken *bonâ fide*, there is no crime and no punishment. So that it comes to this—Any lunatic may take it into his head that arsenic in poisonous doses is beneficial, or a sane knave may do the same thing, and let either of them call himself doctor, and find a dupe, he may straightway administer the poison with impunity, under the shelter of the cold-water standard of Mr. Recorder LAW, or the rhubarb-and-magnesia banner of Mr. Judge PLATT. This may seem putting the matter strongly; but it is only carrying out their principles to their due extent. Medical men know, at the present moment, that there are in London actual lunatics engaged in the treatment of diseases, dealing familiarly, day by day, with life and death; and as there is no law to reach them for assuming medical titles, so when the fatal results come, there are no means of punishment, unless *mala fides* can be proved, which is of course impossible.

Such are the facts, and such is the manner in which Mr. Recorder LAW swallows his Cockle, and justifies death at the hands of quackery.

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IT will be seen, by the subsequent communication, that the first Court-medical has at length, through the patience and perseverance of all the parties concerned, arrived, though by a circuitous route, at the desired conclusion. We are sure all the parties themselves, and the profession, have reason for

satisfaction at the result. When we thought the conduct of Dr. Gregory censurable, we censured it, but purely upon public grounds; and now we see him acting a most praiseworthy part, we as freely accord him our praise. There is always true courage in a frank apology, where any intentional or unintentional wrong has been done; but the longer circumstances defer an apology, the more courage is there required for its full expression. That Dr. Gregory has acted the manly and courageous part will surely not lower but raise him in the opinion of his professional brethren, whether as a physician or a gentleman. We congratulate Dr. Gregory quite as much as Mr. Wigan. Medical etiquette, though made up of slight forms, is a serious matter; and in proportion as we observe a strict etiquette between ourselves, so shall we be treated with respect and deference by the public. In conclusion, we would remark, that scarcely anything within our remembrance has occurred so likely to improve the internal discipline of the profession as these recent proceedings: we trust they will attract the attention of the public medical bodies, who ought to give themselves to the adjustment of such matters, and not suffer the onerousness of them to fall upon private individuals.

## COURT-MEDICAL.

### Note from Dr. Webster and Dr. W. Tyler Smith.

*To the Editor of* The Lancet.

Sir,—The following letter from Dr. Gregory arose out of a correspondence which took place between Dr. Gregory and Dr. Webster subsequently to the report prepared by us of the proceedings in the late Court-Medical. We need scarcely say, that it gives us far greater pleasure to be able to send this, than it did to furnish the report which our duty compelled us to forward for publication. It will be seen that Mr. Wigan has addressed Dr. Gregory in an amicable spirit. He has also addressed a note of apology to Mr. Craddock for the unintentional interruption to his dinner-party on September 7th, 1846, by himself and Mr. Charles C. Eyre. We are glad that the difference between Dr. Gregory and Mr. Wigan has thus reached a conclusion so satisfactory to all the parties concerned.—Sir, your obedient servants,

George Webster.
W. Tyler Smith.

### Note from Dr. Gregory to Dr. George Webster, Dulwich.

31, Weymouth-street, Jan. 30th, 1847.

My dear Dr. Webster,—I request that you will communicate to Mr. Wigan my regret that I did not send for him on the occasion of being called to his patient on the 7th Sept., 1846. I feel quite sure that he will himself acquit me of any design to injure his professional reputation.

I hope that you and Dr. Tyler Smith will pardon me for having, in a moment of irritation, attempted to defend myself by the disparagement of your professional qualifications.

I regret very sincerely that my feelings throughout this affair should have been so excited as to lead me to do that which was hasty, and to say that which was intemperate. I trust that you and my professional brethren may find some partial excuse for these errors in an over-anxiety to uphold my professional honour, which appeared (perhaps unintentionally) to have been called in question.—I am, dear Sir, yours very faithfully,

G. Gregory.

### Note from Mr. Wigan to Dr. George Gregory.

Dear Sir,—I have received a communication from Dr. Webster and Dr. W. Tyler Smith, conveying a candid expression of your regret that you did not send for me when called in to see my patient, Mrs. F——. You had already declared that in what took place you had no intention of injuring me in the opinion of my patient. I am happy to accept this admission and explanation, and I have much pleasure in withdrawing any remarks that may have been personally offensive to you in my first letter to the Editor of The Lancet.—I am, dear Sir, yours faithfully,

42, Somerset-street, Portman-square, Feb. 3rd, 1847.

George Wigan.

## Operations Without Pain.

### ST. GEORGE'S HOSPITAL.

There were three operations at this institution on Thursday, Jan. 28th, and the vapour of ether was administered in each case by Dr. Snow, with very satisfactory results, by means of the inhaler described and depicted in our last number. The first patient was a little boy, on whom Mr. Cæsar Hawkins performed the operation of removing a long sequestrum of dead bone from the interior of the tibia. The boy inhaled without objection or difficulty, and in about a minute and a half the operation was commenced, without causing the least appearance of suffering. The process of inhaling was continued for about a minute after the operation commenced, and was left off just as his face was becoming rather purple, and the pulse feeble. After a short time, he began to look about him, and to show signs of returning consciousness, and the mouth-piece was applied again for a short time,—altogether he inhaled four minutes. He awoke as out of a sleep just as the operation was concluded, and was taken away without having shed a tear. Mr. Hawkins, in his remarks on the case, said that the operation was one which was usually extremely painful, and the inflamed bone in this case was so tender, that the boy would not allow it to be touched with the probe.

The next operation was an amputation of the thigh, and was performed by Mr. Cutler. The patient was carried into the theatre on his bed, and was very feeble. A quantity of pus was flowing from the knee-joint. He seemed to dislike the vapour, and tried to get his hands up to liberate his mouth and nostrils; but this was only for a short time. In about two minutes he seemed quite insensible, and was then drawn down towards the foot of his bed, and the operation commenced without his giving the least token of feeling it. The ether was left off, and given again for a short time, as in the first case. He recovered his consciousness, so as to answer questions whilst the arteries were being tied; but he did not feel what was being done to his limb, and he stated that he had not felt the operation. Mr. Cutler said that the man had had two attacks of erysipelas since he was brought to the hospital with an accident to the thigh, and was so much reduced, that he (Mr. Cutler) was afraid, that if put to sleep by the ether, he might never awake again; but he consulted his colleagues on the subject, and it was decided he was to have a trial of it, and the result had been most satisfactory.

The third patient was a negro, in good general health, with a large fatty tumour over the right scapula, which was removed by Mr. Tatum. The duration of the inhaling and its results were nearly the same as in the previous operations. He struggled a little, and his veins were rather turgid just as he was becoming insensible, before the operation began. He felt nothing of it, and his surprise and pleasure when he was with some difficulty convinced that his tumour was removed, were evinced in a way that excited some laughter in the spectators. Dr. Snow stated that the temperature of the water in which the inhaler was placed was 65° in the first operation, 70° in the second, and 75° in the third; and that, consequently, the proportion of vapour in the air inspired was 44, 50, and 55 per cent. respectively.

### CHELTENHAM GENERAL HOSPITAL.

By W. Philpot Brookes, MD., M.R.C.S.E., Surgeon to the Cheltenham General Hospital and Dispensary, &c. &c.

Having occasion to perform the operation of extirpation of the left breast for a scirrhous tumour, but in which the glands of the axilla had not become diseased, I gladly availed myself of this the first opportunity I have had of trying the effect of the inhalation of ether; and its being the first time it has been used in this town for any capital surgical operation, (although Mr. Tibbs, the dentist, had succeeded with it for the extraction of stumps of teeth,) I invited the following members of the profession to be present:—Dr. Smith, Mr. Eves, one of the surgeons to the hospital here, Mr. Dalton, Mr. Orrell, Mr. Fagan, Mr. Tibbs, surgeon-dentist, and Mr. Sugors and Mr. Peart.

The great importance of this invention as regards operative surgery renders it necessary that surgeons should make known all the cases that come under their observation, and on that account I have given the full notes of this one.

The inhalation of the sulphuric ether was kindly managed

for me by Dr. T. Smith, one of the physicians to the Hospital and Dispensary here, who administered it with a simple gum-elastic tube, with an ivory mouth-pipe attached to a damp bladder, placing in it about two ounces of ether, and putting the bladder in warm water: the ether used was Howard's sulphuric, which had been washed and redistilled by Mr. Smith, chemist, of this town. At first, we had some trouble to persuade the patient to inhale properly; but after a short time, and becoming herself anxious to have the operation performed, she did so vigorously, and the etherial effect was produced in about four minutes from that time; she fell back in bed, the arms dropped to her side, the pupils very much dilated, eyes turned up to the orbit, and sensibility apparently gone. I commenced my operation, which was performed by two elliptical incisions of about four inches in length, extending fully round the nipple to the border of the axilla, dissecting out the disease, one small artery having to be tied: the operation occupied about two minutes. After the lapse of nearly six minutes, the poor creature recovered her consciousness, and when asked if she had felt any pain, said, "None whatever; you have not done the operation; you are only deceiving me;" and we had some difficulty to persuade her to the contrary: in fact, she would not credit it until I gave her the breast to look at. Since the operation, she has been questioned by several parties how she felt, and her answer is, "It was a pleasant sensation—no pain of any kind; and she could not now even believe it possible the disease was cut out with a knife."

The patient had not any bad symptoms from the ether, either during its inhalation or afterwards; the pulse rose from 80 to 125. She complained shortly after of a little pain in the region of the heart, but this left her in a short time. One wineglassful of brandy-and-water was given her after the effect of the ether had left; and at night the pulse was soft, 100; patient very tranquil; skin moist; complains of some difficulty in voiding the urine. A sedative draught was given her.

All the gentlemen present, whose names I have deemed it advisable to give, felt perfectly satisfied that the operation was performed without the slightest sensation of pain or uneasiness of any kind, and expressed themselves highly satisfied with the result.

On reviewing the cases of operations already performed under the influence of ether, we cannot regard the invention in any other light than as one of the greatest boons ever offered to operative surgery, in alleviating the great distress of body and mind which patients always suffer when informed they must undergo a surgical operation; and it must now become the duty of every surgeon to watch well the progress of this painless remedy, and judge for himself whether or not it is not capable of being brought into very general use. I am only sorry the talented inventor should have clogged it with a patent, which I trust will never be allowed to stand: he deserves a far higher reward than that of turning it into a mere mercantile productive.

I cannot close this article without publicly thanking Dr. Smith for the trouble he has taken in trying the effect of the ether on healthy subjects, preparatory to giving it this patient, and the judicious manner in which he administered it for me.

Albion House, Cheltenham, Jan. 1847.

## MAIDSTONE OPHTHALMIC INSTITUTION.

*To the Editor of* THE LANCET.

SIR,—In consequence of the success of several operations performed on the eye, under the influence of ether, at the Maidstone Ophthalmic Institution, on Saturday, Jan. 16th, as reported in your last, a great number of persons afflicted with fistula lachrymalis and strabismus, applied this day to be relieved under its influence, from which three were selected for operation, time not allowing for more; and as many gentlemen of the town were anxious to witness the effects of so novel an agent, as many were admitted as the size of the operating room would conveniently allow, among whom were the mayor, Thomas Franklyn, Esq., and other members of the corporation, the officers of the cavalry depôt, the staff-surgeons, Drs. Marshall and Smith, and many surgeons and scientific individuals.

The operations, though of a simple character, were perfectly successful; in neither case was there the slightest consciousness; and though in the case of a boy operated upon for strabismus, there was (as often occurs) considerable screaming, or rather moaning, he resolutely denied, afterwards, having done so, and assured the gentlemen present that he felt nothing during the whole time, but supposed himself at Gravesend, in conversation with his uncle.

The apparatus used for these operations was Hooper and Robinson's; and having visited, during the last week, most of the London hospitals, and seen many operations, public and private, and inspected, also, various ingenious instruments invented for the purpose of inhalation, I think none will be found more effective. The one or two failures I have seen with this instrument have arisen from beginning the operation before the third stage was thoroughly established. The apparatus of Dr. Snow, as exhibited at St. George's Hospital, on Wednesday last, was certainly most ingenious, and perfectly successful, and I think has many advantages; but its success may be found, perhaps, to depend more upon the great tact, and thorough knowledge of the effects of the vapour upon the system, as shown in its exhibitor, Dr. Snow, than upon any peculiarity in its arrangement and mechanical construction.—I remain, Sir, your obedient and humble servant,

F. PLOMLEY, M.D., F.L.S., &c.

Maidstone, Kent, Jan. 1847.

## BRISTOL GENERAL HOSPITAL.

*To the Editor of* THE LANCET.

SIR,—In the introduction of any novelty in our profession, I consider the best mode of forming a correct judgment of its merits is to procure a collection of plain, unvarnished facts bearing upon the point. This is most particularly applicable with regard to the operations while the patients are under the influence of ether. Since my last letter, I have had frequent opportunities of trying its effects, and will give the cases according to their several dates.

CASE 1.—Jan. 12: A young lady, about twenty years of age, called to request I would remove a tooth for her. Upon examination, her teeth were all sound. It was a case of neuralgia, from which she had been suffering day and night for three weeks. I recommended and used the vapour; she soon became perfectly insensible, and remained motionless for about five minutes; she then appeared to be awakening, and instantly passed into an hysteric fit; in five minutes more she opened her eyes, wondering where she was; and when she saw me, she exclaimed, "Oh! my pain, where is it gone?" It had quite left her; she was not aware of the fit. I questioned her as so whether she had ever suffered in that manner. She was not conscious that she had; but fancied she must have done so; for a few weeks previous, when her servant came into her room in the morning, she was sobbing, of which she was not at the time conscious. In a few minutes she left my house by herself.

CASE 2.—A very painful stricture of the urethra in a gentleman, aged sixty-four, for which I had passed a bougie twice a day for ten days; so great was his agony, that he could scarcely restrain himself from crying out aloud. Jan. 14 to 18: I continued to pass it twice a day, using the ether, then once daily, each time with complete success, until the 27th, at which latter time it was a partial failure. This gentleman expresses himself as "its being a great blessing to mankind;" he looked forward to his ether with much pleasure, as it relieved him from so much suffering.

CASE 3.—Jan. 16: William Prichard, aged sixty, cancer of the lip. This I expected would have been a difficult case, as the inhalation of the vapour could not be so well continued, the supply by the mouth being necessarily prevented as soon as I commenced my first incision. The patient took enough by the mouth to last through the removal of the portion of lip and the introduction of two pins. Fearing he may not have had sufficient, I directed the pipe to be passed into the nostril; but his mouth being open, in consequence of his desire to relieve it of the blood collected there, it did not take effect.

CASE 4.—Jan. 16th: Requested to remove an upper bicuspid tooth for a tall, stout young woman, about twenty-six years of age, of delicate health, subject to hysteria, assuming the form of epilepsy. When I went to the house, her mother expected she would have a fit from the mere fact of my coming to extract the tooth, which was one likely to be broken as soon as the instrument should be pressed against it. I administered the ether; she immediately went off, and as I was preparing to stand on a chair behind her she slipped from off her own; I then crossed that one, caught her head before it fell, and extracted the tooth, sound, and with ease; in a minute or two she went off into one of her usual fits, during which she screamed, and from which she awoke in about five minutes, unconscious that she had had a fit, but heard some person screaming, and thought it was her mother; did not know the tooth was out;

felt exceedingly grateful for what I had done for her. She was quite well before I was ready to leave the house.

Case 5.—Jan. 20th: My own son, fourteen years of age, suffering from a bad tooth, wished me to remove it while he was under the influence of ether; with a few inhalations he went off; I then lanced the gum without his knowledge, but consciousness appearing to be returning, I desisted from extracting the tooth; having passed him off a second time, and desired one of my children to "give me the instrument," I extracted the tooth, which was a difficult one, having one of the fangs much expanded. During the operation he raised his hands and cried out. A servant entering the room to speak to me, I called out, "Come in, Charles, and shut the door." When my son recovered, he said he had felt no pain, but had seen me standing over him, it being an upper tooth, and placing the instrument in his mouth; he heard his scream, as also my request for the instrument and to have the door shut; he repeated my words; he dreamt there was a number of persons dancing about in the air, (his brothers and sisters were moving about before him,) and that as I called out so they all repeated my words.

Case 6.—Jan. 19: A young gentleman, twelve years of age, requiring a portion of the nail of the great toe to be removed, wished to take the ether for the purpose of avoiding the pain necessarily attending such an operation. Upon this occasion he took a few inhalations, and then dashing the pipe from him, said he would take no more, and commenced dancing about the room, tossing up his hands, and declaring he was mad. His mother was much alarmed, but I assured her he would be quite well in a few minutes: this proving to be the case gave her and the boy confidence for the following day, when he inhaled the ether, and upon its effects passing off, told his mother he had had a beautiful dream about her, but he could not recollect what it was, and looking at his foot, he exclaimed, "What! has Mr. Lansdown cut out the nail? I did not feel it."

Case 7.—January 23rd: The extraction of another tooth. A very delicate lady, about twenty, who all but fainted at my passing a probe into her mouth to be certain which was the tooth. She readily became insensible; the gum was lanced, and the tooth extracted with ease, although a very large one, with three diverging fangs. This patient held the tube so firmly in her mouth, that there was no room to withdraw the tooth from it until she awoke.

Case 8.—January 28th: Elizabeth W——, aged fifteen, diseased knee of seven years' duration. Had recovered with partial ankylosis. The head of the tibia had passed backwards under the condyles of the femur, and had there found a resting-place, the under halves being absorbed for its accommodation. This girl, in consequence of the ether, sent to request I would remove her limb, on account of the inconvenience of its position, and, also, its occasional pain. She entered the operating theatre very cheerfully, and was apparently readily affected by the ether. The operation was with the anterior and posterior flaps. Considering her perfectly insensible, I thrust in the knife; this appeared to give her pain. I kept the knife steady, without withdrawing it, for probably half a minute. I then made my incisions: with these she still appeared to feel, but not so much. During the progress of the operation, she shrieked out several times. To a person who had not seen a case before, it would have appeared a complete failure; indeed, that was almost the impression upon my own mind. When the limb was bandaged up, I aroused her, and inquired,—had she felt anything, any cutting, sawing, or pricking? Her replies were all in the negative. She said she had had a very unpleasant dream about being at the bar of judgment, and being punished for her sins. She further said she did not know whether her leg was off or not. In the course of the evening, she remarked she knew nothing of the conversation in the operating room; that she was not conscious until she was in her own bed, and there saw some gentlemen standing around her, which was about twenty minutes after she had been removed to her ward.

From the above cases, as well as from others already published, it is evident that persons, while under its influence, can both see and hear; that they will act from their sight, and reply to questions proposed to them, and give reasonable answers without being aware of what they are doing. It is therefore well to have the eyes bandaged previous to even the slightest operation, and also, if possible, to have silence observed during the period the effect is required to be kept up. I have now administered the ether thirty times, and in no instance has there been anything like a tendency to apoplexy, neither have I seen any injurious effects resulting from it.—I remain, Sir, yours obediently,

Feb. 1847. J. G. Lansdown.

## OPERATIONS ON THE TEETH.

*To the Editor of* The Lancet.

Sir,—Permit me to forward for your notice an account of two operations performed by me, the first on Tuesday the 5th, the other on Thursday the 7th inst.

A medical student now walking one of the London hospitals, applied to me to extract three teeth for relief from disease of the peridental membrane, and disease of the periosteum of the left superior alveolus and maxilla. The only cure to be suggested was the removal of three very carious teeth. The patient brought with him an apparatus which he had described to me the previous day, to be used with sulphuric ether, to suspend or lull the susceptibility of the nervous system. It consisted of a small glass jar, four inches and a half high, two inches in diameter, the wide mouth of it being stopped with a flat bung made from a piece of cork cut thin; in this bung two holes were bored, and to each hole was fixed (air tight with sealing wax) a glass tube; the one extended from the bung to within half an inch of the bottom of the jar, and it dipped in the ether to the depth of about one inch; this tube admitted atmospheric air into the spirit; the other tube was two inches and a half in the jar and three inches and a half out, and adapted for inhaling the vapour; the whole was put together by the patient; and having some doubt in my mind as to the efficiency of this machine, I provided a large bladder, which, when inflated, formed a reservoir for about three quarts; and for want of a better implement, I used the last joint of a German flute, to form a tube for the bladder; this is four inches long, and a very good substitute too. I next cut off the neck of the bladder and softened the outside of the bladder with warm water, and wiped it dry and clean; I put a bit of dry sponge, about four inches and a half long, one inch thick, and two inches wide, into it, and then tied the aperture of the bladder, folded and air tight, round the open tube, extending two inches into the bladder, and having two inches outside for a mouth-piece. By this method free egress and ingress in the wide part or greatest volume was readily obtained. Thus prepared, the patient preferred to use the glass jar, and placing the end of the tube into his mouth drew in the etherial vapour most vehemently; in about six to seven minutes the pupils began to dilate; in eight to ten minutes from the commencement the pupils became dilated; and there was considerable congestion about the tissues and vessels of the neck and face, and he appeared to be in a sound sleep, with his eyelids wide open, and the body in an erect sitting posture. We gently reclined him in the operating-chair. It having been determined that three teeth should be drawn at this sitting, in this instance I deemed it prudent to lance the gum, (in order to avoid any subsequent disease or delay in the healing process, frequently met with, by the appellation of a cold in the gum after drawing a tooth.) The shoulders and body moved at this part of the operation, and on laying hold of the first tooth, the patient, through great muscular exertion, threw himself back on the chair, raising the body and throwing the chest convexly forward, with considerable curvature. In fact, for a moment of time the contortion was so violent as to create an idea of a species of tetanus called opisthotonos. This I chiefly imputed to the imperfectly constructed apparatus; that during the latter part of the patient's first inhalation, with the intensity of his endeavour to completely intoxicate the nervous system, he drew into his mouth and swallowed some few drops of the spirit; however, he quickly rallied, (but we had only one tooth out), he stood erect, and placed each hand to his head, and rubbing it violently, he burst into hearty laughter, inquiring where he then was, desiring to know where he had been, and said he had had the most delightful dreams, and believed his tooth was out, but felt no pain; it was evident to us that the lancing was understood by him to be the extraction, and that he was quite vacant when the tooth was drawn, and when he raised himself from the chair. He was anxious to have the other teeth out, saying it was no pain but a pleasure to be in that state; but still doubting the efficacy of his apparatus, I recommended the one I had provided myself. I poured through the bit of flute tube on to the sponge in the bladder, one ounce of strong sulphuric ether, procured from Bell's, in Oxford-street. I then inflated the bladder, stopping the aperture of the tube with the end of my thumb, and I found, by the slightest inhalation, that I had a large volume of air powerfully charged with ether. The patient applied the end of the tube to his mouth, whilst I with my right hand supported the bladder, and with my left thumb and forefinger gently closed his nostrils, thus inspiration and expiration were carried on between the air contained in the patient's lungs and the vapour generated in the bladder, the sides of it

collapsing and expanding during respiration. I believe in less than two minutes the patient was perfectly motionless and quietly reclining in the chair. I extracted the two other teeth, and no symptom of pain or disturbance was at all perceptible; he laid quiet for about two minutes longer, and then revived. We could not persuade him the teeth were drawn till he had ascertained the fact by feeling in the mouth with his finger and thumb; he then found that a fourth tooth was much diseased, and he requested me to etherize him once more, but I deemed it prudent to delay this for a couple of days. I observed that the patient was much sooner influenced by using this short tube, and breathing to and fro in the bladder; thus bringing the lungs and the medicated air in closer contact; and this time there was much less apparent congestion, and a total absence of muscular disturbance and nervous susceptibility. The patient came true to his appointment on the Thursday following, and went to work energetically, giving preference to the second-named apparatus. In about three minutes, the pupils of the eyes showed some degree of dilatation; in another minute or two they became much dilated, and congestion followed; he permitted his hands to be removed from the tube, and we laid him against the chair; on approaching with the instrument to the tooth, he evinced sensitiveness, and the instant the tooth was touched he sprung up from the chair and bent his body to the right side and backward over it; but being held by two medical friends who were present, I succeeded in bringing away the tooth in that position. He recovered directly and was totally ignorant of the tooth having been extracted and appeared to derive a delightful sensation from the state he had been in.

I remarked that there was less hæmorrhage and less muscular resistance to the operations than I have usually met with in teeth similarly circumstanced as those I have extracted in this case.—I am, Sir, your most obedient servant,

Langham-place, Jan. 1847. T. E. Eden, M.R.C.S.

## Correspondence.

### ON EXPERIMENTS IN PHYSIOLOGY AS A QUESTION OF MEDICAL ETHICS.

"Accusez toujours."—Macchiavelli.

*To the Editor of* The Lancet.

Sir,—The experiment noticed by the Reviewer in the *Medico-Chirurgical Review*, at p. 135 of your journal, was by no means so fraught with suffering as your correspondent would make it appear; whilst it elicited, or confirmed, *five* most important views, bearing strict relation to the diagnosis of diseases of the nervous system.

Possibly your correspondent thinks the cerebrum &c. endued with sensation. If so, he is egregiously ignorant of that which, as a *Reviewer!* he *ought* to know. The pain inflicted was *limited to* that occasioned, 1, *by dividing the integuments;* and 2, *by removing a portion of the cranium;* for I leave out of the ethical question the unexpected difficulty opposed to the quick performance of the operation; to lay bare a nerve is far more inflictive.

Such as the experiment is, however, I wished to prevent the necessity of repeating it. I therefore gave it *twice*—that is, *both* in my own words, and in those of the excellent individual who kindly assisted me; and we, accordingly, never have repeated it, although we have discussed the advantage of doing so, fifty times at the least, since the date of that experiment; being deterred solely by the reluctance we have felt to perform an experiment involving pain *at all*. But I hate *cant*, and therefore have always refrained from obtruding these feelings on the public. But for this reluctance, I should have continued my experiments on the effects of loss of blood, which, among other results, first revealed one cause, the anæmic, of the "bruit de soufflet;" and but for the infliction of pain, there is not a nerve in the animal economy whose function I would not have endeavoured to ascertain. No mere labour or other consideration would have deterred me, for an instant, from accomplishing this object. I speak of infliction; the word cruelty I leave to reviewers and other calumniators.

But now for the important *results* of this experiment. First, we confirmed the well-known opinion, that the cerebrum and cerebellum are *in*-sensitive and *in*-excitor; secondly, we proved, most irrefragably, that whilst moderate pressure upon the cerebrum produces coma, greater pressure induces convulsion, facts further illustrated in my little volume, p. 295, or rather illustrating a case of terrific cerebral disease; lastly, we *discovered* that convulsive affections are induced by irritation of the dura mater and other membranes of the brain, and may therefore be the source of such affections in the human subject.

To *such* experiments we are indebted entirely for the invaluable work of M. Flourens.

Whether what I have said, in reference to our real feelings on this subject, or in regard to the results of our experiment, may be sufficient to justify our procedure, I now leave to the judgment of my professional brethren.

But may I not be allowed to ask why *I* should be so singled out for special attack, while others are permitted to pursue their career of inquiry unmolested? But that I disdain to mention names, I might adduce those of the late Dr. Hope and Dr. Williams; Dr. Addison and Mr. Morgan; Sir B. Brodie, Mr. Travers, and a host of others, to whose experiments physiology and medicine are deeply indebted.

And then, may I ask whether this same writer is consistent, and refuses to partake of the bird which has been cruelly "winged," or of the hare, which has been still more cruelly "coursed" to death, or of the fish, with whose terrors and sensibilities the angler has "played"? More pain and suffering have been inflicted in one day's "good sport," than by all the physiological experiments which have been made since the world began!

But I will add that I am the last who ought to be thus attacked; for *no one* in reality has performed experiments with greater precautions and care to avoid the infliction of suffering, than myself; or, as I may also add, with greater and more beneficial results to medical science, and, consequently, to suffering humanity.

On the other hand, though my reviewer may think there is no suffering except that inflicted on integument or bone, I will inform him that I never, in secret, calumniate my professional brother. Nor will I, even now, drag this person from his obscurity. Only, in future, let him quietly occupy himself with his page of somewhat ancient date, and let others be permitted, without molestation, to endeavour to decipher the book of Nature.

I would again urge upon the profession the institution of a Physiological Society, the objects of which should be, to deliberate on proposed experiments, to adopt or reject them, to assist in their performance, to witness their results, to render their repetition, as far as possible, unnecessary, and thus really to prevent cruelty, to promote physiological science, and, as has now become requisite, to protect individual character.

I will conclude by repeating that the epithets applied to my experiments are unjust; the writer is obviously ignorant, or writes for the ignorant. There is *no* sensibility in the cerebrum; paralysis, coma, convulsions, are all alike free from pain. I again appeal to a Court-Medical. Let my calumniator come forth like an honest man, freely, for I will not name him, though I have already, in three words, given him to understand that he is not unknown to me. A Court-Medical would tend to determine the ethics, not only of physiological experiments, but of anonymous and calumnious medical reviewing. Without some such step, of attacks, and of what is, very erroneously, called controversy, there seems no end.—I am, Sir, your obedient servant, Marshall Hall.

London, Jan. 1847.

### ON PHYSIOLOGICAL EXPERIMENTS.

*To the Editor of* The Lancet.

Sir,—No one could be a regular attendant at the Royal Medical and Chirurgical Society, during the presidency of Sir B. C. Brodie, without being charmed with the happy utility and aptness of his illustrations of every subject brought before the Society. Such I believe to have been the lasting impression made on the mind of every member, every visitor.

Those to whom these brief remarks may bring the recollection of those evenings, will also remember how frequently those illustrations of the president were drawn from his store of well-devised *experiments*.

Such experiments, therefore, are as a light thrown upon the nature of symptoms and the application of remedies. They are of infinite utility, in the hands of the physician and surgeon, in treating disease. Can we, then, refrain from deriving information from this, as from any other source, without making ourselves guilty of the suffering or death which may be the result of our ignorance? *I* answer—No. And I imagine this view to be one which unfolds a fearful responsibility.

Of this I am certain, that Sir B. C. Brodie is a more able

practitioner than if he were ignorant of the results of physiological experiments, as performed by himself.

To such experiments, in the hands of Sir Charles Bell and Mr. Shaw, we owe the distinction between mere facial and cerebral paralysis—a distinction which has lightened many a heart and replaced gloom by consolation.

Now, the experiments of Sir C. Bell and of Mr. Shaw (see "The Nervous System," third edition, p. 24, 81, 85, &c.) were tenfold more severe than that by Dr. Marshall Hall, on which the reviewer in the *Medico-Chirurgical Review* has commented. What shall we say then? Shall we regret their performance? Shall we not, rather, in the spirit of a true and real humanity, regret that it is only in this way that the knowledge of certain points in physiology, pathology, and the administration of remedies, can be certainly and rapidly advanced.

Now, I will not believe that there was anything cruel in the nature of Sir B. C. Brodie, or of Sir C. Bell and Mr. Shaw, any more than I can believe there was any such thing in the breast of Professor Alison, when he suggested and witnessed some of the experiments of Dr. J. Reid. The *idea* is a calumny.

And yet, how difficult is it to lay bare a nerve deeply seated in the tissues of the neck—how much more difficult and inflictive of pain and suffering than to denude the cerebrum!—I am, Sir, your obedient servant,

A Fellow of the Royal Medico-Chirurgical Society.

London, Feb. 1847.

## PROPOSAL FOR TREATING PULMONARY DISEASE.

*To the Editor of* The Lancet.

Sir,—The cases recorded in your valuable journal, of the inhalation of ether to prevent bodily suffering during the performance of surgical operations, induce me to believe that the apparatus used for that purpose might also be applied to the cure of consumption, and other diseases of the lungs, and thus be the means of conferring a permanent blessing on mankind.

Let the medical substance—say iodine, dissolved in ether, sufficiently diluted with water to prevent its intoxicating effects, ammonia, chlorine, or other of the many appropriate ingredients to be found in the mineral and vegetable kingdoms—be placed in the apparatus, in a fluid or other state, so that the air inspired through the tube by the patient may become impregnated with the substance, and thus at once be applied to the diseased surface. And I see no reason why consumption—the opprobrium of our art—which generally selects for its victims the fairest portion of the creation—may not be arrested in its fatal course.

Let draughts of medicated air be inspired every few hours, and those general remedies administered which are necessary to give strength &c. to the constitution, and I feel certain, if my medical brethren, particularly those whose professional pursuits are more especially directed to diseases of the lungs, will fairly try its effects, that ere many months have elapsed, numerous cases will be recorded of its vast power in controlling and curing pulmonary diseases.—I am, Sir, your obedient servant,

Richard Griffin, M.R.C.S., &c.

Weymouth, Feb. 1847.

## PLAIN QUESTIONS ADDRESSED TO DR. FORBES.

*To the Editor of* The Lancet.

Sir,—If you think the following plain questions likely to advance physiological science, I shall be obliged by a little space for them in The Lancet—that advocate of every good cause. I am, Sir, your obedient servant,

Justitia.

Query 1.—Your friend Prochaska has designated certain parts of the cerebrum, extending to the spinal marrow, by the term "sensorium commune." Can you inform me—why? Is it because it is *in*-sensorial, this being your version of his doctrine; as a grove is called *lucus*—a non lucendo; or, as if I were to apply to you the epithets, good, wise, able, generous, benevolent?

Query 2.—Prochaska also speaks of certain *sensorial* nerves, and "nerves appropriated to *sense*," and instances the *olfactory* and the *optic*, as connected with his insentient sensorium. Is this for the same reason? And do you find instances of this "surprising accuracy," and of this "complete anticipation of Dr. Marshall Hall's doctrines," in Dr. Hall's own works?

Query 3.—Prochaska speaks of his "sensorium commune" as not including *the whole* of the cerebrum, but only certain parts of it, as the *crura cerebri, and cerebelli, and part of the thalamus optici*, and as extending to the medulla oblongata and spinal marrow. Is this the opinion of Dr. Marshall Hall? Is it of "*surprising* accuracy," and a "*complete* anticipation" of *his* views?

Query 4.—Prochaska speaks of sneezing, of cough, of vomiting, giving them as instances of sensorial impressions reflected into motory; and *you* call these actions *physiological*. Is this idea of yours *physiological*? Or is it, rather, an instance of a *pathological* condition of intellect?

Query 5.—Prochaska adds to these instances, the case of winking on the sudden approach of a finger to the eye, though he is persuaded it is a feint. Is this, in your physiological idea, an event of the same *nature* as the others? Would Dr. Marshall Hall so view it? Is it anticipatory of his doctrines? Would he not, rather, consider this as an action induced by a sensation, a perception, an emotion?

Query 6.—Next, Prochaska enumerates the action of the heart, (really ganglionic;) the movements of *respiration*, (really true-spinal;) the *raising of the hand* of an apoplectic patient to the head, (really cerebral;) as acts of the *same* kind. Does this appear to *you* to be of "surprising accuracy"? Especially is it "complete" as an "anticipation" of Dr. Marshall Hall? Does Dr. Marshall Hall entertain or promulgate such absurd confusion of things so different.

Query 7.—Prochaska next speaks, as of events of the same class, of the movements in chorea, and of the rigor in ague. Do you find such things in the works of Dr. Marshall Hall.

Query 8.—Then the effects of *fright*, the *movements of the intestines*, are associated together in like manner! And these things, too, are viewed with wonder, as of "surprising accuracy," and as part of a "complete anticipation" of one of the most careful and cautious writings in physiological science!

Not one word will I add of vituperation or epithet. But, assuredly, the system of the distinct spinal marrow, and its own peculiar incident and reflex nerves, in essential connexion with it, the exclusion of *all* that is *cerebral* in substance or nerve, of *all* that is *sensorial*, of *all* that is *ganglionic*, &c., &c., is very *different* from all this, and of a different kind of "accuracy," and not quite "anticipated."

If a bright torch ever were given into the hands of the practical physician, to aid him in his diagnosis of a class of diseases, formerly obscure, it is that afforded by the distinction of the true spinal system, its functions and its symptoms, from the cerebral and the ganglionic.

Why, Sir, if Dr. Marshall Hall had done nothing more than detect and assign the proper function of the *pneumogastric*, that single and sole achievement ought to protect him for ever from such mean and vulgar attacks as those which have crowded your imbecile Review.

I can make one excuse for you. I verily believe you do not, to this day, understand the thing you are talking, or rather writing, about. It requires accuracy of mind to comprehend it distinctly,—how much more to have hunted it out? But why, if indeed they yet understand it, does not Professor Alison, or Dr. Carpenter, come forward and show as much readiness to defend, as they did at the first to attack it and its laborious author?

Query 9.—You speak of Dr. Marshall Hall's "bitter nature," &c. Has Dr. Marshall Hall a Review? Has *he* attacked *you*, journal after journal, writer after writer? Whose, then, is the "bitter nature"? Take my parting advice: let Dr. Marshall Hall alone, and he will let you alone. You say, speaking of his immortal work, "it is grievous to write it down." Doubtless the viper said, or thought, "it is a grievous task to devour a file!"

Query 10.—And lastly, may I ask you, what you have done, especially for physiology, that you should set yourself up as a great critic and judge in these matters? Did you ever bring forth one new idea, or add one new fact to our store? Be warned then. Try to know yourself. Give up this puppyism of authorship and judgeship. Be advised!

February, 1847.

## ETHERIZATION.

*To the Editor of* The Lancet.

Sir,—Suffer me to occupy a corner in your journal, that, through the medium of it, I may offer a few words of caution to the profession on the all-engrossing subject—narcotism by ether. It is devoutly to be hoped that an agent so undoubtedly valuable in suspending sensation, and lessening the sufferings of the afflicted, may not be brought into disrepute and consigned to oblivion by its incautious and injudicious use; and my object in these brief remarks is to state that I have known great cerebral derangement produced in a highly

talented and intellectual individual, by too freely inhaling ether. The gentleman had a strange delusion that he could expand the powers of his mind *ad infinitum*, if he could obtain a free supply of ether, and he pursued this delusion so earnestly that his mind became disordered, and, in fact, he suffered paroxysms very nearly allied to delirium tremens. At first he was speedily restored by being deprived of the ether, but as often as he was set at large, his unhappy delusion returned, he flew to the chemist for his admired drug, and again became deranged, and requiring to be placed under surveillance; the attacks increased in violence and duration, until his mind was so impaired that it was necessary to place him under permanent restraint.

This solitary case may suffice to prove the necessity of circumspection in administering the ether, especially to subjects predisposed to mental excitement.

I am, Sir, your obliged servant,

FRED. THOS. WINTLE,
Resident Physician, Warneford Hospital, near Oxford.

January, 1847.

## PATENT FOR INHALATION!

*To the Editor of* THE LANCET.

SIR,—The idea of trading, bartering, and speculating, on the "ills that flesh is heir to," is to me a most revolting thought; it bespeaks a condition of mind unworthy of our noble profession.

Years since, I gave the process of inhalation to produce unconsciousness to the world, without the most remote idea of remuneration, which I thought was amply afforded me in the knowledge that I had contributed towards the alleviating of suffering humanity. The process of inhalation to produce unconsciousness, so that all kinds of surgical operations might be performed without pain to the patient, I have publicly advocated since 1842, and published in 1843. I am not responsible for the apathy manifested from that time to the present moment, when it seems to have flashed on the profession as if by magic, and is now generally adopted.

I now distinctly give to all who may choose to use it, "the process of inhalation for the production of unconsciousness, so that surgical operation can be performed without pain to the patient." I do this without fear or compromise, knowing that I can substantiate my claim to priority. And if any patent is taken out, I will take measures to render it null and void.—I remain, yours respectfully, R. H. COLLYER, M.D.

St. Helier's, Jersey, Jan. 1847.

*** Dr. Collyer should produce something like proof of his liberality. In the first instance, proof should be given that the discovery of the production of insensibility by ether, *and* its application to surgery, were *his* to give. As yet, nothing of this kind has been supplied, and until it is, the writer must be content to belong to the class of jump-up-behinders.—[ED. L.]

## NEW METEOROLOGICAL INSTRUMENTS.

*To the Editor of* THE LANCET.

1. Every one admires the hygrometer of Daniell, and regrets that it should be so complicated. I would suggest that the thermometer be placed in the bulb containing ether, as in that instrument; and that that fluid be reduced in temperature to the dew point, by the action of an accurate little pump, adjusted at the top of the tube.

2. It is well known that the temperature of boiling water is taken as a measure of the height of mountains: a ball containing pure spirit of turpentine, attached to a tube in which a thermometer is placed, as in Daniell's hygrometer, the tube being drawn at the top to a rather small orifice, would, for many reasons, I imagine, be very preferable for this purpose. The boiling point of the fluid would be lower, and less heat would consequently be required, and the apparatus would occupy little space.

VIATOR.

Feb. 1847.

## PLAN TO PREVENT COUGHING WHILE INHALING THE VAPOUR OF SULPHUROUS ETHER.

*To the Editor of* THE LANCET.

SIR,—Having taken great interest in the reports, in the English newspapers, of surgical operations performed upon patients under the effects produced by the vapour of ether, I have observed that in several of the cases there seemed to be considerable difficulty with the process of inhalation, the patients being seized with coughing, more or less violent. Now as I have not seen the different modifications of apparatus made use of in England, I do not consider myself qualified to pronounce upon them, but the extreme simplicity of the apparatus which I have used, in a few experiments that I have made upon this subject, induces me to recommend it to your notice. I take a common glass flask, such as we employ for chemical operations, of a tolerable size, and with a well-turned lip; I remove the bottom as neatly as possible, and, by that opening, I introduce into the body of the flask, a large sponge wet with ether, and then the apparatus is ready. In order to use it, the mouth of the flask is applied to the patient's mouth, the turned lip covering his lips, somewhat in the manner of the mouth-piece of a trumpet; the nose is held shut, and, consequently, the air which the patient breathes passes through the sponge, and carries the ether vapour with it into the lungs. I have employed this apparatus several times, and in all cases have found it answer perfectly.

I have myself, by the use of it, been thrown, five distinct times, into a state of insensibility so perfect that during the last time I had a large tooth extracted without even being aware that the operation had taken place. Every other modification of apparatus which I have tried, (where there was less admission of air,) produced violent coughing, as did also the attempt to breathe the vapour of ether, as pure as I could collect it, in an air-tight bag. The flask which I have used would hold about a quart, and is somewhat of the form of the ancient wine bottles, the neck being about as long as the bulbous portion of the bottle is deep.

I am, Sir, your obedient servant,

Giessen, Jan. 1847. JAMES ALLAN, Ph. D., &c.

## ALLEGED DISCOVERY OF THE INFLUENCE OF SULPHUROUS ETHER IN 1824.

*To the Editor of* THE LANCET.

SIR,—Permit me to make a few observations in your journal respecting the system of inhaling the sulphuretted ether for the purpose of causing insensibility during surgical operations. It is, I believe, considered to be an entirely new invention, and the authorship of "the discovery" will no doubt be claimed by various parties; but I am in a position to prove that a similar system was brought before the public nearly twenty years ago, by a Dr. Hickman, then residing at Shiffnal, and previously at Ludlow, where he successfully performed various experiments with it upon animals. I am not prepared to state whether the inhaling system discovered by him was identical with the one now exciting such universal attention, but he most assuredly was the propounder of a system to produce insensibility to pain under operations by the inhalation of some species of gas. So far as I am aware, no discovery has been claimed by others until within the last few weeks. Dr. H. commenced his experiments at Ludlow previous to the year 1824; after which he resided at Shiffnal for three years, and went to Paris in 1828, in which year he presented a memorial to the King of France, Charles X., praying for permission to perform his experiment before the medical officers of that metropolis. A copy of his memorial is now before me, and also a letter from the widow of the memorialist, which was supplied to me with the above memoranda.

I am by no means prepared to dispute that some one of the present claimants may have discovered this medical agent to be a new method to *him*, inasmuch as it is quite possible for two philosophical minds to fall upon a hidden truth, but unless they can prove that their discoveries were made anterior to the year 1828, the claim of priority must be awarded to the late Dr. Hickman.

I have never heard the result of the memorial, but the prosecution of his inquiries was cut short soon after by his decease, previous to which he published an account of his invention either in a pamphlet, or in the form of an essay in the medical publications of the day. I well remember that the system was treated with very great severity in the medical reviews, and was generally condemned as a wild and visionary theory, which was deemed practically useless, if not dangerous and impossible.

I am making inquiries in Ludlow and Shiffnal, and may very probably be able to procure farther evidences of his claims. A reference to the medical periodicals of 1828-1829, or perhaps a few years earlier, as I am not sure of the date of his publication, will no doubt afford a satisfactory corroboration of what I have here stated.—I am, Sir, yours,

Kingswinford, near Dudley, Jan. 1847. THOMAS DUDLEY.

P.S. The widow of Dr. Hickman is now living at Tenbury, Herefordshire.

## THE SEDATIVE EFFECTS OF VAPOROUS ETHER RECOGNISED FORTY YEARS SINCE.

*To the Editor of* THE LANCET.

SIR,—How long the etherial suspension of feeling for the moment has been practised to assuage pain or anguish may be worth investigation. Perhaps the following fact may assist the inquiry:—The hapless name of an eccentric practitioner will yet be remembered by some who, like me, have reached an advanced age. That gentleman, Dr. Graham, was accustomed to inhale the vapour from an ounce or two of ether several times a day. I once witnessed his *modus operandi*, in a drug shop at Bristol, about the year 1802 or 3. He was sitting at the counter, with his thumb over the mouth of a two-ounce phial, sniffing its vaporous contents every now and then, with manifest placidity and self-enjoyment. Being known to me, I took the liberty of asking him what he felt on the occasion. "Soothing, soothing," replied he, "to an immeasurable degree." Mr. Shedden, the druggist, told me that it was the Doctor's custom, whilst in Bristol, to drop in twice or thrice a day, and sniff his dose, always expressing himself as being much gratified by the practice. The Doctor's name became associated with the "celestial bed" and with "earth sweating" panaceas of that time, like the water-cure or the atomic M.M. of modern days. You may, perhaps, recognise as the name of a former contributor to your valuable publication the signature of yours, very respectfully,

Bexley Heath, Kent, Jan. 1847. THOS. LEE.

## SECRETION OF MILK IN A NEW-BORN INFANT.

*To the Editor of* THE LANCET.

SIR,—I have now (Jan. 22nd, 1847) under treatment a female infant, aged three weeks, each of whose mammary glands is as large as a walnut. There is a continual secretion and oozing of milk. The mother (delivered in Dunmow Union House, Essex) informs me she observed this "swelling" from the child's birth.

Should this fact be as singular as I suppose, I am perhaps justified in forwarding it to THE LANCET.

Hatfield, Broad Oak, Essex, Jan. 1847. JOHN COVENTRY, Surgeon.

# Medical News.

ANTI-QUACKERY.—The *Scotch Reformers' Gazette* is another Glasgow newspaper from the pages of which all quack advertisements are banished. The conductors of such journals universally distinguish themselves from the editors and proprietors of such metropolitan papers as the *Pictorial Times*, in which the grossest quackery is entertained, and those numerous provincial journals, in which the publishers are agents and dealers in quack medicines and the obscene quack books.

ACADEMIE DE MEDECINE.—M. Begin has been elected President of the Académie de Médecine, Paris, for the year 1847; M. Bouillaud, Vice-President, and M. Métier, Secretary.

CAMBRIDGE.—A medical lecturer has been appointed at Gonville and Caius College, Cambridge, to direct and superintend the studies of the medical students in the College.

UNIVERSITY COLLEGE, LONDON.—As a proof of the estimation in which this academic institution is held in Calcutta, it may be mentioned, that on the intelligence being received in that city of the death of Dwarkanauth Tagore, a large and influential meeting took place, to adopt measures to commemorate the admiration of the community for this excellent man. It was thought that no better plan could be adopted than the endowment of a fund intended for the support of native students at this University whilst pursuing their studies, whether professional or general, and to be called the Dwarkanauth Fund. It will be recollected that two native gentlemen have been already educated at this school, with a success that enabled them to carry off the diploma of the Royal College of Surgeons of England. One of them has just returned to Calcutta; the other remains in England, pursuing his studies on comparative anatomy, with a view, it is said, to compete for the appointment of student in that department at the Royal College of Surgeons.

THE NORTH LONDON OPHTHALMIC INSTITUTION.—The annual meeting of the governors of this institution took place on Saturday last, at the Freemasons' Tavern, Sir George Staunton, Bart., M.P., in the chair. The report, which was highly satisfactory, stated, that upwards of 800 patients had been relieved during the past year; of this number, 117 were milliners and others suffering from the effects of overwork of the eyes: and that eighty-nine operations had been performed. This charity is about to be removed to more commodious premises, and will in future be known as the North London Infirmary for Diseases of the Eye.

STAMFORD AND RUTLAND INFIRMARY.—The funds of this Institution have just been augmented by a most munificent bequest from the late Mr. Stephen Rowles, of Stilton, who has left the sum of £350 per annum for the general purposes of the Institution; and for the express purpose of providing a house-surgeon, a further sum of £100 per annum. Altogether, this Hospital has been enriched by the princely donation of £10,000 from this benevolent individual; and it is a curious coincidence that this gentleman was the tenant of Sir Thomas Apreece, who, dying a short time since, left the enormous sum of £6000 per annum to St. George's Hospital.

A QUACK HANDBILL.—M. Francis begs to inform the inhabitants of New Peckham and its neighbourhood, that he has re-opened the shop in Park-row, opposite Trafalgar-square, lately conducted by S. H. Fysh, chemist and druggist; and trusts, by careful attention, and supplying the most genuine medicines, to receive their support.—Physicians' prescriptions and family receipts will be carefully prepared.—Medical and surgical advice given to the poor (gratis) at all hours.—Bleeding, cupping, dental surgery, &c., performed at the most reasonable terms.—Advice in ophthalmic diseases on Mondays and Thursdays.—Midwifery attended.

Park-road, opposite Trafalgar-square, New Peckham, Jan. 1847.

MORTALITY OF THE METROPOLIS.—The deaths within the week ending January 23 amounted to 1225, or 157 above the weekly average for the five past winters. Of these, 531 were from diseases of the lungs, 54 from heart diseases, 50 from hooping-cough, 28 from typhus, 45 from apoplexy and paralysis, and 65 from natural decay. Electricity positive for the six latter days of the week; weather overcast; mean of thermometer, 32° 6′. Since the commencement of this year, the district of Lewisham and sub-district of Hampstead have become included in "London," which thus comprises an area of 115 square miles, with a population, in 1841, of 1,948,211. The deaths within the bills of mortality henceforth will, of course, be materially more numerous in the aggregate; but they may be expected to be less relatively to the population, the additions to the metropolis (on the line of the Brighton and Birmingham Railways) comprising some of the most healthy districts in its vicinity. Total births, week ending January 23, 1334.

## CORRESPONDENTS.

*J. H. B.*—The question proposed involves a nice case of conscience. We incline to the opinion, that the medical man fulfilled his duty in urging upon the master and mistress the necessity of search for the body of the child.

*A Governor of the Birkenhead Hospital.*—There can be no doubt that some period of service ought to be fixed, after which surgeons retiring might properly be elected consulting surgeons, and that the period ought to be a lengthened one, to avoid the anomaly of having a consulting surgeon of much less standing than the actual surgeons to the charity.

*Non Viridis.*—The Dawson quackery shall not escape us.

*A Constant Reader* had better address Professor Graham, or the publisher of the "Elements of Chemistry." We are unable to answer his question.

*Mr. Adams.*—In our last we inserted some excellent cases of dislocation of the astragalus. They were kindly furnished by Mr. Adams, of the London Hospital; but the name was omitted in the heading. This explains the use of the personal pronoun throughout.

*Iota* could not *claim* any fee more than an ordinary witness.

ERRATA.—In page 112, line 23 from the bottom, *for* sensorium, *read* tentorium; in page 114, line 37 from the top, *for* heal, *read* treat; and in page 114, line 38, *for* purgative, *read* purgation.

Communications have been received from—Dr. Sheppard, (Plymouth;) Mr. Bouverie; Dr. G. Webster; Dr. Tyler Smith; Mr. Eden; M.D., (Bournemouth;) Dr. Jacob; Mr. C. M. Ashwin; Mr. Vores, (Yarmouth;) Mr. F. S. Garlick; W. T., (Putney;) Dr. Milroy; Dr. Taylor; Dr. Day; Mr. Lake; J. H. B.; Viator; A Governor of the Birkenhead Infirmary; Dr. Jeffreys, (Liverpool;) Mr. J. A. Dorr; Mr. Handsby, (Abergavenny;) Dr. J. G. Swayne, (Clifton;) Mr. Rendell, (Tiverton;) A Constant Reader; Mr. C. Ray; Sir Philip Crampton; Dr. Addison; Mr. Bell, (Halstead;) Mr. R. L. Freer; Mr. Adams; Justicia; Dr. Power, (Great Queen-street;) Mr. J. G. Lansdown; Dr. Dick; Dr. C. E. H. Orpen; Mr. W. Thompson, (Putney;) Mr. J. F. Leach; Dr. Plomley; Mr. Johnson; One Deformed; Mr. Sleman, (Tavistock;) Mr. Reeves; Chemicus; Gratus, &c.

FOR DISPOSAL, an old-established PRACTICE in a good Provincial Town. The receipts (there is no Union attached) between £500 and £600 per annum. Six months' introduction will be given. The Practice is best calculated for a married man, and will bear every investigation.—For further particulars, apply to Messrs. Lane and Rathbone, 13, John-street, Adelphi, London; if personally, between the hours of Twelve and Four.

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FOR IMMEDIATE DISPOSAL, without Premium, the Proprietor leaving for India, the established business of a Retail Chemist, well situate for PRACTICE, averaging a weekly profit of £3 10s, held at a rental of only £22 per annum, and all the House Furniture, Bedding, and Requisites, may be included in the purchase. Sum required, £150.—Apply to Chemicus, No. 1, Vine place, Old-street-road, or to Mr. Orpwood, Artillery-place, Finsbury-square.

GLAMORGANSHIRE and MONMOUTHSHIRE INFIRMARY, CARDIFF.—The Subscribers will, at a Special General Meeting, to be held at the Infirmary, on Thursday, the 25th February next, at one o'clock in the afternoon, proceed to the Election of a HOUSE-SURGEON. He will be required to be a Member of the Royal College of Surgeons, and Licentiate of Apothecaries' Hall; also to act as Secretary to the Institution. Salary £100 per annum, with Furnished Apartments. Testimonials to be sent, addressed to Charles C. Williams, Esq., Roath Court, near Cardiff, on or before Saturday, the 20th February, 1847.

F. M. RUSSELL, House-Surgeon and Sec.

Cardiff, January 9th, 1847.

FINSBURY DISPENSARY.—THOS. JAS. AUSTIN, ESQ.—At a General Meeting of the Governors, held on the 20th day of January, 1847, WM. FOSTER WHITE, Esq., Vice-President, in the Chair, it was resolved unanimously, on the motion of John Thomson, Esq., M.D., F.L.S., seconded by John Thorne, Esq.—"That this meeting feels it to be due to Mr. THOMAS JAMES AUSTIN, on his retirement from the office of Apothecary to this Institution, to record on its minutes, and also to testify to him for his satisfaction, that during the time of his tenure of his office, he has discharged all its duties with great zeal, constant assiduity, and unflinching integrity; and this meeting has great pleasure in wishing Mr. Austin all the success in life to which his talents and merits justly entitle him."

Resolved also, "That the above Resolution be advertized in the 'Times' and 'Morning Chronicle' newspapers, and in the 'Medical Gazette' and THE LANCET publications, at the expense of the Institution."

Gray's-Inn. WM. BARTHOLOMEW, Sec.

TESTIMONIAL TO J. P. VINCENT, ESQ.—At a Meeting of the pupils and friends of Mr. Vincent, held at St. Bartholomew's Hospital, on Monday, Feb. 1st,—Dr. ROUPELL in the Chair,—it was unanimously resolved, "That some testimonial be presented to J. P. Vincent, Esq., upon his retirement from the office of surgeon to St. Bartholomew's Hospital;" and a committee was accordingly formed, to carry the same into effect.

Subscriptions (limited to Two Guineas) will be received by Messrs. Twining, Bankers, Strand; by the Hon. Secs., and at the Museum of the Hospital.

JAMES T. WARE,
T. W. CROSSE, } Hon. Secs.

LETHEON.—Mr. BULLOCK begs to inform the Profession, that he supplies the Apparatus for the Inhalation of Ether, approved by the Patentees. In justice to the discoverers and inventors of this great improvement in surgical practice, Mr. Bullock assures the Profession that this Instrument is incomparably superior to all others. Many of the substitutes, constructed in total ignorance of pneumatics, are highly dangerous.

22, CONDUIT-STREET.

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22, Conduit-street.

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ROYAL COLLEGE OF PHYSICIANS.—The Lectures of the present year will be delivered at the College, Pall Mall East, at Four o'clock on each of the following WEDNESDAYS and FRIDAYS:—

GULSTONIAN LECTURES.—Dr. WILLIAM BALY, Feb. 10, 12, 17. "On Dysentery: its Pathology and Treatment."

CROONIAN LECTURES.—Dr. GEORGE BUDD, Feb. 19, 24, 26. "On Diseases of the Stomach."

LUMLEIAN LECTURES.—Dr. JAMES ARTHUR WILSON, March 3, 5, 10. "On Pain: the Pathology, Varieties, and Treatment."

LECTURES ON MATERIA MEDICA.—Dr. GOLDING BIRD, March 12, 17, 19, 24, 26, 31. "On Electricity and Galvanism, as Physiological and Therapeutical Agents."

By order of the President,

February, 1847. J. B. SEDGWICK.

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Nov. 1846.

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That this Company was the first to Assure DISEASED AND INVALID LIVES in a systematic manner, and on the same safe and defined principles as those on which ordinary Offices assure Healthy Lives; and that at the present time it is the only Company furnished with scientific and well constructed Tables showing the duration of life in the different classes and various stages of disease.

That the Public have felt the urgent necessity for a Company established on such principles, was rendered manifest by the fact, that during the period of five years in which the Society had been in business, no less than 2051 *proposals had been made to it, covering Assurances to upwards of One Million of money.* The number of Policies issued far exceeds the average of that of most of the old and successful Offices in a similar period; and the business has been gradually progressive, the number of Policies issued during the last year *being nearly triple* that in the first year of the Society's existence; showing that as the establishment of the Company has become more generally known, the Public has more freely embraced the peculiar advantages which it offers, thus affording every reason to believe that the business of the Company will still go on rapidly increasing.

That the number of deaths that have taken place has been under the number estimated by the Tables of the Society *by nearly ten per cent.*; a strong proof of the safety and correctness of the data and principles on which they are founded; and that these facts conclusively show, that business in INVALID LIVES can be transacted with as much safety as that in HEALTHY LIVES; that the prejudice which once prevailed against this class of business is rapidly disappearing; and that there are few Companies which are not satisfied that this kind of Assurance may be done with security and profit, so much so, that several have now become anxious for it. That it is also gratifying to be able to state, that a very large proportion of old established Offices have latterly co-operated with this Society by sending it a considerable amount of business.

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By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

It will be recollected, that in Case 39 the blood did not coagulate. Now, though it is quite true that there are few diseases after death from which, in some cases, the blood has not been found fluid, yet the majority of cases of this sort are connected with bronchial obstruction, or, in its absence, fall under that denomination of diseases of which purpura is taken as the type. In this occasional absence of organic lesions, pathologists have long turned their attention to the blood as the seat of the essential changes in fever, and some of these chemistry has reduced to definite formulæ. (Simon. Med. Chem., vol. ii. pp. 185, 215.) But such accurate information is not often attainable; and where we have no blood at our command till after death, we must be content with facts of looser signification in themselves, but clearly showing in what way the disease has a tendency to destroy life. In illustration of this point, the following cases are subjoined, in the first of which the existence of a diseased condition of the blood was not matter of speculation only, but was ascertained by previous analysis.

### FEVER, WITH MOTTLED RASH, SUPERVENING ON PURPURA; CONVALESCENCE.

Case 40.—Christopher V——, aged twenty-one, admitted April 9th, 1846, John front ward; a healthy looking man, arrived in London seven weeks ago from Parma. A week after his arrival, his legs swelled; he suffered repeated alternations of heat and cold, and a number of purple spots appeared on his lower limbs. The swelling has now subsided, but the spots still remain, of a deep purple colour, not fading on pressure, slightly elevated, and generally first appearing towards evening.

He was treated by purgatives, with apparently good effect. A large crop of fresh spots appearing on April 20th, with some swelling and pain of the left wrist, and increased power of the pulse, he was bled to twelve ounces.

The blood on analysis gave, in 1000 parts—

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|---|---|
| Water . . . . . | 783.53 |
| Colouring matter . . . . . | 55.88 |
| Fibrin . . . . . | 2.28 |
| Albumen, Salts } of the serum . . | 160.59 |
| | 1002.28 |

The coagulum was of a moderate size, soft—the fibrin, when separated, particularly so. The serum was opaque and milky-looking.

He continued without any very marked change taking place, his legs swelling, and the spots reappearing as often as he assumed the upright position, till May 7th, when, having had no sleep the previous night from pain in the head and neck, he complained of pain in the bowels, and purging to an unusual degree following the medicine which he was in the habit of taking. Tongue moist and furred, with elevated papillæ; pulse 120, rather sharp. Ordered, an effervescing draught every six hours; to take rice-milk diet.

Third day.—His face is flushed; skin hot and perspiring; pulse 128, still sharp; tongue moist and furred, the tip and edges clean and red. He still complains of pain in the head and abdomen. Ordered, a saline draught, with half a drachm of antimonial wine, every six hours.

Fourth day.—Increased pain in the abdomen; bowels once open; a mottled rash appearing on the chest. Ordered to have eight leeches applied to the abdomen; to take a saline draught, with camphor mixture, every four hours.

Fifth day.—Generally much the same, his chief complaint being of the want of sleep. Continue.

Sixth day.—Sleeps very little; face flushed; skin pungently hot, with a distinct mottled rash, fading on pressure; tongue moist and furred; pulse 120, with less power; bowels once slightly open; he has heat, without pain of the head. Ordered to continue. To take half an ounce of castor oil.

Seventh day.—Better sleep; face less flushed; tongue moist, less furred; bowels open three times; pulse 130, fuller; he is quite free from pain.

On the eighth day, a few purpurous spots appearing, and the pulse still increasing in frequency, he was ordered two pounds of beef for tea, and six ounces of wine daily.

On the ninth day, the state of debility, which it had been thus attempted to forestall, made its appearance. He lay quiet during the night, but is now moaning incoherently; skin pungently hot; tongue inclined to dry, furred on the dorsum, the tip red; pulse 130, as before; bowels twice open; abdomen flat, free from pain. Ordered to continue.

Eleventh day.—He remains in much the same condition as yesterday—namely, tongue with an uniform brown fur, inclined to dry; pulse 130, soft; bowels open once a day; abdomen tender in the right iliac fossa; his face is flushed, his skin hot and dry. Ordered, to take two grains and a half of mercury with chalk twice daily; to continue the other treatment.

Twelfth day.—Better sleep; skin warm, dry, soft; the mottling does not fade on pressure, and there are many large petechiæ on the abdomen and flanks; pulse 120, small and soft; he has had three relaxed bilious evacuations. Ordered to leave off the pill.

Thirteenth day.—Slept well, only waking up once, much frightened; he lies dull and drowsy; pulse variable, 108 to 120, small and soft; tongue with a broad brown streak; four relaxed, ochry motions; abdomen tolerant. Ordered two grains and a half of compound ipecacuanha powder thrice daily.

The notes of the three next days speak of him as sleeping quietly, the rash gradually fading, his bowels slightly relaxed, with pain in his abdomen, his face dusky and anxious, with, to-day, a slight cough; the same general plan of treatment having been continued.

Seventeenth day.—A blister plaster applied to the epigastrium yesterday has drawn well; he has had good sleep; pulse less frequent, 90, small and soft; three slimy bilious evacuations. He has still cough with mucous expectoration.

Nineteenth day.—Face natural; tongue moist, with a thin fur; pulse 108, small, soft; skin warm and moist, with a few miliary vesicles; no complaint of cough.

He remained under observation till the latter part of July, liable at times, during this period, to slight occasional eruptions of purpurous spots, but not otherwise out of health.

This case has been prefixed to the others on account of the additional interest which the fact of the blood having been analyzed shortly before the accession of the fever confers on it. It is probable that the same condition of blood persisted more or less throughout, inasmuch as the same tendency to the formation of purpurous blotches continued, though the most striking characteristic—the enormous amount of solid contents in the serum—should perhaps be set down to the same temporary cause as its milky colour. As the analysis was conducted with large quantities, the limits of error in the process were but small.

How far did this condition of the blood modify the symptoms, or the knowledge of it the treatment, of the disease? As to the symptoms,—the visible signs of purpura intermixed themselves with those of ordinary continued fever, in the form of petechia, which, it should be remarked, have been noticed only three times out of fifty-three cases occurring during the last year; in no other respect was the case singular. But the knowledge, not to say of the condition of the blood, but of the diathesis, of which this formed a part, constituted a very important part of the treatment. It cautioned against any free use of mercury; it led to expect early prostration of strength; but while it warned against any active depleting measures, it taught to consider of less grave importance the eruption of petechia, which there was a cause independent of the fever tending to produce.

The next patient fell ill when weakened by previous illness and existing organic disease, accompanied by a tendency to hæmorrhage, which accidentally terminated his life. The case possesses additional interest from the peculiar condition of the kidney, discovered after death, in connexion with the previous history.

### FEVER, WITH MOTTLED RASH; ALBUMINURIA; DEATH BY HÆMORRHAGE INTO THE BRONCHI; DISSECTION.

Case 41.—Henry B——, aged thirty-one, admitted Feb. 9th, 1846, John front ward. Stoutly made, with a hurried, anxious expression; face flushed; tongue large, pale, and flabby, with a brownish-white fur on the dorsum; gums sore, with mercurial fœtor; pulse 100, small; respiration 36, hurried; bowels regularly open, the last evacuation solid, mixed with blood; has headach and pain in the loins of five days' duration.

*History.*—A type-founder, married, temperate, healthy till

eighteen months ago, when he had scarlatina, which laid him up for five weeks. Since then he has suffered much from muscular debility, with pain in the loins and sacrum, and occasional diarrhœa, with bloody evacuations. Three months ago he came under the care of Mr. Fisher, with anasarca and slight ascites, the urine being very albuminous. Under the use of digitalis, with preparations of iron, after cupping and mercury, the anasarca disappeared, and the urine ceased, on Dec. 17th, to contain albumen. He improved rapidly in health and strength till five days ago, when the pain in the loins suddenly returned, with headach, watering of the eyes, and vomiting. Ordered, comp. spirits of ammonia, half a drachm, every six hours, and half an ounce of castor oil to-morrow morning.

Seventh day.—No sleep from pain in the eyes; skin warm, perspiring; tongue moist, as before; pulse 100, soft; four liquid evacuations from the bowels, with much mucus; urine copious, sooty, with a dark sediment, albuminous. Ordered to take six ounces of wine daily; to continue the draught.

Eighth day.—No sleep from vomiting and purging; motions loose, bilious; the abdomen tolerant of pressure; less pain over the eyes; tongue dry and brown in the centre, the edges moist; pulse 100, fuller, soft; urine as before. It seems that the urine was never sooty before yesterday. Ordered to continue; to take an aromatic draught, with ten minims of tincture of opium at once, and five grains of comp. ipecacuanha powder every eight hours.

Ninth day.—Sleepless and delirious at night, and now he is not quite coherent; the vomiting has not returned, and he has only had one evacuation from the bowels, that one loose and mucous; skin hot and dry, with a red, mottled rash on the chest and abdomen; pulse 120, still full, soft; urine almost black, specific gravity 1016; some pain over the eyes is still complained of. Ordered to have his head shaved, and to have cold lotion applied to it; to have a blister applied to the epigastrium; to continue the draught; to take the compound ipecacuanha powder twice a day.

Tenth day.—He had about one hour's sleep during the night, now his lips tremble, his speech is incoherent and querulous; tongue tremulous, dry, with a broad, dark streak down the centre; pulse 108, small, and soft; bowels not open; abdomen soft and tolerant. Ordered to continue.

Eleventh day.—He had a little broken sleep; his face is flushed, his expression anxious; but his speech, though still incoherent, is not so urgently querulous as before; pulse 120, small, soft, undulating; tongue dry, transversely fissured; bowels not open; urine still deposits a heavy sediment, specific gravity 1014, albuminous.

That night he slept well, and appeared in all respects improved on the following day. During the ensuing night he was restless, and on the thirteenth morning had a slight convulsive attack about seven A.M., during which he lost consciousness for about ten minutes. His urine, it should be observed, had been less abundant during the last forty-eight hours. About nine A.M. he commenced coughing, occasionally expectorating a little blood with difficulty, and continued doing so, at intervals, for an hour, talking rationally to his wife the while; then he had a slight convulsive struggle, and died immediately.

*Body examined, four hours after death.*—Limbs rigid; blood all fluid; integuments of the head and neck much congested. Brain in all respects quite healthy. Larynx healthy; trachea lined with treacle-like strings of bloody mucus, reaching into the bronchi, and, thus obstructing them, preventing the lungs from collapsing. In other respects the right lung and the left lower lobe were healthy, but the left upper lobe was dark, harder than the rest of the lungs, though still elastic, and so gorged with blood as but just to float in water; but no distinct centre of extravasation was to be seen. The bronchi of this part were filled with fluid frothy blood. The heart presented only traces of old pericarditis, and some trifling thickening of the edges of contact of the aortic valves. The œsophagus was healthy; the stomach injected and coated with thick mucus, and a thin friable coat of mucus was spread over the jejunum and ascending colon. There were some dark patches in the jejunum; a few vivid red spots with dark-green centres, as if from sloughing, in the cæcum, and a few vascular points in the descending colon. Otherwise the mucous membrane of the intestines was quite healthy. The liver was large, and in a state of biliary congestion; the gall-bladder full of thick tarry bile. The spleen was large and soft. The kidneys were very large, measuring six inches and a half in length, dark, with a deeper red mottling; the capsule parted easily. Within, the organ was of a deep claret colour, pyramids and cortex alike, a deeper-coloured fringe surrounding the bases of the pyramids. The cortex was nowhere more than a quarter of an inch, generally not more than one-eighth of an inch in thickness. It was a little more friable than natural, the fracture clean, and no exudation taking place into the fissure. The appearance of the kidney was very similar to that so beautifully figured in Dr. Bright's "Medical Reports," (vol. i. plate 5,) only of a claret instead of the chocolate colour which Dr. Bright's plate presents. The pelvis of the kidneys and the urinary bladder were quite healthy. Under the microscope all the urinary tubes appeared gorged with blood. There was no deposit of any kind in the substance of the organ.

The sum of the morbid changes in the above case was,—a little injection of parts of the alimentary canal, with proof, by the presence of a large quantity of mucus, that the injection was not the result simply of gravitation. There was old disease of the kidneys, biliary congestion of the liver, and there was a large, soft spleen. Besides, there was extreme congestion of part of the lungs, and obstruction of the bronchi. In connexion with these changes stand the vomiting and purging, and, with the last of them, death by apnœa.

But there is more to be explained, on which the morbid anatomy throws no light:—the various symptoms, whether referable to the nervous system directly, or to the constitution at large, which make up continued fever. Even had an opportunity for analyzing the blood offered itself, it could not have been safely concluded that its abnormal constitution, had such been established, was connected with the presence of fever, when the old standing renal disease, and the mercurial affection, would have both tended to vitiate such an inference. Nevertheless, in the absence of any morbid changes strictly characteristic of spotted fever, it appears of use to consider this case as illustrating its pathology, in the two particulars considered in the previous case,—what influence did the knowledge of the existence of the causes capable of modifying the condition of the blood exercise on the treatment; what their effects on the result of the case?

As to the first: the knowledge of these facts only caused greater watchfulness. There was room for little else but to support him, and to calm the excited state of his nervous system, which resembled more the condition of delirium tremens, or nervous excitement after protracted lactation in a female, than the dull, apathetic condition usually seen in the early days of fever. As to the second: therein lay the cause, both of his death,—though, to judge from the similar result in one of Rayer's cases, (Des Maladies des Reins, tome ii. p. 204,) this seems rather to be connected with the renal disease,—and, also, of the above symptoms of nervous excitement. In a previous case, (37,) the unfavourable character which old organic disease of the liver gives to fever has been illustrated; the present illustrates that arising from disease of the kidney, albeit modified by so many other influences, that there is danger of attributing the effects to the wrong causes, all tending, however, to alter the constitution of the blood, the effects of which change we have here set before us more particularly to illustrate.

## ROYAL SOUTH LONDON DISPENSARY.

### DIFFUSE PHLEGMONOUS INFLAMMATION.

Reported by WILLIAM TIFFIN ILIFF, JUN., Surgeon to the Dispensary.

JOHN M——, aged fifty-two, admitted as patient, and seen at home, June 20th, 1846. He is a coach-joiner, of temperate habits, enjoying generally good health, but has of late been living low, owing to depressed circumstances. Eleven days ago suffered first from severe pain across the forehead, and slight febrile symptoms, for which he applied a few leeches to the temples. In a few days, he observed the right leg to be swollen generally, below the knee, and painful. He applied leeches here also, and then enveloped the whole leg in rag, on which was spread basilicon ointment, and this is on it now. Countenance intelligent and expressive, but somewhat haggard; mind lethargic; tongue dry, and inclined to become brown; much thirst, with some little heat of skin; pulse 86, moderate in size, but weak; urine scanty; bowels confined; sleep fair. The right leg, below the knee, in front, and on the outer side, is swollen, resisting to the touch, inclined here and there to feel quaggy, of a dusky-red colour, and very hot; the dorsum of the foot is of a darker colour, and more quaggy; the calf of the leg is not much affected. Considerable irritation exists on the surface of the skin, probably from the contact of the ointment, and there are several small vesications. There is also an abscess, about the size of a crown piece, just

below the head of the fibula. He has not the least feeling in the affected structure. Free scarifications and incisions were made, followed by a warm linseed-meal poultice, with saturnine lotion. Compound extract of colocynth; extract of henbane; of each five grains, every four hours, until the bowels were opened. Effervescing mixture, with gentian and ammonia, every six hours. Beef-tea, and arrow-root, and wine.

22nd.—The abscess has been opened, and nearly a teacupful of sanious pus let out. There is much less heat and tension of the leg, and the bleeding following the incision was not very great; the dorsum of the foot presents an ulcerating and sloughing appearance; the bowels were thoroughly opened yesterday, and have acted once to-day; he lies in a dozing state, but answers rationally when addressed; tongue rather more dry; he takes his nourishment well; pulse much the same. To continue the poultice as before, and take his medicine every four hours.

23rd.—Has passed a bad night, owing to pain in the dorsum of the foot, which presents a yellowish-white, sloughing aspect; the edges of the sore are dusky and irritable; the leg itself is looking much better; the abscess discharges freely sanious pus; tongue more brown; bowels not open to-day; pulse 96, weaker. A yeast poultice to the foot; two aperient pills at bedtime; and to continue his mixture.

24th.—Tongue less brown, more moist; bowels not yet opened; pulse failing; leg generally progressing favourably; but the foot does not look so well. Has taken twelve ounces of wine, and beef-tea, arrow-root, &c., freely, during the last twenty-four hours. A carrot poultice to the foot. To repeat the aperient pills at bedtime.

25th.—Tongue quite clean and moist, not at all brown; pulse 96, slightly improved; bowels well opened; sleep better; considerable pain in the foot; the sloughing surface has increased to the size of the palm of the hand; the edges are tumid, dusky-red, irregular, and looking angry; the abscess is discharging freely, and the pus is more healthy. The edges of the sore were freely and deeply incised from without to within, and a stale beer-grounds poultice ordered.

26th.—Yesterday evening there was marked improvement in the aspect of the foot; to-day, however, it has somewhat retrograded. The leg continues improving; the swelling is nearly gone, as is also the tension and heat; pulse weaker; general powers less.

27th.—Decided improvement is again manifest in the foot; but he is more prostrated, probably from having had a bad night; tongue clean, but posteriorly dry; pulse 98, feeble. Hydrochlorate of morphia, a quarter of a grain, in camphor mixture, every night. To go on otherwise the same.

28th.—By mistake has taken three doses of his night mixture within the last twelve hours; is easy and free from pain; general improvement in the leg and foot.

29th.—The abscess discharges copiously; sloughing surface on the foot not extending, rather indolent, edges much improved; tongue clean and moist; pulse 90, rather stronger; bowels not open for two days; sleep indifferent. Sulphate of magnesia, two drachms; carbonate of magnesia, ten grains; tincture of ginger, ten minims; peppermint water, one ounce; every four hours, until the bowels are relieved. Black-wash poultice to the leg. Lint dipped in black-wash to the sloughing surface of the foot, and over it a stale beer-grounds poultice as before.

July 3rd.—Has progressed favourably as regards the leg and foot; the slough came away from the latter on the 1st, as also a slough from the abscess, both are looking well. He is also better in himself; appetite improving; bowels regular. Continue the poultice to the foot. A compress and strapping applied to the parts surrounding the abscess, and at the patient's request. Porter and meat allowed, he having ceased to relish the wine.

6th.—Yesterday and to-day he has retrograded. On the 4th, I opened a small abscess over the inner malleolus, and to-day another on the inner side of the upper third of the tibia. The strapping could not be borne. More pain in the foot; aspect very healthy; tendons plainly seen; tongue beginning to become dry. To resume his wine as before.

8th.—Another abscess forming above the patella; discharge very copious from those already opened, and also from the foot; sleep indifferent; complains of all his limbs aching; is losing all relish for food. Quinine, one grain and a half; dilute sulphuric acid, six minims; tincture of ginger, twenty minims; distilled water, one ounce; three times a day. Hydrochlorate of morphia, half a grain every night in camphor mixture.

20th.—No material change has taken place since last report; the abscess above the knee was opened on the 13th, and has since discharged freely; the daily quantity of pus from the different secreting surfaces is very great. Tongue dry; his appetite, which returned for a few days, has again failed him, and he is gradually sinking. In spite of great attention to guard against it, a sore has formed over the sacrum. A linseed-meal poultice to be applied. To continue his mixture, with, in addition, compound spirits of sulphuric ether, half a drachm for a dose.

22nd.—Half-past seven P.M.: Died: sensible to the last. No necropsy.

*Remarks.*—We have here a good illustration of a not unfrequent form of disease, which, in unfavourable instances, generally proves fatal in what may be termed the second or more chronic stage, this result depending on the inability of the patient to sustain the profuse discharge. In this case the appearances on my first visit were most unfavourable, for not only had the diseased action gained ground from inattention, but also had been aggravated by an improper application. Several free and moderately deep incisions were made in the leg, each about two or three inches long, so also in the foot; in the former, with the object of checking the progress of the inflammation, and preventing sloughing; in the latter, which was more advanced, of expediting the throwing off of the sloughs. Of the value of free incisions in cases of diffuse phlegmonous inflammation, I have seen several good examples, and in no case have I found the hæmorrhage profuse, applying, generally, after a short interval, a warm linseed-meal poultice, with saturnine lotion.

The treatment must necessarily be twofold—local and constitutional. In the first, the object is to relieve the heat and tension, in a word, to reduce the inflammation; this may be effected in the early stages by either cold or warm moist applications assiduously applied, with leeches, or, still better, incisions, more or less free, according to the extent of mischief, and perhaps averaging from one to three or four inches in length. When, however, the morbid action has advanced, the incisions become especially called for, to assist Nature in getting rid of the sloughs, the applications varying according to the nature and condition of the ulcerating surface, which it is a great object to limit as much as possible.

The local treatment of the second stage is to be directed to the maintaining healthy discharge, and, as far as may be, moderating its quantity, and endeavouring, by the judicious application of (firm but not tight) bandages, or bland strapping, to prevent burrowing of matter, and approximate the sides of the discharging sore.

The object of the constitutional treatment is to allay febrile excitement with as little sacrifice of the patient's power as possible, the support of which during the protracted suppurative stage is so important. The bowels should act regularly, and, where sleep is deficient, morphia, or any other appropriate sedative, may be administered.

The most nutritious diet should be given, and, especially in the later stages of the disease, the free internal administration of tonic and stimulating medicines should be persisted in; with, in addition, wine or spirits, the quantity of which that may be allowed is very great; indeed, no rule can be laid down, the best guide being the effect produced on the patient; in some cases, one may almost say they cannot take too much, so large a quantity is required to produce so slight an alteration in their condition. Malt liquor, also, as porter, bitter ale, &c., may be given; the chief objection to them consists in their quantity, this being a very important consideration where the nourishment taken is so frequently almost entirely fluid.

There is, however, an important question connected with this case, to which I will briefly allude—viz., what would have been the probable effect of amputation, performed when the suppurative stage was commencing? My own opinion was, certainly, that it would have afforded a fair chance of saving the life of the patient; he, however, strongly objected to it, when I hinted at the subject being a matter under consideration, and as I felt it to be somewhat of an "anceps remedium," I did not press him on the subject. This is not the first patient which I have seen die literally from profuse suppuration, healthy in character, and from healthy sores; and, on the other hand, I have seen patients so situated, suddenly restored almost from death by the removal of the limb; much may be said for and against: on the one hand, the patient would, perhaps, have been little able to withstand the shock of the operation, and loss of blood unavoidable under the most favourable circumstances; on the other, a great source of irritation would have been removed, and a large suppurating surface converted into a very small one. It is, of course, only in extreme cases that its feasibility can be

entertained, and though it is a serious thing to deprive a patient of a limb, yet if it be to save his life, we must not hesitate to consider the subject in all its bearings, and remember that in extreme cases extreme measures are often called for.

## Original Papers.

### ON THE INHALATION OF ETHER.

By JAMES ROBINSON, Esq., London.

As a description of my apparatus has so recently been published in THE LANCET, it will be unnecessary again to describe it. I will therefore give the method I always adopt of preparing the ether for this purpose.

It is of the greatest importance that the ether employed for the purpose of inhalation should be perfectly pure, and of the least specific gravity, and of the most volatile kind. To secure this, the operator must either prepare it himself, or procure it of some chemist in whom he can place implicit confidence, and who must prepare it for this especial purpose; for I feel convinced that many of the failures that have occurred in its administration, in some measure may be attributed to the imperfect preparation of the fluid, and the apparatus employed. I have myself obtained ether of various specific qualities from different chemists, and on one occasion, requiring an extra quantity for a series of experiments, and the gentleman supplying me being out of that of the quality he had generally supplied, sent some of a different quality which he had in his establishment, and which was administered in two cases. I found, however, that I could only produce partial unconsciousness, not insensibility to pain, and therefore deferred the operations, which were on the teeth. I procured what was then considered the strongest and purest ether, which was washed in lime water, and afterwards employed in the same cases with success.

I subsequently ascertained, however, that this ether was not of the first quality, but that there were three kinds, of which the one I was using was the second.

Having been favoured by Dr. Holland (who had received the information in a private communication from Dr. Jackson) with a description of the manner in which the Americans prepare ether for this purpose, I immediately adopted their method, which I shall proceed to describe.

Having procured the strongest and purest rectified sulphuric ether, wash it well with water, to get rid of any acid that may remain, and which would cause considerable irritation, producing coughing, &c., during the inhalation.

The ether is then to be decanted from the water, drying it with chloride of calcium, to free it from any water that might otherwise remain from the washing.

Since adopting this process, I have found the effects of the vapour more uniformly consistent in its effects, producing little irritation, seldom sufficient to cause coughing, which may generally be altogether prevented by allowing the patient to take six or seven inspirations of the atmospheric air, in conjunction with the etherial vapour, at the commencement of the inhalation.

INHALING.—At the commencement of the operation, I always allow the patient to inhale the vapour three or four times without closing the nostrils, carefully observing the pupil of the eye, which in about one minute will be found considerably dilated, but this will of course depend upon the susceptibility of the patient; after eight or ten more inspirations, the pupil will remain stationary for some few seconds: it will then turn towards the eyelids, which motion will, in most cases, be repeated several times. Continuing the inspirations, the pupil will be observed to turn under the upper eyelid, or remain in the centre of the eye; and in five or six inhalations beyond this, the operation may commence.

In operations, the performance of which requires any length of time, the vapour should be cut off by means of the stop-cock attached to the mouth-piece, which is so constructed, as when turned it admits a current of atmosphere to the mouth, as well as permitting the patient to breathe through his nose during seven or eight inspirations. Then again let on the vapour, and so on breathing that and the atmospheric air alternately at intervals of half a minute, until within three minutes of the end of the operation, when the pipe may, with perfect confidence as to the result, be removed from the mouth.

Having thus far described the mode of proceeding, I will illustrate its practical application by a series of cases, in which it was demonstrated in the presence of various members of the medical profession, who carefully and minutely watched the position of the eye and other phenomena attendant on the etherial inhalation; for I have invariably declined operating, even on private patients, and at my own residence, unless the parties would permit such members of the medical profession to be present, as chance or invitation had brought before me.

OPERATIONS ON THE TEETH.—The following cases were operated upon in the presence of Messrs. Liston, Quain, Storks, Symes, Casson, Bishop, &c.:—

A boy, about fifteen years of age, of a weakly constitution, and occasionally subject to a cough, came to me for the removal of a bicuspid tooth. He readily inhaled the vapour, and in two minutes became narcotized. The tooth was extracted, and he recovered from the effects of the inhalation in about two or three minutes, slightly bewildered. On being questioned, he said that he had had no pain, and that he had been dreaming, but could not describe what it was about.

The next case was that of a man, of about thirty years of age, and robust habit, the servant of a gentleman residing in the neighbourhood. One of his teeth, a first molar, had been a source of constant pain and annoyance for some weeks, and he was desirous to have it extracted. He inhaled the vapour for four minutes before any visible effect was produced, and appeared to suffer considerable pain during the operation. On rising from the operating-chair, he was in a state of some excitement, saying, "Now, gentlemen, it's all very well, but I wont stand it; and if there is anybody here"—making an attempt to take off his coat, when he became partially sensible. After taking a small quantity of wine-and-water, he quickly recovered; and on being questioned, said that he had certainly felt some pain, but not so much as at previous operations of the same kind, observing, however, that a few more breathings would have done for him. In this case the patient had not taken a sufficient quantity, while, in all probability, being in the habit of taking spirituous liquors, he required an additional dose of the vapour.

The next case was that of a youth, twenty years of age, by profession a mechanical dentist, who wished me to remove the remains of a first molar, from which he had suffered considerable annoyance. He inhaled the vapour for about three minutes, when he fell into a state of narcotism, and the stump was extracted by means of the elevator, an operation that, under ordinary circumstances, would have caused intense pain. On his recovery, which took place in about three minutes, he knew nothing of the operation, or how or when it had been performed, having had a dream, the substance of which he could not recollect, but in which he fancied that he had slept for some hours.

The next operations were performed at the Metropolitan Hospital, in the presence of Messrs Easson, Acret, Johnston, and Mr. Pearsal of Hull. The patient was a young man, twenty-seven years of age, who was desirous of having the first bicuspid extracted. He had not heard of the new process, and at first objected to inhale the vapour, but after some persuasion submitted, and began to inspire it. Owing to the reluctant and consequent imperfect manner of inhalation, however, it did not produce the effect, and after trying it for three minutes I extracted the tooth while the patient was only partially insensible. The fact was, as the man afterwards confessed, that thinking I was making experiments, and being afraid of losing his senses, he managed to breathe the atmospheric air with the vapour from the corner of his mouth, thus preventing its full effects, which otherwise would no doubt have been produced at an earlier period.

The following case, which I select from among several others, as being the youngest patient I had yet operated upon, occurred in the person of a boy, eight years of age, who required the extraction of one of the permanent molar teeth of the lower jaw. On being told that he would suffer no pain in having his tooth extracted by this process, he immediately inhaled the vapour, and in less than one minute, the eye indicating insensibility, the tooth was removed. When he recovered, he said that he had not suffered any pain; that he had felt nothing; that he had been in heaven or somewhere else, for he had been exceedingly comfortable and happy.

In the presence of Messrs. Storks, Jeremy, and some other medical men, I administered the vapour to a young woman about twenty-five years of age, of a delicate habit and nervous temperament. She at first inhaled the vapour with some fear, but on gaining confidence, and taking more decided inspiration, she in two minutes became narcotized, and a carious lateral incisor was removed. On her recovery, which was prompt, she was questioned as to her sensations; she said that she could not recollect any dream, as her head had been in a state of confusion, and felt funny, but that she had not suffered any pain whatever during the operation. It was ob-

served, that during her insensibility she sat shaking her hands, over which, however, she appeared to have little control, not being able to raise them above a certain height; and that she did not make the slightest attempt to raise them to her head when the tooth was extracted.

The next case presents somewhat different features from any in which I had previously administered the vapour.

A stout, robust, and masculine-looking female wished to have two molar teeth extracted; she had suffered excruciating pain for three weeks, from the teeth, which were very carious, and a large alveolar abscess had been the result of the irritation. After inhaling the etherial vapour for three minutes and a half she became narcotized, and the second molar tooth was extracted; on which she observed that she had felt some pain, but not near so much as formerly when she had a tooth out. She inhaled the vapour again, and I then for the first time observed its action on the iris, and allowed her to inhale for two minutes more, when the pupil of the eye, after ascending and descending several times, became fixed under the upper eyelid. I now removed the other tooth. She recovered in three minutes, and observed that she would postpone having it out till the next day, and could scarcely be persuaded by those present that it had already been removed. She said that she had had a dream, but could not remember its purport.

From her having suffered some slight degree of pain when the first tooth was extracted, I felt convinced that there was something wrong unconnected with the action of the apparatus. Under this impression, I inquired into her usual habits, and whether she was a dram-drinker. She denied the habit, but allowed that on that particular day she had taken two glasses of gin to give her heart for the operation.

A woman, a patient of Mr. R. Storks, had met with an accident, by which her nose had been divided. Being desirous of having the two edges brought together to improve her appearance, she inhaled for twelve minutes, when she became intoxicated, but not insensible to pains; it was afterwards ascertained that she was in the habit of taking considerable quantities of spirituous liquor daily. And it was conjectured, that in her case the ether would be of no avail, as the quantity of stimulus she daily swallowed would counterbalance or neutralize its effect.

In another case of this gentleman's, the ether was administered to a girl about twenty years of age, preparatory to the opening of an abscess. She became narcotized in two or three minutes, and the operation was performed. On her recovery, she stated that she had been asleep, and that she had not experienced the slightest pain. This patient, unlike the last, was a most abstemious person.

The following case presents a scene somewhat more entertaining than those hitherto reported:—

A solicitor was anxious to have two teeth removed while under the influence of the ether. After inhaling for four minutes, he became narcotized, and the teeth were extracted. On partial recovery, he took me by the hand, and, in a semi-jocose tone, said, "Now we'll dance the polka—now we'll dance the polka"—a proposition that sufficiently proved his unconsciousness of what he was talking about: he soon, however, settled down into a more sober state of mind, when he assured us that he was as perfectly unconscious of any pain as of the proposal he had made only a few minutes before.

In the next case, the inhalation had a different effect: it occurred in a gentleman of between forty and fifty years of age, who required a tooth to be extracted. He inhaled the vapour, and in three minutes the tooth was removed, during which he cried out as heartily as if the operation had been performed by the usual method. Rising from the operating chair when only partially recovered, he exclaimed, "Now, Sir, I will not be dictated to in this manner, and if you question my respectability—No—I'll tell you what." When recovering his faculties, he went on, "Are you my brother? I never saw such a likeness. God bless me! what have I been talking about? I'm quite sensible now, and know where I am, and what I came here for. You are Mr. Robinson: have I had my tooth out?" And on being assured of the fact, he repeatedly washed out his mouth, and though he had repeatedly done so previously, he was as perfectly unconscious of it as he had been of all pain.

Gower-street, Feb. 1847.

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"Dissertations generally advance a science but little. I not long ago examined critically the literature respecting one of the most important diseases; I laboured through one hundred and forty dissertations treating of it, without finding a single profitable idea."—*Pauli.*

# ON THE NOMENCLATURE OF THE SCIENCE OF MEDICINE.

By R. G. MAYNE, M.D., Leeds.

## No. IV.

THE GREEK ASPIRATE—THE MISPLACEMENT OF ITS SYMBOL, THE LETTER *h*, IN LATIN COMPOUND TERMS, AND IN THEIR ENGLISH SYNONYMES.

It is remarkable, that in almost all the Latin compound terms derived from the Greek, in which the aspirate (ʽ) of that language is preserved, it is misplaced; that is to say, the aspirate, or rather, what is its equivalent in the Latin or English, the letter *h*, is removed from the situation it occupied in the etymon of those terms respectively, and is put into another, where it has no business, literally,—where it is superfluous and useless. Without straining after the perpetration of a witticism, I may here be said to stand upon delicate ground when venturing to find fault with a misappropriation of this one-while favoured, another, slighted and rejected letter. It is no part of my intention, however, to carp at those little liberties taken with the *h*s peculiar to certain districts of the kingdom. I confine my criticisms exclusively to their occurrence in medical terminology.

Examples of the misplacement alluded to are numerous, as in *Catarrhus, Leucorrhœa, Hœmorrhagia, Gastrorrhaphia, Hœmorrhois,* and a host of others now extant, and by the industry of speculative inventors, every now and then ushered in among us. Let us take the first of these, *Catarrhus,* signifying catarrh, or common cold in the head or chest, which will serve for illustrating the same point in the whole. *Catarrhus* is immediately derived from the verb καταῤῥέω, to flow down; in reference to the increased flow of the mucous discharge of the nose, which forms the most familiar characteristic symptom of this complaint. To give effect to the aspirate in this verb, and more clearly to explain my purpose, let us render it, letter for letter, into Italic type, and substituting the letter *h* for the Greek aspirate, of which it is the true symbol, the word will be spelled thus—*katarhreō;* and the ordinary pronunciation of this by a person ignorant even of the Greek characters will be perfectly that of the original verb. Why, or for what end, then, is the *h* shifted in *Catarrhus* from its proper station before the second *r*, to a place after it? Do not *Catarhrus,* Catarhr, look as well, and sound as agreeably, as the common but false spelling of *Catarrhus,* Catarrh; while the former have the advantage of consistency with their origin, of being, what the latter are not, etymologically correct?

These queries may be met by the M'Clarty-*an* argument, that we have been long accustomed to the faulty orthography, and though not as it should be, it does well enough. But this is opposed to the very spirit of our profession, which prompts its members to try every means in their power, each in the sphere in which his lot is cast, according to his ability and the bent of his inclinations, for the general improvement. Moreover, it does *not* do well enough; for these compound terms, inserted in ordinary course in dictionaries, present (to those, at least, whose education has not been confined within too narrow limits) a conspicuous difference, in every instance, between the derivative term and its etymon. Thus, to take another example,—*Hœmorrhagia,* (from Αἱμορῥαγία, *Haimorhragia,* an eruption of blood,) a word borrowed *literatim* from the Greek—the change of diphthong *αι, ai,* into *œ,* being scarcely an exception—bears an evident departure from correctness, presents an orthographical assertion, as it were, which is contrary to truth, in the unauthorized transposition of the letter *h,* the aspirate of the Greek synonyme. Again, should we divide those terms at the end of a line, either in writing or printing, in a manner which, I believe, is allowed by the rules of modern typography, and may often be necessary, the latter portion of the syllables so separated raise somewhat of a ridiculous association in the mind, with one of those same liberties already hinted at, by which considerable stress is bestowed on the introduction of an *h*,—"whar'," as the old ballad has it, "an *h* shouldna' be,"—as *Catarr-hus, Hœmorr-hagia,* &c.

It may be argued, too, that the *h* is mute in these terms, and therefore it signifies little where its position may be. It is *not* mute in the etymon, and ought not to be so in the derivative; yet if mute in the latter, which, in its present improper situation, it undoubtedly is, or should be, then, better to throw it out altogether as useless, (which, in several terms, to be noticed below, has actually been done,) than to maintain, without shadow of excuse, an error, which probably

had no more legitimate origin than the carelessness of a transcriber or printer.

With regard to Greek words commencing with P, *R*, or the letter *rho*, and in which the aspirate precedes that initial, the entire omission of its symbol *h*, in all their derivatives, is preferable, I submit, to thrusting it, like a troublesome travelling companion, into some place or other behind. This preferable course has, as already stated, in many instances been actually followed, as *Rupia*, (from *ῥύπος*, *hrupos*, sordes,) *Ruta*, (*ῥύω*, *hruō*, to defend,) *Raphanus*, (contracted from *ῥαδίως φαίνεσθαι*, *hradiōs phainesthai*, it grows easily, or quickly,) *Raphe*, (*ῥαφή*, *hraphē*, a suture,) *Racosis*, (*ῥάκος*, *hrakos*, a rag,) &c. It has been only partially followed, however, for in other words similarly constituted as to the point in hand, the *h* is introduced in the same erroneous manner which I have endeavoured to exhibit, as *Rhachialgia*, (*ῥάχις*, *hrachis*, the spine; *ἄλγος*, *algos*, pain,) *Rhamnus*, (*ῥάμνος*, *hramnos*, the plant Buckthorn,) *Rheuma*, (*ῥεῦμα*, *hreuma*, a discharge of the air passages from cold,) *Rheumatismus*, (*ῥευματισμὸς*, *hreumatismos*,) &c. These two sets of examples, opposed to each other in the mode of their construction, show with how little of consistency the aspirate has been treated. If held to be of no utility in *Raphe*, *Racosis*, or *Rupia*, of what greater use is its existence, out of place as it is, in *Rhachis*, *Rhamnus*, or *Rheumatismus?* An objection will lie to its being preserved, in its proper place, in these terms; in other words, to its representative *h* being made their initial letter—that this would alter their alphabetical arrangement. So far as custom has familiarized us to finding them inserted under the letter R, the objection is of weight; but it affords no ground whatever for putting the cart before the horse, to use a vulgarism, or for reversing the orthographical order of the word on which each term is professed to be modelled. Since the aspirate has in many instances, and without the slightest detriment, been suppressed, what just grounds can be advanced for encumbering certain others with the letter *h*, which lends nothing to the sound, or sense, and, far from being a distinctive mark (placed where it is) of their derivation, is such a positive perversion of what appears there, that the aspirate would blush with indignation, if it could, for the awkward position of its substitute. Rather ought it to be banished from every term where it cannot appear in its right place; and the change which this would effect is of small importance, for from the extent to which it is already wrought, there only remain something under a score of terms to be subjected to its operation.

In Greek words, where the aspirate precedes an initial vowel, or diphthong, it has been preserved in their derivatives without exception; and this serves to show, not only the impropriety of having suppressed it before the initial consonant R, but, also, the greater impropriety of pretending to retain it, by assigning its symbol a place in which it is unmeaningly in the way, and often (to some fingers) a teazing hindrance to ready-writing, as in *Rhachitis*, *Rhizophora*, *Rhonchus*, &c. In any other situation than before the initial letter it is sometimes excluded, as in *Hydrorachis*, (*ὕδωρ*, *hudōr*, water; *ῥαχις*, *hrachis*, the spine,) instead of *Hydrohrachis*—sometimes correctly maintained, as in *Ahrizus*, (A priv., *ῥίζα*, *hriza*, a root,) but most frequently, as in the cases mentioned in the earlier portion of this paper, it is egregiously misplaced. This want of uniformity in a matter of constant recurrence in our every-day engagements, is calculated to increase the *opprobrium* which has been cast, not undeservedly, upon the technical language of medicine. Many English synonymes of the mis-spelt terms under consideration appear in dictionaries, and are current among non-professional persons; but this forms no good reason for keeping up their erroneous construction, neither any strong objection against effecting their correction. It only proves that medical men of former days, by adopting that *mal*-construction, misled the non-medical, on a subject peculiarly their own, and that the profession to this hour have, through neglect, upheld the error.

I shall now endeavour to sum up in brief, what I may, perhaps, seem to have dwelt on at too great length. My apology is, I have been urged by a feeling of necessity, under circumstances to which reference has repeatedly been made by me, to say so much on the subject, from an apprehension that I should stultify my own efforts at improvement, by presenting these derivative terms in a certain order of orthographical arrangement, with which the immediately succeeding account of their derivation would, in one essential particular, be at direct variance. I propose, then, as a required correction of positive error,—

That the Greek aspirate be given effect to in all Latin terms derived from words in which it occurs, and in their English synonymes, as a distinguishing mark of their origin, by inserting its symbol *h* in the same place which it occupies in the etymon, or root; excepting only where it precedes the initial R. That where the latter case happens, it may well be dispensed with altogether, because its introduction into its proper place, now, as the initial of such derivatives, would cause an alteration of their alphabetical arrangement; its retention in only some of them, and in a situation where it does not constitute either a part of their sound, as expressed in the etymon, or any special sign of their derivation, presents an unwarrantable departure from the one, and sacrifices, though only to a small extent, the other.

Leeds, February, 1847.

Errata.—In p. 117, col. 2, line 4, *for* "letters," *read* "class;" line 33, *for* "second and third," *read* "first and second."

## FACIAL NEURALGIA FROM UTERINE DISEASE.

By E. B. MAINWARING, M.D., Bournemouth.

In the early part of July, 1845, I was consulted by a married woman, residing in this locality, for a painful affection of the left eye and cheek, of great severity. On inquiry into her previous history, I elicited the following particulars:—That she had enjoyed excellent health, and was very stout, with florid complexion, until the age of twenty, when she menstruated for the first time. After menstruation she began to lose flesh and strength, but attributed her loss of health to her situation as cook in a family, and, in consequence, resolved to marry and leave her situation. After marriage, the menstrual discharge, which had been scanty previously, became less, and accompanied by severe pain and bearing-down, and she became afflicted with boils from head to foot, which tormented her for several months. Twelve months after marriage, the boils disappeared, and then commenced the pain in the jaw, teeth, and left side of the face, which has gradually become worse up to the present time, a period of more than five years. The pain, at first, having a resemblance to toothach, she had had several extracted, but without the slightest benefit. Her husband being in the coast guard, she has been living in several districts, and has had the advice of several medical men, who have given her various and powerful medicines—iron, arsenic, mercury, &c., at different times, without producing relief.

Her appearance, in July, 1845, was that of a nervous, debilitated, and suffering invalid. The affected side of the face presented a different appearance to that of the right side in several particulars; it appeared smaller, was more pallid, and the outer canthus of the eye was drawn down, the eye itself being in size and form smaller than the other, and the saliva drivelled from the corner of the mouth. In other respects she is a well-formed young woman, of the middle stature, with fair skin, dark hair and eyes, the white of which has a pearly lustre. She complained of want of rest, and of the pain wearing her out; of irregular bowels, sometimes costive, at other times very lax; of loss of appetite, scanty and very irregular menstruation, pain and weight in the loins, leucorrhœa, frequent desire to make water, and general suffering. This history led me to suspect ulceration of the os uteri, and I named my suspicion, and requested to be allowed an examination, which, with little difficulty on her part, I was permitted to do, using West's speculum vagina. On exposing the os and cervix uteri to view, I perceived a large ulcer, of the size of a crown-piece, or larger, extending over the os, and penetrating into the cavity of the uterus. The ulcer bled at the slightest touch, and was covered with a dirty-coloured matter. Under these circumstances, I recommended entire rest in bed, an unstimulating but nutritious diet, gentle aperient medicine when required, vaginal injections of lukewarm water, and the nitrate of silver well rubbed over the whole surface of the ulcer. This plan was pursued for about three weeks, without the least impression being made upon the ulcer by the free use of the caustic, or any mitigation of the symptoms. I now resolved to apply the acid nitrate of mercury pretty freely. On the third day following the application, the ulcer presented a more healthy aspect, and the patient stated that the pain in the face was much easier, in fact, that she had had some comfortable sleep, and that she felt altogether relieved. In eight days after the first application of the acid, I made a second, three days after which the pain in the face had entirely ceased, and has not returned up to the present time, and the ulcer began to heal rapidly, my patient gaining flesh and strength daily. Thus we went on for nearly a month, when on a sudden she was seized with a most agonizing pain in the region of the uterus and its appendages, with tenderness over the lower

part of the abdomen. On my arrival, I found her prostrate and faint, with a cold clammy skin, and the pulse small and quick. Under these circumstances, I gave her some brandy and laudanum, and directed that hot fomentations should be applied to the abdomen. On examining the womb with the speculum, I found the ulcer progressing favourably, and an absence of heat or other inflammatory appearance. On questioning her after she had rallied, I was told that it was about the period of her menses; that the pain came on without premonition; and that up to the time of this attack she had been going on most favourably: that unless she had taken cold on removing her bed from her room upstairs to a sitting-room below, she could not account for the attack. The pain having subsided in half an hour, I left her, directing that a draught, composed of castor oil, compound tincture of senna, and mint water, of each half an ounce, should be given early in the morning; and to use, in the meantime, warm emollient anodyne injections per vaginam.

On my visit next morning, I found the patient much better; the draught had operated well, and much offensive matter removed from the bowels. As she complained of being exhausted by this attack, I ordered her the iodide of iron, in the form of syrup, twenty drops, three times a day, in water; an aperient pill at night, composed of two grains of the extract of aloes, one grain of the extract of hyoscyamus, and one grain of gum mastich, with the view of keeping the bowels gently open; and if faintness came on, a draught, composed of one drachm of compound spirits of ammonia, one drachm of ether, and a little mint water; also to continue the use of the injections. No appearance of the catamenial discharge; ulcer going on well.

On the third day from the first attack, she was again suddenly seized with agonizing pain, which more particularly attacked the right side of the uterus, and extended to the right groin—this attack being accompanied by flushed face, heat of skin, and increased vigour of the pulse. Six leeches were applied to the painful part immediately, and she was directed to sit in a hot hip-bath for an hour after the leeches had dropped off. To take also one ounce of the following mixture every hour until relieved:—Sesquicarbonate of soda, one drachm; camphor mixture, six ounces; sedative liquor of opium, one drachm and a half; hydrocyanic acid, twelve minims. Mix. In the evening I found my patient better; pain almost gone; leeches had bled freely. As the bowels had not been relieved during the day, a stimulating enema of turpentine and castor oil was administered.

The next morning I found her better; bowels had been well opened; but as the tongue was furred, and the pain not quite gone, she was directed to take another castor oil draught as before, and to apply poppy-head fomentations to the painful part.—Five P.M.: Better. To have calomel, three grains; opium, one grain, in a pill at bedtime, and the castor oil draught repeated in the morning. In the night, she was again seized with violent pain in the region of the uterus; but was much relieved, ere I arrived, by her neighbour giving her some brandy and laudanum, which, she said, gave her most relief. At this visit, my patient expressed herself as without hope of recovery, declaring that she must die, as she could not bear her sufferings; in fact, she was quite despondent and hysterical. As these feelings were, probably, the effect of the brandy and laudanum, I cheered her, and gave her every encouragement to persevere, directing that the brandy and opium might be used again, if violent pain returned.

The next day I found her better, but still suffering from pain; and as there was tenderness on pressure, six leeches were applied to the cervix uteri; to be followed by the hot hip-bath for an hour. Bowels were open. To take one grain of blue pill, with three of conium, in a pill, three times a day, and to continue the emollient injections. The ulcer healing kindly.

The next day, the pain returned as violent as before, without any apparent cause, when the same means were had recourse to, with the addition of cupping to the loins; and thus we went on for six weeks, the pain returning more or less often during that time. In the meanwhile, leeches, cupping, narcotics, stimulants, hot baths, alteratives, injections of conium and poppy-head decoctions, opium suppositories, &c., were had recourse to, with various effect; but nothing permanently effective. During this period, the ulcer on the cervix had healed, and the menstrual discharge had returned in somewhat increased quantity, but still scanty. The pain in the back and loins was much relieved, and the bladder performed its functions naturally and comfortably. All leucorrhœal discharge had ceased, and the paroxysms of pain were less frequent and less intense; but as there remained some hardness and thickening of the neck of the uterus, the part was well painted with tincture of iodine every three or four days. In a fortnight, the pains had quite left her, and the uterus had regained, in a great degree, its natural appearance and softness. During her convalescence, I suggested a change of air, and in consequence, she went to her friends in Cornwall. After an absence of nearly three months, she returned as "well and as hearty as ever she was," (to use her own expression:) her appearance corroborated her words. The eye and cheek had regained their natural appearance, and she appeared cheerful and happy. She remains free from pain up to this time.

In passing a remark upon this case, it occurred to me, after my first examination of the uterus, that the cause of the painful affection of the face was the foul ulcer on the cervix uteri; and in consequence, I did not feel anxious to give her medicine, arguing, that as pregnancy frequently caused a painful affection of the teeth and face, so in this instance the presence of so large an ulcer on the womb might be the sympathetic cause of the tic douloureux, and that by healing the ulcer, the pain in the face would be removed also: the result is most satisfactory. For the painful affection of the uterus during the healing of the ulcer, I cannot offer any explanation further than by stating, that as the discharge diminished from the ulcerated surface, congestion of the surrounding parts commenced. That congestion existed at that time there is not any doubt, the relief being so marked after the application of the leeches and the cupping; yet the violence of the paroxysms would induce me to believe that there were other causes existing. Perhaps some twig of a nerve from the ganglionic plexus at the cervix got either exposed, or implicated in the cicatrix during the healing process; certainly the pain was too brief and too agonizing to be merely the result of inflammatory congestion. The question is not easily solved.

## Reviews.

*On Tumours of the Uterus and its Appendages.* By Thomas Safford Lee, M.R.C.S. London: Churchill, 1847. pp. 274.

This is the prize dissertation on a question recently proposed by the College of Surgeons—viz., "Tumours of the Uterus and its Appendages." A question no doubt suggested by the unmerited notoriety which one form of disease connected with this organ has obtained in reference to the operation of ovariotomy. Accordingly, this subject here receives a prominent share of attention; and it is consolatory to find, that the conclusions at which the author arrives, after a most careful consideration of the facts which he has accumulated, correspond very nearly with the opinions so often and so strongly expressed in The Lancet. To this subject we shall presently return.

The author arranges his views under three heads:—

1. Tumours of the uterus, including the very various forms of polypi-cauliflower excrescence, hæmatoma, scirrhus, &c., with their pathology, diagnosis, and treatment.

2. Diseases of the ovary, including ovarian dropsy, under which head are considered all the facts connected with its history, symptom, treatment, &c., and malignant and other tumours of the ovary.

3. Tumours of the vagina, and the external organs of generation.

The volume concludes with an Appendix, formed of a series of tables connected with the operation of ovariotomy.

The first shows the whole number (118) of all known operations, (and how many are unknown?) from 1809 to 1846.

The two following relate to the mode of operation—viz., by the large (85), and by the smaller (23) incisions.

The fourth table numbers eighteen cases, in none of which was the tumour removed.

The fifth table exhibits the extraordinary fact, that in six cases the operation was performed, and no tumour found exist in any of them.

The conclusions from these and other facts are so very clearly expressed by the writer, that we give them at length:—

"1. We have ascertained that ovarian disease is one which is not so harmless as some imagine; that, in fact, under ordinary treatment, it is very fatal. More than half of the cases recorded actually die, a large proportion of the others are reported only to be relieved, and only one in five recovers.

"2. That not only is ovarian dropsy fatal, but that it is also much more *rapidly fatal* than is generally supposed; the tables showing that more than one-half, or sixty-three deaths in 124 patients, in less than two years, and more than half of these —viz., thirty-eight, died within the first twelve months.

"3. That tapping, which has previously been considered the only mode of palliating the disease, is a very dangerous remedy. For I find in the tables I have collected, composed of thirty patients, one half, or fifteen, died within four months [after] the *first* operation, and twelve of these were after the first tapping. That in the result of the tables drawn up by myself and Mr. Southam, that of forty-six cases, twenty of which died after the first tapping, sixteen died within one month of the operation, and ten of these sixteen, or one half of the whole number, died in seven days after the evacuation of the cyst.

"4. We find that, supposing the danger of the first tapping passed, the fluid reaccumulates rapidly, and that the intervals between each operation become greatly diminished, while the quantity of fluid is increased, so that its remedial powers hardly compensate for the dangers which attend its performance.

"5. We must bear in mind, that, in many cases, the operation of tapping can be borne frequently, and life can be preserved in a tolerable state of comfort for many years, under the careful performance of the operation, from ten, sixteen, twenty-five, or even thirty years; and that more than one in three patients, (forty-three in 142,) survive the operation more than four years.

"6. That the operation of tapping ought only to be performed under one of two circumstances; either early, when the cyst is unilocular, or when the ovarian tumour is producing fatal pressure upon vital organs. In no case, except under the latter circumstances, ought a multilocular cyst be punctured, because the relief given is so trifling, and the dangers of tapping are so much increased in this form of the disease.

"7. That medicinal treatment produces only slight benefit: it may stop the progress of the tumour for some time, but very rarely effects a cure. Pressure, as a remedy, prevents the cyst from enlarging rapidly.

"8. That ovarian disease sometimes undergoes a spontaneous cure, either by an internal rupture of the cyst, or the communication of it, by ulceration, into the various outlets of the body.

"9. That from the difficulty arising in the cure of this disease, the operation of extraction of the cyst has been proposed and performed in 114 cases, of which number seventy-four cases have recovered, and forty died, making the average mortality nearly one in three.

"10. That of these 114 operations, in twenty-four, or rather less than one in five, the operation was obliged to be abandoned, either from extent of adhesions, from the tumour being an uterine or omental one, or from there being no tumour at all; proving most indisputably the *difficulties of the diagnosis.*

"11. That in the ninety cases where the tumour was removed, nearly one died to three recoveries.

"12. That the diagnosis of ovarian tumours is very obscure as regards adhesions and the character of the tumour; that adhesions existed in forty-six of the eighty-one where the fact is mentioned, and in six there was no tumour.

"13. That where adhesions existed, the mortality was greater, being one death in two and a quarter, whereas the mortality was one in three where they were absent.

"14. That the disease may be complicated with organic disease of other viscera.

"15. That the principal recorded causes of death, where it took place soon after the operation, are hæmorrhage and peritonitis; but the cases are much too few to be depended upon.

"16. When death takes place in consequence of the operation, it is very rapid. Of thirty patients, where the time is mentioned, fourteen died within thirty-six hours, and twenty-five within a week.

"17. That the character of the disease is of importance with regard to its mortality. In the extraction of hard tumours of the ovary, the mortality was more than one in two. Of the sixteen, nine were cured, seven died, and in five the tumour was not removed. Whereas, where the tumour was composed partly of fluid, and partly of solid matter—viz., in sixty-five cases, forty-four were cured, twenty-one died, and in fourteen the tumour was not extracted, making the mortality less than one in three; so that encysted dropsy is much more favourable to the operation than hard tumours of that organ.

"18. That as regards the mortality of the two operations, in eighty-five cases where the major operation was performed, fifty were cured, thirty-five died, making the mortality one to two and a half, (1 to $2\frac{1}{3}\frac{4}{5}$;) in twenty-three, where the minor operation was performed, nineteen were cured and four died, making the mortality one in six.

"19. That in some of the cases operated on, the ovarian tumour was malignant; but that the encysted dropsy is not, in the ordinary sense of the word, malignant, and that it may be removed without any tendency to malignant disease appearing in the pedicle."—pp. 209—211.

So much, then, for the success of this much-vaunted operation. The subject of cauliflower excrescence is one which might have been expected to afford room for some original investigation. Much doubt exists as to its nature, and as to the probable effects of its removal by operation. The author states, that he examined it microscopically, with the assistance of Dr. Quain, and that they found each lobule composed of compound cells and delicate filaments. The cells were round or oval at the centre of the lobule, but on approaching the circumference they became flattened, gradually assuming the character of the epithelium scales. There were no spindle-shaped or tailed corpuscules. The vascularity was doubtful. In fact, it appears to be a disease of the epithelium and of the tissue immediately beneath it. These observations correspond very nearly with those of Dr. Simpson, who says—

"One submitted some very thin slices from the surface of the section of the tumour to a powerful microscope in the possession of Dr. John Reid: it was seen to be composed of a number of cells, arranged in some places in groups; in others, in irregular lines. These cells contained each a large nucleus, and the nucleus enclosed several large nucleoli. . . . . It may be interesting to add, that none of the caudate or spindle-shaped bodies, described by Müller as often existing in morbid cephaloid structures, were seen in any section examined."—pp. 86, 87.

In reference to the non-malignant nature of the disease, and the propriety of its removal, the author states—

"I agree with those who suppose that the cauliflower growth is not carcinomatous, and there are many circumstances to favour this presumption. In the first place, the patient enjoys generally good health throughout the disease. In Anderson's case, No. 5, there was no pain like that of cancer; the disease was unnoticed until it had attained a considerable size, whereas, in cancer, it is almost the first and prominent symptom. There is no great absorption of fat, as in those who die of cancer, (Clarke.) Again, it occurs early in life: Sir C. Clarke has seen a case at the age of twenty. It is confined to a particular part, and does not involve other structures. However, when the disease is of long standing, it may involve the upper part of the vagina; I have seen this in two cases. I think, then, that these reasons are sufficient to justify the opinion that these growths are not cancerous.

"Several cases are now on record, where this disease has not returned after its entire removal, by Drs. Simpson, Montgomery, Boivin, and Duges, and in my mind fully establish the proper treatment of the disease."—p. 88.

From Mr. Lee's conclusion on this point we do not dissent, though certainly stronger arguments in their favour may take the place of some of those which he adduces here.

The extracts which we have given will enable our readers to form an opinion as to the merits of this essay, which we believe to have deservedly received the prize which evoked it. The author appears to have paid much attention to the collection of facts and cases, and his reasonings thereon are generally correct and forcible, though not always very happily expressed. Those who are interested in the subject of which it treats will find the volume worthy their attention.

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*The Provincial Medical Directory*, 1847. London: J. Churchill.

Little remains to be said, respecting this publication, in our columns, beyond announcing its appearance in a volume during the past week, "incorporated" with copies of the London Medical Directory. The work is intended to ap pea

afresh, with revisals and corrections, on the first of January of every year until the Millennium. At present it is an instalment,—presented with great industry and good faith,—towards a payment of twenty shillings in the pound on the whole sum due—that is, of twenty medical men of the profession in every score; circumstances not permitting the work to be made at once perfect, the full number being promised in future editions, when time and further inquiries have shown how many names are not yet comprised in its pages. The Registrar-General of Births and Deaths has lent material aid towards producing the work, the district registrars having, at his desire, supplied to the editors lists of the various legally qualified medical practitioners resident in "the provinces"—in the *counties*, by the by, England not being divided into provinces. We wish the work a successful circulation, not, however, *taking leave* of it with these words, for it must continually prove to us, in our editorial labours, a very useful index to the profession.

## Medical Societies.

### MEDICAL SOCIETY OF LONDON.

Monday, February 1, 1847.—Mr. Dendy, President.

#### PARALYSIS FROM LEAD.

The following case, occurring in the practice of Dr. Chowne, was read by the secretary:—

A man, by trade a tailor, about thirty-two years of age, of small stature, and slight make, was in his usual good health when he began to work and to sleep in a newly-painted small room. He slept in the room four nights; but continued to work in it, until the end of a week, at which time he was seized with colic, violent retching, and a very confined state of the bowels. He applied to a medical man, (since dead,) who gave him calomel and other purgatives. The constipation continued thirteen days, during which he had great pain (colic pain) and swelling of the abdomen. Enemata were given, and he had other medicines to relieve the bowels. When they were relieved at the end of the thirteen days, both the pain and the swelling of the abdomen left; but he remained still very ill with debility, and now and then a return of colic. Aperient medicines were still required. He continued in this state about ten weeks, constantly requiring purgatives, and having occasional attacks of colic. He went into a hospital, Sept. 6th, 1842, and was told by the physician under whose care he was admitted, that he had painter's colic. At that time he had not any paralysis. Had "sulphur brimstone," milk, and occasionally house medicine; afterwards quinine. When he had been in the hospital about a week, he began to feel tremor and weakness in his hands; was in the hospital three weeks; the tremulousness increased; it was confined to the hands and wrists; the hands at that time did not drop; his health appeared to improve in the hospital. After he left, his hands gradually grew worse for about six weeks, and then he had the "drop wrist." His physician noticed, while he was in the hospital, that his gums were blue.

He was admitted under my care into Charing-cross Hospital, Nov. 12th, 1842. The hands quite dropped; the ligaments were very lax; his general health was very bad, and he had great general weakness; the gums had a blue margin, very well defined. The plan he was put under was essentially the same as he had been under before, and by which his general health had been slowly improving. He had rubefacients to rub on the hands. He left Charing-cross Hospital to go to the country; but although his health had improved, his hands were worse. This was his state five months after his first attack of colic.

While in the country he was not, at first, under medical treatment. Ultimately he was galvanized six times. The operation produced perpetual tingling in the hands and arms; a wire was placed at the back of the neck, and he held the balls in his hands. He thinks that although he was not conscious of benefit at the time, that the galvanism did him good; he says he often feels the same sensation now as that produced by the galvanism, "not so strong a sensation, but exactly like it."

He left the country with his health much improved, and his hands not quite so feeble. He was then advised to use a solution of rock-salt in water, and to plunge his hands into it as hot as he could bear it, at least half a dozen times a day for four or five weeks. He found them acquire still more strength under this treatment; he kept on bathing them in the same way up to November, 1843, but still they were so weak that he could not make any use of them, the wrists still dropping.

On the 14th of November, 1843, he attempted to use a measure tape, (the measure of his trade,) to take measure of a gentleman, but his hands were "too feeble."

About a week after this attempt, he was at Stratford, and on arriving in town in the evening, being behind his time, on leaving the coach, he walked very fast, (that is to say, as fast as he could,) from Aldersgate-street to his residence, about two miles; when he arrived he was in a strong perspiration, and to guard against catching cold went to bed, but slept very badly; continued in a perspiration, but still felt "burning hot," and was alarmed lest he was going to have a fever. He had not any ache or pain anywhere, only the burning sensation; the next day he found, to his surprise, that he could raise his hands and support them at the wrist, which he had not been able to do before, from the time of their first dropping. The preceding day, (that on which he was at Stratford,) his hands were so weak that he could not hold anything in them without visible trembling, but the day after his brisk walk, strong perspiration, and night of feverishness, he could hold his hands quite steady, and as well as he could before he was afflicted. He considered it quite sudden; as it "seemed to him that he could even work, he tried it, and succeeded quite well." Since that time he has pursued his business as usual.

From the day of his first attack to his return from Stratford was about seventeen months. He continues using the salt-and-water; he thinks the warmth is good for him, and that he can work better in a warm than in a cold room.

He cannot account for lead getting into his system in any other way than by the paint of the room he slept and worked in. The house he lived in had not leaden cisterns, but wooden ones, casks. His bowels are more apt to be confined than they were before the attack.

At present he has not blue gum, but I have not any means of knowing for certain when that left.

In the discussion which ensued on this case, and in which various members took part, the often debated subject of lead paralysis formed the main point.

### PATHOLOGICAL SOCIETY OF LONDON.

Monday, Feb. 1, 1847.—Dr. Williams in the Chair.

Dr. Fuller exhibited

#### TWO SPECIMENS OF DISEASED HEART OCCURRING IN PERSONS UNDER THE AGE OF TWENTY.

Case 1.—George S——, aged sixteen, was admitted into St. George's Hospital on the 9th of December, 1846, under the care of Dr. Wilson. A stonemason by trade, he was attacked, at the age of fourteen, with rheumatic fever, complicated, as it appears, by some inflammatory action about the heart. On recovery from this illness he went again to work, and though ever since subject to dyspnœa and palpitation, increased on active exertion, he continued to pursue his usual occupation up to a week or ten days ago, when, as he began to suffer from wandering rheumatic pains, and from increased dyspnœa and palpitation, he was obliged to take to his bed. His countenance, on admission, was most anxious, his breathing hurried. He complained of pains in various parts of the body, more particularly in the right hand and wrist; of pain referred to the cardiac region, increased on inspiration; and of excessive palpitation, dyspnœa, and orthopnœa. His joints were neither red nor swollen, but he was sweating profusely, and presented all the general symptoms of rheumatic fever, complicated by heart affection. There was extended dulness on percussion in the cardiac region, and considerably increased and extended impulse. The heart's action was regular, but of a peculiarly trembling character; the sounds were dull and distant, unaccompanied by any murmur at the apex of the heart, but both attended by a loud murmur at its base: that with the first sound, short and whiffing, was heard loudest on the sternum, quite at the base of the heart; that with the second was prolonged, and as loud over the aortic valves as up the track of the aorta. There was distinct pulsation over the sternal extremity of both clavicles. His pulse was regular, but eminently jerking. He could not lie on his right side, and his easiest position was leaning forwards, with his body in-

clining to the left. Moist and rather coarse crepitations universally diffused throughout the chest. There had never been dropsy. By the treatment adopted great relief was obtained, and by the 21st, as all pains had subsided, and the palpitation was hardly more severe than it had been for several months, he was induced to get up for a few hours. On the 22nd he sat up during the day, and so also on the 23rd, and expressed himself as "very much better." On the evening of the 23rd, he retired to bed about seven P.M., and appeared comfortable and cheerful; but about ten P.M., without any complaint of palpitation, he made a sudden exclamation, and expired in a few seconds.

The following was the result of the post-mortem investigation:—The body well formed, and in good condition; the left lung pushed upwards and backwards by enormous enlargement of the heart, which occupied the whole of the anterior surface of the chest, as seen when the sternum was removed. Both lungs were healthy in structure, though congested at their posterior and inferior parts, and loaded with frothy serum. The opposed layers of the pericardium were universally adherent by old and firm adhesions, except just at the root of the large vessels, where there was about a square inch of surface, covered with soft, recent, jelly-like lymph; the heart enormously enlarged, but without much hypertrophy; the left ventricle was almost sufficiently large to allow of the introduction of the whole hand, and the aorta was also greatly dilated; the aortic valves were thickened, and one shortened; and the mitral valves opaque, and somewhat thickened, but not so as to interfere with their action; they were considerably enlarged, and the tendinous cords of the mitral valves were elongated and developed to an extraordinary degree; the cavities of the right side of the heart considerably dilated, but their valves healthy. The liver, kidneys, and other abdominal viscera, healthy.

Case 2.—Edward R——, a groom, aged eighteen, was admitted, under Dr. Wilson's care, at St. George's Hospital, on the 9th of December, 1846. Having previously enjoyed good health, he began to suffer, about two months ago, from slight cough, dyspnœa, and pain in the chest, referred to the cardiac region. These symptoms, however, were so slight, that he kept about his work up to a month ago, when he was suddenly seized with acute pain on the left side of the chest, dyspnœa, and severe cough, which symptoms, though somewhat relieved by the treatment adopted, ever after prevented his resuming his occupation. During the last month he has suffered slightly from palpitation, and his feet have occasionally swollen towards evening. He never had rheumatism; he never had a blow on the chest, nor is he aware of ever having strained himself. On admission, though his complaint was of cough and debility, it was evident that the primary cause of mischief was in the heart. There was turbulent action of that organ, with extended dulness on percussion in the cardiac region; considerably increased impulse, and dull, imperfect, and confused sounds. Indeed, the normal sounds of the heart could hardly be distinguished, but were replaced by a low, continuous murmur, which at times might almost be confounded with an indistinct friction sound. His pulse was exceedingly small and weak, and rather irregular, but did not intermit. His chest was resonant on percussion at either apex, and the breathing, though accompanied by occasional large, moist crepitations, was vesicular; urine loaded with the lithates and purpurates, and though on one or two occasions albuminous, not so constantly; his bowels were acting freely; his tongue moist, and but slightly coated. He went on comfortably up to the 19th inst., when his cough became worse, and on the following day was accompanied by aggravation of his other symptoms, The dyspnœa and orthopnœa became excessive, he suffered greatly from palpitation and pain in the region of the heart; profuse hæmoptysis occurred, and his feet and legs became rapidly swollen. From day to day these symptoms became worse, the hæmoptysis continued, the cough increased, and the lower part of either side of the chest became dull on percussion, and thus, after his lungs had become gradually more gorged, he sank, without any material alteration in his symptoms, on the 27th.

The post-mortem appearances were as follow:—Lower extremities œdematous; each pleura contained about half a pint of clear blood-tinged serum. Lungs, in their superior third, extremely congested; in their inferior two-thirds, apparently somewhat inflamed, and much solidified by the interrupted effusion of blood. Pericardium contained about three ounces of clear blood-tinged serum. The heart was enormously enlarged; its right cavities were greatly dilated, and the walls unusually thin, but the tricuspid and pulmonary valves were healthy. There was enormous dilatation of the left ventricle, with considerable hypertrophy, and the left auricle was somewhat enlarged. The mitral valve was probably efficient, but bore marks of recent inflammatory action, for on its free margin were several recent pink fleshy vegetations, and on its surface one or two specks of recent lymph. The aortic valves were diseased to such an extent as to render it almost impossible to pass the little finger from the ventricle into the aorta. The free margin of one of the valves had been entirely broken down, (probably by ulceration,) and the valve itself destroyed for at least one half of its depth, while the remaining portion of it was thickened and opaque. At its point of junction with the other valves, but chiefly on the superior surface, was an enormous irregular deposit of calcareous matter, which, projecting into the cylinder of the aorta, at right angles to the walls of that vessel, held the aortic valves in a permanently semi-closed condition, the only egress for blood from the ventricle into the aorta being through the opening afforded by the broken-down condition of the mitral valve, and by such freedom of motion as yet remained in the other two valves. These valves were greatly thickened, and were very rigid along their free margin, and immediately above each of them was a dilated pouch of the aorta, sufficiently large to receive a small hazel nut. The aorta itself, with the exception of the lesion above alluded to, was healthy. The abdominal viscera was greatly congested.

The cases above detailed, though by no means uncommon, Dr. Fuller remarked, presented excellent illustrations of two forms of cardiac disease. The first was interesting, as showing to what an enormous extent the chordæ tendinæ may become developed, when, from the circumstances of the case, the strain upon them has been violent and long continued. The second was remarkable for the extent of organic mischief, and the short duration of any notable symptoms. For as the patient considered himself in perfect health two months before admission, we must either suppose that considerable lesion of the aortic valves had existed for some length of time without giving rise to much inconvenience, or that such mischief commenced coincidently with his symptoms, and, accordingly, within the short period of two months, produced the enormous dilatation and hypertrophy of the heart revealed by post-mortem examination. The former hypothesis appears the most consistent with experience; for even when the valvular mischief is excessive, it is found in cases where the exact date of that mischief can be ascertained, that a much longer period of time than two months is usually required to produce cardiac hypertrophy, corresponding in extent with that which existed in the present instance. And the condition of the valve is most clearly indicative of chronic rather than of recent disease; for though thickened and opaque, they bore no traces of recent inflammatory action, nor was there any evidence of such action on the lining membrane of any part of the heart.

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Dr. Peacock then read a case of

CONTRACTION OF THE MITRAL APERTURE, IN WHICH THERE WAS NO MURMUR DURING THE LAST PERIODS OF LIFE, AND IN WHICH THE LUNGS PRESENTED OBSTRUCTIVE COAGULA IN SEVERAL LARGE BRANCHES OF THE PULMONARY ARTERY.

The heart and lungs were exhibited. The woman was sixty-eight years of age, and the only history obtained was, that she was taken ill one month prior to admission into the Free Hospital, after having been exposed, nearly naked, to the cold and damp air. During the three weeks that she was under observation, she had extreme difficulty of breathing, cough, and expectoration, partly muco-purulent, partly bloody, with anasarca of the lower extremities, and effusion in the cavities of the abdomen and thorax. The action of the heart was irregular, both in force and frequency; but though she was attentively and repeatedly examined, the sounds were only flat and imperfectly developed, and were not attended by any distinct morbid murmur.

On examination after death, the pleural cavities were found to contain much fluid, and the abdominal and thoracic viscera were much congested. The heart weighed twelve ounces, and all its cavities were distended with blood. The left auriculo-ventricular aperture was contracted, and the valves thickened, rigid, and united, so as to leave only an oval aperture capable of admitting the point of the forefinger, and permanently patent. The left ventricle was very large, and its walls somewhat thin, very flabby, and collapsed on division. Dr. Peacock remarked that this instance afforded, while under observation, an exception to the ordinary signs of disease of the mitral valve. The explanation of the absence of the systolic murmur

at the apex is, however, readily to be found in the powerless state of the circulation during the whole time she was under observation. The left ventricle was evidently incapable of contracting with the energy requisite to throw a column of blood through the patent orifice with sufficient force and rapidity to produce a murmur. The section of the left lung shows an obstruction, by coagula, of two branches of the pulmonary artery. At the anterior and lower edge of the upper lobe of the right lung, there was a mass of pulmonary apoplexy, and, in connexion with this, a large branch of the pulmonary artery was found obstructed; two other branches in other parts of the same lung were similarly affected, and two in the left lung. The coagula were firm, decolorized, and partially adherent. Their formation was doubtless owing to the long-continued and gradually increasing obstruction to the current of blood in the pulmonary artery, dependent on the contraction of the mitral aperture, and the engorgement of the pulmonary veins, together with the pressure exercised upon the lung from without, by the fluid in the pleural cavities.

Dr. Williams agreed in the opinion expressed by Dr. Peacock in reference to the cause of the absence of the cardiac murmur, and alluded to several cases of mitral disease in his own experience, in which, during violent action of the heart, the murmur was very audible; but during the feeble contraction of the organ, not capable of detection.

Dr. Norman Chevers remarked, that in every case of pulmonary apoplexy that had come under his notice, he had remarked clots in the divisions of the pulmonary artery, and mentioned a case in which the coagula extended to almost the secondary ramifications. He was of opinion that this morbid appearance was diagnostic of this affection from grey hepatization.

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Mr. Prescott Hewett presented a specimen of

AN EXTENSIVE LACERATED WOUND OF THE RECTUM AND BLADDER, PRODUCED BY THE LEG OF A CHAIR.

The patient, a man, aged forty-three, was admitted into St. George's Hospital, under Mr. Keate, in a state of collapse, and complaining of severe pain about the vesical region, and over the lower part of the abdomen. He stated, that a short time previously, he had slipped off a table upon which he was standing, and that in his fall he had knocked over a chair, one of the legs of which having struck him on the side of the anus, had glanced off, and passed up the rectum. On examining the anal region, nothing was observed, with the exception of a slight laceration at the left margin of the anus, which did not penetrate more than a few lines in depth. A catheter was passed into the bladder, and a quantity of bloody urine drawn off. The pain soon spread over the whole of the abdomen, the collapse continued, and the patient sank, with symptoms of low peritonitis, in about twenty-one hours after his admission into the hospital. At the post-mortem examination no appearances of injury existed about the perinæum; but there was some ecchymosis in the neighbourhood of the slight wound at the margin of the anus. At about two inches and a half from this opening, there was a large, lacerated wound in the front part of the rectum, through which two fingers were easily passed into the bladder, at its fundus, and on laying open this organ, another extensive laceration was found at the right side of its apex, leading into the cavity of the peritonæum. The leg of the chair having slipped up the rectum, had thus transfixed this organ and the bladder from its fundus to its apex. The peritonæum contained a large quantity of bloody fluid, mixed with recently-effused lymph.

The preparation is in the museum of St. George's Hospital.

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Mr. Avery exhibited a specimen of

EXTENSIVE ULCERATION OF THE RECTUM, OF A SYPHILITIC CHARACTER,

taken from the body of a fair, delicate girl of the town, aged twenty-two, who was admitted into the Charing-cross Hospital on the 14th of August, 1846, and who died, five months afterwards, from an accidental attack of erysipelas of the face. Mr. Avery remarked, that the ulceration was interesting on account of its extent, as well as of its duration, and, taking into consideration the length of time it had existed, of its limited depth; it was also interesting from its connexion with syphilis, and from the little suffering it had occasioned. She had been in the hospital a year before, under Mr. Hancock, with an extensive sloughing ulcer in the fourchette, which had burrowed deeply between the vagina and rectum. When she was admitted on the last occasion, she complained of a copious discharge of pus, sometimes bloody, that poured from the anus in considerable quantity on any sudden movement. The annoyance had existed more than two months before her admission. On examination, the gut, just within the anus, felt uneven and rough; higher up it was soft and smooth. She suffered very little pain, and her motions were not otherwise unusual than being covered with purulent matter and sometimes streaked with blood. She had numerous indelible marks of previous syphilitic eruption on the limbs and trunk, and she was still suffering from sore throat. The treatment consisted of small doses of bichloride of mercury and sarsaparilla, and astringent injections, with nutritious diet. The discharge gradually diminished so much, that just before her death it had almost ceased, when she was attacked with erysipelas, which proved fatal in a few days.

The rectum was opened from behind, and immediately within the anus, which is surrounded by a circle of vegetations, the ulcer was seen to commence: it extended three inches upwards, and occupied the whole of the internal surface of the rectum to that extent. The edges rough and uneven above and below, but soft and rounded; the whole surface smooth, exhibiting the muscular fibres of the intestine quite bare, some of the circular muscular fibres being destroyed. The neighbouring mucous membrane appeared in a healthy condition, and the whole ulcer gave me the idea that the ulcerative process had been arrested, and that of reparation was about to commence. A deep hollow in the fourchette showed the situation of the ulceration (most probably a primary syphilitic one) for which she came into the hospital a twelvemonth ago, and there is little doubt but that the ulcer of the rectum itself is one of the phenomena of secondary syphilis.

Mr. Avery, in answer to Dr. Gull, (who had quoted some of the statements of Rosenbaum, to prove that what were thought generally to be secondary ulcers were absolutely primary in many instances, such as those occurring in the fauces &c.,) stated that the evidence in favour of the ulcer of the rectum in the case under consideration, rested on the long period of its existence, its slight depth, the previous occurrence of primary ulceration, and the presence of old cicatrices in different parts of the body.

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Mr. Forster exhibited a specimen of

DEFICIENCY OF THE LOWER PORTION OF THE RECTUM.

The child had lived thirteen days without taking food, and during life an operation was not deemed advisable.

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Dr. Jenner exhibited a specimen of

ULCERATION OF THE GALL-BLADDER,

which was taken from the body of a maiden lady, aged sixty-three, who had been seized, six or seven years ago, with an acute attack of what was deemed to be hepatitis, and which was treated accordingly. Since this attack, she had always been in a delicate state of health, suffering from occasional diarrhœa, slight pain, and sense of distention after eating. A second acute attack came on, on Jan. 11th, marked by severe pain in the hepatic region, violent vomiting, cold surface, rapid and weak pulse, and constipation, followed by the formation of a circumscribed tumour below the cartilages of the ribs, towards the umbilicus, in the situation, in fact, of the gall-bladder. Under the influence of active treatment, the symptoms declined in intensity somewhat till the 17th, when bilious diarrhœa supervened, followed by copious discharge of blood by stool, and repeated vomiting of green fluid. She died comatose twelve days after the commencement of the attack. In the post-mortem examination, made forty-two hours after death, the stomach was observed to contain two ounces of greenish fluid, and to present at the large curvature several deep-red spots, from the effusion of blood. A similar congested condition existed in the mucous membrane of the cæcum, colon, and lower part of ileum. The large intestines were distended with flatus, and some clots of blood were in the cæcum. Liver small. On making section of it, a thick, reddish, purulent-looking fluid escaped, which could be traced into the portal system. The vena portæ contained a dark clot, extending into its smaller branches, and which clot adhered to the lining membrane of the vein, in the latter situation, some small red patches being observed in the inner membrane of the primary trunk. The gall-bladder had all its coats much thickened, and several small round ulcers of the mucous lining covered over by a thick layer of greenish mucus, and here and there an apparent effusion of lymph.

Dr. Lloyd exhibited the

DISEASED KIDNEYS OF A CHILD, AGED ONE YEAR AND A HALF, WHO HAD DIED FROM DOUBLE PNEUMONIA.

The urine during life was albuminous, and in the post-mortem inspection, the surface of both kidneys were observed to have been highly inflamed, there being immediately beneath the proper covering much purulent effusion, and the cortical structure itself being interruptedly sloughy and gangrenous, with numerous circumscribed depositions of scrofulous pus. There was neither disease of the bladder, nor obstruction of the ureter.

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Mr. Cole exhibited a specimen of

SCIRRHOUS STRICTURE OF THE ŒSOPHAGUS,

taken from a patient, aged forty-six. The stricture was situate two inches from the stomach, and was so small as merely to allow of the passage of a large probe.

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## Foreign Department.

We have no doubt that the experience of the French surgeons and physicians in applying the influence of ether to the alleviation of pain during surgical operations, and under other circumstances, will prove acceptable to our readers.

The following is a digest of the discussions of the learned societies of Paris concerning the properties of this agent, and of hospital reports, contained in the *Gazette des Hôpitaux* for the last month:—

*Académie de Medécine, Meeting, Jan. 12th*, 1847.—M. Malgaigne announced that he had tried upon five patients the method proposed by the Americans, to render surgical operations painless. The first patient was a young man, aged eighteen, who was afflicted with an abscess at the lower part of the leg. He breathed the ether for two minutes, which sufficed to plunge him into a state of complete lethargy. The abscess was opened with a bistoury. In half a minute afterwards, the patient woke up, and affirmed that he had experienced no pain, and up to that time believed he had not undergone any operation, but wished it to be proceeded with.

The second, an Italian, a little older, who had a tumour in the neck, respired the ether for five minutes. By the time he had revived, the operation was finished. He said he felt that the tumour had been removed, but had not experienced any pain.

The third patient was a young woman, also having a tumour in the neck. She did not fall into a state of insensibility until she had inhaled the vapour for eighteen minutes. She did not feel the first incision; but woke up immediately afterwards, and suffered during the rest of the operation as though she had not been submitted to its influence.

The fourth was a man who had had his leg broken by a railway truck, and underwent amputation at his own desire. He was submitted to the vapour of ether for seventeen minutes. On his coming-to, he said he had felt the operation, but had not suffered more pain than if he had lightly scratched his leg with the point of a knife.

The last, a young man, who was operated upon for strabismus, previously respired the ether for ten minutes without effect, and suffered during the operation as other patients would have done. In answer to a question from M. Nacquart, M. Malgaigne explained the process as used by the American surgeons, which he had adopted for the first patient; but for the others he had introduced into one of the nostrils, the other being closed, a tube leading from a vessel, the bottom of which was covered with ether—the patient inspiring by the nose, and expiring by the mouth.

M. Velpeau questioned whether ether was altogether innocuous to the system. He feared it might produce some injurious effect upon the patient, counterbalancing the advantage derived from the absence of pain. Besides, as the influence only lasted for a short time, its use in operations of a long duration was doubtful.

M. Guibourt had no fear of a bad result from the employment of ether, his only anxiety was as to the certainty of its operation, he himself having frequently and for a long time inhaled air strongly charged with ether, without experiencing any ill effect; and on this point he was supported by M. Chevallier.

M. Roux, of the Hôtel Dieu, detailed the particulars of a case of compound fracture of the leg in the *Gazette des Hôpitaux*, January 16th, 1847. The patient, who was about forty-five years old, breathed by the mouth the vapour for twenty minutes with great earnestness; in about ten minutes his eyes closed, but he still answered any questions put to him, and in ten minutes more the operation was finished; the pain thereof being evidently diminished, as the patient was not aware that the operation had been completed, until he was told such was the case.

*Hôpital St. Louis.*—A patient of M. Malgaigne—a man about thirty-five years old, of strong constitution, presented at the lower and internal part of the leg, about the level of the malleolus, a phlegmonous abscess—was submitted to the influence of the etherial vapour for two or three minutes, which short space of time sufficed to put him into the state necessary for the commencement of the operation, which can only be compared to drunkenness. M. Malgaigne addressed the patient, asking him whether he felt any particular sensation, or found his sight confused. The man having answered that his vision was imperfect, M. Malgaigne immediately used the bistoury, making an incision in the abscess and in a portion of the skin much supplied with nerve and considerably inflamed. He then pressed the pus from the abscess. On the termination of the operation the patient appeared agitated—his face was red, his features contracted, his eyelids closed, and, in short, his whole muscles, particularly those of the face and superior extremities, exhibited symptoms of abnormal contraction. He seemed to be under the weight of painful feelings which he wished to shake off. He had undoubtedly lost his reasoning power, for his conduct was outrageous—he closed his eyes, and foamed from the mouth. This state lasted but two or three minutes. He was aroused by the voice of M. Malgaigne, and on recovering his consciousness he declared the pain was slight, not more than a prick, but he directly afterwards complained of the smarting which resulted from the wound.

A second patient, a man aged forty-five, had necrosis of the bones of the finger, resulting from a whitlow. M. Malgaigne determined to remove the finger, at the articulation, and caused the patient to inhale the ether for about four minutes. The patient declared he was drunk and unable to see. The operation was performed in the usual manner. This patient also compared the pain he felt to a prick, afterwards experiencing the sensation of smarting over the surface of the wound. The pulse was carefully observed during the operation, and found to be eighty-eight during the inhalation of the ether, and ninety-two after the operation.

A young girl of eighteen, with an affection of the hand, requiring incisions, was submitted to the action of the vapour, and in four minutes she declared her sight to be confused. She compared the operation to a prick. It is remarkable that in this case there was a considerable want of sensibility in the wound for some time after the operation.

M. Malgaigne administered wine in each of the last cases, to effect a more speedy recovery from the stupor; and it may be worthy of notice that the air exhaled was impregnated strongly with ether, so that it was impossible to mistake the agent that had been employed.

At the meeting of the *Académie de Medécine*, on Jan. 19th, a letter was read from M. Menière, respecting the successful employment of vapour of ether in cases of nervous deafness, hemicrania, paralysis of the facial nerve, complaints of the cavity of the cranium, &c.

M. Honoré mentioned a case of intense neuralgia, which was alleviated by the breathing of the vapour of ether, placed in a vessel with a large mouth, held close under the mouth.

M. Malgaigne made the following important observations as to the consequences of the use of ether:—In the case of amputation of the leg, he believed that there was less reaction than in ordinary cases; and another point, which he recommended to the attention of psychologists, was, that in most cases it appeared that the seat of sensation for pain was different from the seat of ordinary sensibility. Many patients retained perfect consciousness, understanding what was said to them, answering correctly, but feeling no pain; it really appeared to him that there were two centres of sensation.

A discussion also took place at the meeting of the *Academy of Sciences*, on Jan. 18th, when M. Velpeau stated that he had failed in obtaining a complete and satisfactory result from the use of the vapour of ether. One patient had proved unmanageable. In another, the sensorial functions were evidently disturbed; but he had suffered pain while being operated on. A third had suffered in a like manner; but declared that he was plunged into such a state of ecstasy, that he was unable to complain. In short, it appeared that it succeeded with certain persons, and failed with others; and that it was not proved to be altogether without danger.

M. Dunos said that he had been led, from some experiments, to believe that the ether possessed a cataleptic power.

On the 22nd of January, M. Velpeau, at the *Hôpital du Charité*, having used an apparatus constructed by M. Charrière, succeeded perfectly in removing a tumour without pain. The etherial vapour was inhaled by the patient about four minutes, after which time complete insensibility and relaxation of the muscles were manifested.

M. H. Larrey, who assisted at the operation, suggested the valuable assistance that the agent would render in the reducing of difficult luxations.

At the *Hôpital du Midi*, a case occurred in which the sensibility seemed to have been exalted by the inhalation.

The influence of the vapour has also been tested by M. Guersant, at the *Hôpital des Enfants*, on two children. One child, whose finger was amputated, declared that she felt pain, but was totally unable to cry out. The other, on recovering from the state of insensibility into which she had been thrown, declared that she had no recollection whatever of the operation.

At the *Hôpital du Midi*, M. Ricord, in injecting in a double hydrocele, employed the inhalation with success, though he was obliged to renew its influence twice during the operation. A second patient, afflicted with single hydrocele, after respiring vapour for thirteen minutes, fell into a complete state of insensibility; the limbs were relaxed; the pupils contracted; the conjunctiva was injected; and the pulse not affected. A third patient, who was apparently perfectly under the influence of the ether, suffered the usual amount of pain during an operation for removing a tumour from the rectum.

In the first two cases, a state of intense exhilaration preceded that of insensibility. In the last, the use of the ether was followed by sickness and fainting.

At the meeting of the *Societé de Chirurgie de Paris, Jan.* 13, 1847, M. Malgaigne mentioned a case in which the inhalation having been continued for too long a time, caused sinking of the pulse and coldness of the extremities to such an extent, that fears were entertained for the life of the patient.

At the meeting of the *Académie de Medécine, Jan.* 26, 1847, M. Landouzy called attention to a case, where hæmorrhage, after removal of a small tumour from the mastoid process, did not come on till half an hour after the performance of the operation; and suggested that surgeons should be on their guard lest accidents might happen from the arteries not being secured.

M. Honoré stated, that he had succeeded in relieving a patient afflicted with most obstinate neuralgia of the face, by the inhalation of ether vapour for about two minutes.

*Académie des Sciences, Meeting, Jan.* 25.—M. Gerdy related several experiments with the vapour of ether, the results of which had been satisfactory in the highest degree.

From the above it will be seen, that the success which our neighbours have met with has been varied; but we think that in most of the cases in which the ether failed to produce its stupifying effect, that fault was clearly in the instrument used for its administration. At first they attempted to use this agent by causing the patient to inspire by the nostrils, and respire by the mouth, and *vice versâ*; but afterwards they found it requisite to close the nostrils while respiration was carried on by the mouth alone.

The fact announced by M. Malgaigne, that some of the patients retained their consciousness, but felt no pain while being operated on, is most interesting, and we leave it to be commented on by physiologists; but the statement requires confirmation by other observers.

The influence, also, over the power of *expression* of pain, is also very curious, but seemed to be quite an uncommon result; for we only find that this was the case in two out of the numerous cases quoted.

The continued lethargy, with failing of the pulse, and coldness of the extremities, is certainly a most awkward complication to deal with in treating the shock of an operation, and one which should make us cautious in the employment of the vapour of ether. In this country, in more cases than one, this unpleasant effect followed its use.

If the vapour of ether prove an efficient therapeutic agent in the treatment of neuralgic affections, then, indeed, will its introduction prove a boon to society. And we much regret that M. Honoré did not give a more detailed account of those cases in which he employed this remedy.

"It would be well worth while to collect together all that is positive in medicine, and of which not a jot is transitory. It would make but a small book."—*Pauli.*

## British Medical Journals.

"TWO CASES OF ANEURISM TREATED BY LIGATURE, WITHOUT CONFINEMENT TO BED; THEIR FORTUNATE TERMINATION. By J. KIRBY, Esq.

"Since the period in which it was satisfactorily ascertained that ligatures should induce a certain amount of division in the tunics of an artery to secure their successful application, all operators have experienced much anxiety about the degree of force they employ when an artery is being tied, especially in cases of aneurism; but more is esteemed necessary than the due adaptation of force for the purpose of ensuring a fortunate result. Repose is strictly enjoined as an essential to union, and commanded with such authority, that it appears as if the slightest infringement of the rule might defeat all previously well-executed proceedings.

"The following cases are calculated to abate the great solicitude, which many, in common with myself, have felt upon the latter subject. How far the cautious precept may be neglected or opposed with surprising impunity, the practical reader may judge.

"CASE 1.—Some years since, assisted by my former pupils, Drs. Mathews and others, I tied the femoral artery at the groin in a man residing in Wexford-street. He was young, intemperate, and there was obscure evidence of morbus cordis, of which he died in a few years. He was a thin person. The artery was easily exposed, readily secured, and matters being finished in the usual way, I felt quite satisfied that the case was one of comfortable promise.

"The day was Sunday. Monday, and every succeeding day, I saw him morning and evening. The thirteenth day the ligature came away with the dressing, &c., and the wound was healed.

"I was now informed that all my rules, as to rest and quietness, were from the first neglected. Being summoned to a police-office a few days before the operation, he left his house the day after it was performed, and walked about a mile to the court, repeating the journey every day for a week, during which his attendance was required. My visits being always at the same hours, he easily carried on the deception, of which one could not hold the least suspicion, as he was always found most comfortably and quietly settled in his bed.

"CASE 2.—I assisted Mr. Mitchell in an operation for popliteal aneurism, performed in the groin. The patient was thirty years old, very plethoric, and very intemperate. Impatient of hospital restraint, he left on the third day, and nothing was heard of him until the fourteenth, when he presented himself in a state of intoxication, with the ligature dangling on his finger, and 'wishing his joy to whoever might next require to wear it.'"—*Dublin Medical Press.*

The cases do not require a word of comment. It is enough to remember, that it was an Irishman who did not die after having a red-hot poker run through his chest.

"A CRITICAL DELIRIUM FEROX.

"The following is an amusing example of the effect produced by an unfavourable notice upon the proverbially irritable race which is so ambitious of the honours of authorship. These gentlemen enter the lists mounted on their hobby-horses, with lance in rest, challenging all comers, and vaunting their prowess; but the moment a 'pettifogging scribbler, with as much brains as a beetle,' makes his appearance, then their courage cools, and the tongue is substituted for the arm. If medical reviewers err at present, it is most assuredly not on the side of severity. On the contrary, the great, and perhaps the just, reproach against them is the lenity of their decisions, or perhaps their partial leaning to the author and disregard of the interests of the reader."—*Idem.*

Here follows the specimen of "philosophic temper" addressed to the Editor of THE LANCET by the bellicose individual who puffs off his sorry trash by a trumped-up quotation.

APHORISMS.

"In stomatitis, peppermint drops allowed to melt in the mouth produce a feeling of coolness, and are a good palliative.

"Cold foot-baths at bedtime are a valuable remedy in that sleeplessness caused by loss of blood.

"Brandy-drinkers can generally bear very hot baths; the peripheral nervous system being dulled in them."—*Pauli, in British and Foreign Review.*

# THE LANCET.

LONDON, SATURDAY, FEBRUARY 13, 1847.

The law reports which have appeared in the public journals must have made our readers acquainted with the fact, that in Michaelmas term last Mr. Wakley moved the Court of Queen's Bench to obtain a *rule nisi* for a criminal information against the publisher and the proprietor of a periodical pamphlet, for inserting alleged libels respecting the inquest at Hounslow. The Court, after a very brief statement on the part of the Attorney-general, granted the rule. Mr. Cockburn was heard against it on the 3rd instant, and, having taken time to consider the question, Lord Denman delivered the judgment of the Court on the 4th instant, and declared that the rule must be discharged. The Court, therefore, decided that the alleged libellers should not be tried under the ordeal of a Criminal Information. But the Court could not decide that the case should not go before a jury. The whole question must now come before the public under the process of a civil action. In that form,—probably, under the circumstances, the best that it could assume for the cause of truth and justice,—the defendants will have an opportunity of placing a plea of *justification* on the record, when, if they prove the *truth* of their allegations, they will escape the penalty of malicious libellers. We ought to inform our readers that the mode of proceeding in moving the Court of Queen's Bench for a criminal information, is by means of affidavits; and this curious thing occurs—that the affidavits which are made by the prosecutor are answered at any length, and by statements, however erroneous or exaggerated, without the prosecutor having the opportunity of putting in a single affidavit in reply. In such an arrangement, hard and unscrupulous swearers find both an encouragement and an advantage. The judgment pronounced by the Court of Queen's Bench has occasioned not a little astonishment at the bar, and attracted much public attention; but we shall be greatly deceived if the evidence that will be produced at the trial of the action which Mr. Wakley—so soon as he was informed that the rule was discharged—instructed his solicitors to commence against the alleged libellers, do not produce as powerful an impression on the public mind as was made, in the first instance, by the remarkable disclosures at Hounslow. When the proper time arrives, Mr. Wakley will analyze, in this journal, the extraordinary materials of which the "judgment" is composed.

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What is Mesmerism? A few words may answer the question! The influence of mind, imagination, emotion, over the body and its diseases, need not here be told. One of the first things the student of disease learns is, that there is a number of nervous maladies which may be produced through the influence of emotions of the mind, as, for instance, hysteria in its thousand forms, spasmodic diseases, from chorea to the most terrible convulsion; and other nervous disorders, from the most simple up to the most rare, as somnambulism, catalepsy, or trance. Practical men know that in persons predisposed to these disorders they are readily developed and brought on by imitation or by mental impressions. The production of diseases of this class, we say without hesitation, is one of the chief offices of mesmerism. By pointings, passes, rapports, frictions, and all the other manipulations of mesmerism, these disorders are in impressible subjects readily evoked, and they are many of them not a little wonderful. It would be easy to adduce cases from the writings of mesmerists themselves, in which not merely morbid sleep and insensibility, but convulsions, delirium, and even insanity, have been produced. If they were brought about by any other voluntary agency than this professed science, it would be considered a heinous crime. But mesmerists are free from legal or moral responsibilities. They relate, with the utmost pride and sang froid, that one sickly young girl would fall into frightful epileptic convulsion whenever the mesmeric M.D. pointed a finger at her; that a few passings arrested the action of the heart in another; that a woman of the most delicate chastity might be thrown into a state of erotomania, and filled with the ideas of the Sicilian Lais, the Roman Clycia, or the Imperial Messalina, whenever the said Doctor should choose to approach his hand to the occiput, or indulge his own sinciput in sensuose thoughts, and so affect her by mesmeric sympathy. Such are amongst the greatest triumphs of mesmerism; in themselves criminal, and immoral in principle and in fact, but yet pryed after by a quack-loving and wonder-mongering generation. The production of disease, morbid conditions of the nervous system, through the influence of the emotions of the mind, is—we repeat it emphatically—one great trunk, if not the root, of the mesmeric infamy.

This is Mesmerism Criminal!

Neither need the principle of malingering be insisted on to professional readers. Medical men know, that in certain nervous affections there is an almost irresistible tendency to feign and to deceive. That from a mysterious pleasure in deceiving, or in obtaining the sympathies of those about them, persons will torture themselves by even producing artificially those diseases which they desire to simulate. Impostors of this kind, temper-diseased, have been known to swallow packets of needles or pins, to take poisons, to reject food, to introduce acrid matters into the vagina and urethra, and to injure themselves in every conceivable way. Every one knows that there is frequently this morbid tendency in the human mind, and particularly where there is nervous disease or the tendency thereto. Mesmerism is a convenient focus, a point of attraction, to this vicious principle; mesmerism develops it where it would not otherwise exist; and mesmerism, in turn, supports itself by such evidence as these cases of cunning and delusion afford. All the malingering of the age has a natural determination towards mesmerism. Of such impostors the sisters Okey may be considered the type. In some cases there is no actual deceit, but merely a morbid desire to parade these disorders, real or imaginary, before the public eye; or they deceive themselves, and really believe in the existence of diseases and the occurrence of cures. Affected by a depraved appetite, like that which impels certain descriptions of patients to eat the dirt of the most loathsome corners, and to devour with greediness the most unnatural substances, so these semi-patients and semi-dupes, affected by a moral pica, delight to dwell upon disgusting or indelicate details, which otherwise would never meet the public eye. In this way the celebrated authoress of the preventive check parades her diseased vagina and os uteri as it were in a public

speculum before the general gaze, and other ladies write and publish pamphlets about their uterine symptoms and their disorders of sex, in a manner to have made our grandmothers sink into the earth for shame. The sensations, disorders, credulity, cunning, and self-deceptions of this class of subjects, and the simplicity of the great number who credulously believe in them, form the other great division of the mesmeric array.

THIS IS MESMERISM DUPING AND DUPED!

We have a tale of the duped and duping to unfold on the present occasion, in which the cunning of the duper and the silly credulity of the duped, claim an equal and unusual share of admiration. But we shall give the narrative, as far as possible, in the words of the parties themselves. The dramatis personæ are, first, the patient, Mrs. BIRD, who has acquired the soubriquet of the Arsenic Prophetess, a woman living in a cottage near the little village of Whipton, about two miles from Exeter; next, the acting mesmerists, who are, JOHN BATTISHALL PARKER, Esq., member of the Royal College of Surgeons, JOHN CHAVE LUXMORE, Esq., a county magistrate, H. U. JANSON, Esq., president of the Exeter Philosophical Society; and lastly, the searching expositors of the cheating and delusion of the mesmerists and their patient—namely, WILLIAM HENRY ELLIOT, M.D., of Exeter, and a private gentleman, H. DORVILLE, Esq., of Alphington.

We introduce Mrs. BIRD, the Arsenic Prophetess, and the extraordinary phenomena she exhibited, to our readers, in a quotation from the *Zoist*, being a portion of a "Diary" of the case kept by the mesmeric attendant, Mr. LUXMORE. The patient is clairvoyant, and supposed to be endowed with the miracle of introvision. She is describing her past and present bodily condition; and the diary goes on to show how she made a wonderful prophecy, and how she fulfilled her extraordinary vaticination:—

"Jan. 5th, 1846.—During sleep-waking, Mrs. Bird said, 'The first thing that injured me was being salivated. I ought not to have had any mercury. My then medical attendant also gave me a solution of arsenic, which I took until my mouth was all over black spots: it created inflammation in the stomach, which has never subsided.'

9th.—'How beautiful! I see all my inside.'

12th.—In her sleep to-day, she described a sort of coating over the inside of her stomach.

Feb. 5th.—Bled and put to sleep. Said, 'The coating in my stomach, which I mentioned in January, is rather loosened. My food should be nourishing.'

27th.—She still vomits her food, and says she shall continue to do so until the coating is removed from the stomach.

March 6th.—Vomited nearly two quarts of water. Says, 'The day before, on the same morning I vomit the coating from my stomach, I shall eject a little blood.'

12th.—'If, when I throw the coating from my stomach, Mr. Parker will analyze it, he will find it contains arsenic.'

30th.—'My stomach is very much irritated, and the arsenic, acting on the system, is poisoning the blood, and also the water that is floating about me: this makes the rash so troublesome.'

April 9th.—'Whenever the coating is removed from the stomach, I must have a strong dose of aperient medicine, to prevent any portion remaining in the bowels.'

22nd.—'On the 1st of May I shall throw a little blood from my stomach. On the 2nd I shall be very ill. On the 3rd I shall throw up something gritty; it will contain part of the coating of my stomach I have before spoken of. After I have thrown up the gritty substance, I must have a dose of medicine.'

24th.—Nausea produced retching. She said, 'The coating is almost all fallen from the stomach, but it will not be got rid of until the 3rd of May.'

May 1st.—She was delirious; she has vomited a little blood; on eating salt, or salt meat, she experiences garlic eructations. All this, and the rash she has suffered from, are, I understand, indications of the presence of arsenic.

3rd.—Mr. Parker and I called on Mrs. Bird between one and two o'clock, and found she had thrown from her stomach a quantity of a gritty substance, in a little bloody water, at five A.M. On applying the established tests, the presence of arsenic was indicated. She had taken the aperient medicine.

8th.—'Very shortly after I am mesmerised this evening, I shall cough, and shall wipe some more of the gritty substances from my mouth.' In the evening, Mr. Luxmore says, 'She coughed, and I wiped from her mouth a gritty substance: this also contained arsenic.'

18th.—Retched violently; mustard emetic twice administered; now discovered that there was a small portion of the gritty substance still remaining in her stomach, to be thrown off within three days.

20th.—In her sleep (always mesmeric sleep be it remembered) she coughed, and threw from her stomach a small quantity of the gritty substance. This also contained arsenic. Said, 'The stomach is lacerated at the parts from which the gritty substance has last been removed.'"

The pocket handkerchief in which this mesmeric saint wiped some of the gritty substance from her mouth is preserved as a sacred relic. Portions of the gritty substance itself were sent to London, to an analytical chemist, (not named,) to Mr. HERAPATH, of Bristol, who detected arsenic; to Dr. GREGORY, of Edinburgh, who also found it to contain poison. As regards the quantity of arsenic, it was openly proclaimed by Messrs. PARKER, LUXMORE, and JANSON, that this gifted sufferer had, in fulfilment of her mesmeric prophecy, vomited "enough arsenic to kill twenty men." This mendacious assertion was confirmed in writing by the gullible President of the Philosophical Society, on a doubt having been publicly expressed, by a correspondent of the *Exeter and Plymouth Gazette*, respecting the credibility of the case. Referring to that portion of a letter in the *Gazette* relating to the arsenic miracle, Mr. JANSON expressed himself as follows:—

"The next article is one impugning the veracity of a case, which, as he ('Medicus') intimates, has been under mesmeric treatment in this neighbourhood. With this case I have nothing to do, beyond asserting, that having been from the first freely admitted to the fullest examination of it, I am enabled to state, from the most perfect knowledge, that the circumstances which 'Medicus' has thought fit to treat only with scorn and contempt, are absolute facts."(!)

It was considered necessary to prop up this extraordinary case by some further probabilities, and this was soon achieved, and a very pretty theory set afoot, as to how the arsenic had got into the woman's stomach, and how it remained there without producing the ordinary symptoms of poisoning.

In 1834, fourteen years ago, the prophetess had been under the medical treatment of Dr. MACGOWAN, then of Exeter, but now in Palestine, and it was stated that arsenic had been prescribed for her by this gentleman in large quantities. Mr. JANSON comes in again as a witness to quantity, and as lay therapeutist, and says,—

"We know that the solution of arsenic was persisted in until the teeth were loosened, the mouth turned black, and even a large portion of the jaw-bone caused to exfoliate."

Mr. PARKER, the M.R.C.S., completed what he considered a theory of probability, by asserting that at the same time with the arsenical solution, the Whipton Prophetess had been taking lime-water; suggesting that an insoluble arsenite of lime had been formed, which had coated the stomach for fourteen years, unaffected by the heat, muscular action, or free acids of this viscus.

Dr. GREGORY was appealed to, and he furnished corroborative arguments in favour of the PARKER theory. The soundness of Dr. GREGORY'S opinions upon a point involving mesmeric credulity, may be inferred from his being the serious

translator of the Baron von Reichenbach's extravagant work on mesmerism. The following extracts embody Dr. Gregory's opinions in his own words, as addressed to Mr. Parker:—

"Considering that your patient took the arsenic in the form of the liquor arsenicalis, and was, at the same time, in the habit of taking lime-water,—a very unchemical prescription, by the way,—it is quite easy to see how arsenite of lime should be formed in the stomach, &c.

"It is probable that there was originally much more of the powder,"—(than the four or five grains given in the analysis;)—and adds, "that the symptoms, more particularly the vomiting and garlic eructations, after the use of salt, would seem to indicate that some portion, no doubt a very minute portion, of arsenic has been, in some way, dissolved, possibly by free hydrochloric acid.

"From what I have already said, you will perceive that I do not see any reason why such a powder, enveloped no doubt in organic matter, should not have remained in the stomach for any length of time, as long as it formed a coherent mass, and that without destroying life."

Thus far everything seemed in favour of this mesmeric miracle, which was to have upset all our ordinary notions of poisoning, physiology, and disease: the witch of Whipton was at least as great a personage as she of Endor. There was the prophecy of the blood and arsenic on a particular day, and there was the fulfilment. The facts were testified to by a medical practitioner, by a country magistrate, and by a president of a scientific institution. The reality of the presence of arsenic in the vomited matters was vouched for by the medical man, and by at least two chemists, and a theory of its formation and existence in the stomach for the long series of years was proposed and supported by the medical attendant, and by the Professor of Chemistry in the University of Edinburgh. It was almost a case to set further inquiries at defiance.

But here we must introduce upon the stage the indefatigable and able Dr. Elliot, who has investigated the matter for six months, from August, 1846, to the present time, and whose researches offer quite another theory of the manner in which this wonderful egestion of arsenic was brought about, and one, we opine, rather more in accordance with probability, and better supported by the evidence of facts than the mesmeric or prophetic hypothesis so stoutly or subtilely contested for by Professor Gregory, and Messrs. Luxmore, Janson, and Parker.

The first fact evolved by the rigid analysis of Dr. Elliot, or Medicus, which we shall give, is the discovery of the real quantity of arsenic taken by the Prophetess medicinally, upon the prescription of Dr. Macgowan, and which these silly mesmerisers at one moment declare to have lain dormant as an innocent arsenic crust for fourteen years; and at another, to have expended itself at the time in producing the most virulent symptoms—black pustules, eruptions, garlic eructations, necrosis, &c. The analysis made by Professor Gregory estimated the amount of arsenic at from four to five grains. It will be seen from the following letter, written by the chemist who dispensed Mrs. Bird's medicines, that even for this quantity some other source must be sought besides the prescriptions of Dr. Macgowan:—

"*To the Editor of the Exeter and Plymouth Gazette.*

"Respected Friend,—Observing in the columns of the last week's *Gazette*, that in the mesmeric-arsenic case now in controversy, between 'Medicus' on one side, and a worthy magistrate of this district, with his coadjutor, another medical gentleman, on the other, I am appealed to for exact data as to the quantity and kind of arsenical preparation administered some years ago to the patient, Mrs. Bird. I have examined my prescription books, and find that she placed herself under the medical care of Dr. Macgowan, formerly of this city, on the 5th of March, 1832; and that he ordered for her, from time to time, various medicines of an alterative and antispasmodic character, with mild aperients, until March 2nd, 1834, when he prescribed liquor arsenicalis, half an ounce, to be taken in one-drop doses every three hours. The liquor arsenicalis being by combination a solution of the arsenite of potassa, the whole quantity of Mrs. Bird's recipe (i.e., the half ounce) contained about three grains and a third of arsenite of potassa, allowing the loss of weight accruing from the expulsion of the carbonic acid of the alkali, or precisely two grains of arsenious acid, which by thy non-medical readers is commonly known as arsenic, (though in reality it is a compound of the arsenic-*metal* and oxygen.) This was the only prescription of Mrs. Bird's containing 'arsenic,' and was not repeated, but for some months subsequent to this recipe being dispensed; she had various other medicines. The plain fact, then, is, that had she continued to take the whole quantity as prescribed, it would not yield more than two grains of arsenious acid. There are, we know, agents that combine with this deadly poison, and render it insoluble and inert; but whether it be within the bounds of probability that this should happen in the human stomach, and form a permanent incrustation adhering to the membrane of that active organ, I defer to the inquiries of the more learned profession: all that I have properly to do is with the materia medica of the question. But I confess my apprehension that the arsenical solution of the mesmeric enigma is an unfortunate one for the occult science, and likely to make many say, 'ex uno, disce omnes.'—Thine, &c.,

"41, High-street, 10 Mo. 5th, 1846." Thomas Knott.

A very *knotty* letter, we should say, and a most caustic and arsenical *solution* of the question as to *whether* Mrs. Bird could have got the arsenic into her stomach in an orthodox fashion. Of course the publication of this letter demesmerised some of the mesmerisers, and rendered others frantic. Poor H. U. J., the philosophical president and præses of philosophers, was hugeous in his dismay. At one time, he is zealous for the quantity and power of the poison, and querulously asks—

"I should like to know upon what other ground the fact can be accounted for, that this patient hardly ever could retain a meal for many years, and that since this deleterious coat has been thrown off, she can do so as well as any one."

At another, he is blasphemously energetic in his desire to reduce the arsenic to a minimum.

"I repeat it," he says, "for the last time, and swear, so help me God, that Medicus was the first person from whom I ever heard that the arsenic was enough to kill twenty men. I never had reason from the authentic source to believe that it was more than what is stated in Dr. Gregory's analysis"—(about five grains.)

Medicus nevertheless proved that Mr. Janson and his friends possess the true mesmeric memory, and that they did vouch in express terms for the quantity sufficient to kill twenty men. This poor creature evidently clings to Dr. Gregory's skirts, but needlessly. Mrs. Bird was but one woman, and it would have been as great a miracle for her to have carried a poisonous dose for one woman in her stomach, as for twenty men. However, one point in the career of Dr. Elliot was now reached. He had proved that the *five* grains of Dr. Gregory's analysis did not get into the stomach of the Arsenic Prophetess therapeutically.

Dr. Elliot was next successful in obtaining circumstantial evidence of the most conclusive kind as to where the arsenic really *did* come from. Dr. Elliot produced the druggist, a highly respectable man, who, with his own hand, delivered to Mrs. Bird, the Whipton miracle, nearly an ounce of arsenic, and who stated that he had received an order for some arsenic three weeks before the above quantity was supplied. It was said to be required for the purpose of killing slugs in the garden! This was an odd coincidence, to say the least of it. To this it was replied by the credulous mesmerists

that the druggist had sprinkled it over the plants in the garden himself, and thus disposed of it so as to render it unavailable for any purposes of malingering on the part of Mrs. Bird. Dr. Elliot made a further application to the druggist, Mr. Brailey, when it was ascertained that not only had she obtained an ounce of arsenic, but he, Mr. Brailey, took it to her at Whipton, and had then, under Mrs. Bird's directions,—she standing at the window, to direct where it was to be placed,—"planted" it round the roots of some heartsease, for the purpose, as was said, of killing slugs, and then covered it lightly. At the conference Mr. Brailey had at this time with Mrs. Bird, she told him she had taken arsenic from Dr. Maccowan for the cure of tic douloureux. From a comparison of dates with the narrative of Mr. Luxmore, she ought to have been very ill at this time, instead of superintending gardening operations. He says,—

"She was, at this time, living in an upstair room, and so weak from not having been able to lie down, night or day, for some weeks, owing to water on the chest, that she could not cross the room without assistance."

The account of her illness is confirmed by Mr. Brailey, the druggist, who said, that on the day on which he went to Mrs. Bird's with the arsenic, she had been bled, and that he himself saw the blood in a basin.

Upon these facts, one of the detectors of the case says, very pertinently, "It was rather remarkable that, so ill as Mrs. "Bird is described to have been, she should have manifested "such great interest about a plant of heartsease!"

But not only is there evidence that the arsenical compound analyzed by Dr. Gregory did not enter the stomach from a medicine bottle, (of course, it never entered the stomach at all,) and not only is there evidence that Mrs. Bird, at very great inconvenience, carefully watched the spot "*where*" the arsenic was deposited, but it can be proved that it was carefully set down, so that it might be reclaimed from the heartsease at any convenient season. The detail of Mr. Brailey, as to his mode of disposing of the arsenic, is very minute. He "did not," as asserted, "sprinkle the arsenic on the plants," but "a pit was made in the earth, round the roots of some heartsease," in which, having previously mixed it with salt, by the direction of Mrs. Bird, he deposited it, and then covered it lightly with mould, to destroy the slugs.

Besides the power possessed by Mrs. Bird, of obtaining the poison from the heartsease, there was an opportunity for her to tamper with it before, had she been so minded, for, "The arsenic, which was wrapped up in paper, and not sealed, "was left in Mrs. Bird's house one night before it was thus "used"! Mr. Brailey honourably furnished Dr. Elliot with a written document, testifying to all the above facts.

Thus, then, a mode is supplied in which Mrs. Bird could have obtained arsenic to smear on her pocket-handkerchief, or mix with the vomited matters, without the necessity of believing that it came from her stomach, much less of believing that it had lain there these fourteen years, to be discovered by mesmeric introvision, and vomited or coughed forth in fulfilment of a mesmeric prediction. That the real origin of the arsenic given to Mr. Parker and Mr. Luxmore by this woman was a very natural one there can be little doubt in the mind of any person of impartial judgment. Mr. Parker, the surgeon, and Mr. Luxmore, the magistrate, knew, as it afterwards turned out, that their Prophetess had obtained the ounce of arsenic from the chemist! Yet, wonderful to relate, these biped slugs professed to believe that the prophetic arsenic came from the shop of Mr. Knott, instead of from the shop of Mr. Brailey; from the stomach of the lady, instead of the unsealed paper parcel, or the little pit at the heartsease. What amount of silly innocence and male credulity, or complicity with female cunning, such a belief evidences, we of The Lancet leave to the estimation of our readers.

We have now to comment on the figures cut by some of the parties to these transactions.

Mr. H. U. Janson has performed the part of asseverator and actual swearer to the extraordinary vagaries of Mrs. Bird, and also of vilifier and termagant to those who have occupied themselves in her exposure. After exhausting a not very limited vocabulary of abuse, he rests in the hope and expectation that some divine judgment will fall upon the rude manglers of mesmerism. Like Mrs. Bird, a prophetic impression of futurity comes to the mind of the poor unphilosophical president, and when foiled in assertion and asseveration by fact and circumstance, he still anathematizes his opponents, and says,—

"It is strongly impressed upon his mind, that some very severe, even *temporal*, punishment will befal them."

Mr. Luxmore, the mesmeric county magistrate, exhibits himself as an object so palpably lude that we have scarcely the heart to laugh at him. He evidently believes everything about the Prophetess, and, innocent *gobe mouche*, would swallow twenty times as much in the cause of mesmerism. The details of the case expose this member of "the great unpaid" as the drudge and menial of Mrs. Bird's sick room and person. His descriptions have rendered the sofa at Whipton cottage, upon which the Prophetess reclined, immortal. Never was there such nursing sympathy of the mesmeric kind established between the sexes in sickness. Mr. Luxmore is friend, nurse, servant, mesmerist, and medical attendant. The mesmeric connexion between the two is so intimate and startling that no one must come near her, speak to her, or touch her, save the humble serving magistrate. If Mrs. Bird hungers, it is enough that Mr. Luxmore eats, she is sated and nourished; if her spirits flag, hartshorn to the magisterial nose revives her from faintness.

Lest all this should seem too ludicrous to be true, we are fain to make some genuine but vastly amusing extracts from this Diary in the *Zoist*. In the bleeding referred to, Mr. Parker, the surgeon, while performing the operation, had to rest his hand on Mr. Luxmore's, lest he should disturb the mesmeric understanding or sympathy between these two celestial mortals!

"July 22nd, 1846.—Mrs. Bird says—'Bleed until I show some signs of faintness; then put my feet into warm water, with a little mustard in it, for ten minutes; wipe them dry, and put them on the sofa.'

Aug. 15th.—Mrs. Bird to Mr. Luxmore.—'Your taking sal volatile or wine, after I am bled on the 16th, will be beneficial to me.'

Aug. 16th.—'Her other directions as to hot water, bleeding, &c., were attended to. She fell into the stupor, and was to all appearance dying. I persevered in keeping her as much under the influence of mesmerism as possible, wetting her lips with wine, and taking some myself, as well as several doses of sal-volatile; this recovered her for a moment, &c.'

Nov. 11th.—'While Mrs. Bird was in sleep-waking, I silently placed the kernel of a nut in my mouth; she then complained of a nasty taste, and in one moment began retching violently. I ascertained she had lately taken a dislike to nuts, from having eaten a very bad one.'

Nov. 21st.—'My taking strong doses of dilute sal volatile seemed to have a beneficial effect on Mrs. Bird.'

Aug. 6th.—'She hears no voice but her mesmeriser's, nor can she distinguish the loudest mechanical sounds.'

July 25th.—'She heard the thunder, although no mechanical noise, nor the voice of any one but that of her mesmeriser, is audible to her. May not this be owing to electricity?'

Jan. 9th.—'Soon after she got into sleep-waking, she said, "How beautiful! I see all my inside." She described the structure of her foot, and then went through many other portions of her body with (in the opinion of Mr. Parker, who was present) great accuracy.'

Jan. 13th.—'I placed my finger on benevolence, and subdued her, but on my ceasing to act on her, angry feelings returned. I at last discovered that a kerchief she wears over her ears had slipped, and was pressing on Destructiveness; on removing it all anger ceased.'"

This is mesmeric philosophy! which Mr. Luxmore, the magistrate, gravely relates, while Mr. Janson, the philosopher, declares, *in print*, that those who doubt the truth of such cases are "rogues in grain, or naturally bad at heart"!!

"Let it be remembered, that this woman, whose prophetic powers have been so greatly extolled, is described by Messrs. Parker and Luxmore, in their 'wonderful' case in *The Zoist*, to have been hardly ever free from mania in one or other of its forms, viz., 'delirious,' 'quite delirious,' 'high state of delirium,' 'mad,' 'quite mad,' 'raving mad,' and this too, is said to be occasioned by a mechanical injury of the brain, sustained in early life. And it is well known, that in all cases of insanity, cunning is one of the most prominent features, and 'though this be madness, yet there's method in it.'"

So much for Mr. Luxmore, whose acumen upon the magisterial bench let our readers fancy, investigating a case of suspected poisoning, of obtaining money under false pretences, or any other delicate investigation. We can imagine one of the hugest contempts in the world would be the contempt of an officer of the Mendicity Society skilled in the track of cunning and duplicity, for such a person as our Devonian magistrate.

No professional man can think of the conduct of Mr. Parker without feeling the profession degraded by the details it presents. We have a surgeon who bled his patient on the faith of her own mesmeric ordering, for a disorder ascertained only mesmerically; who submits to bleed under the farcical provision that he must not touch her for fear of disturbing the mesmeric sentiment between the Prophetess and the magistrate. We would be severe upon such proceedings, because unless medical men could be found willing to prostitute their profession to mesmerism, the thing itself would soon sink into nothingness. We are bound to believe that he gave his entire credence to the woman; and we scarcely know which was most remarkable, his credulity or his modes of treatment. Mr. Parker shall speak for himself upon the latter point:—

"I have now bled her nearly six hundred times, never taking less than half a pint, and more frequently more than a pint, each time."

How did she get the blood? which, taking a pint of blood for each bleeding, would amount to seventy-five gallons! Nothing but a miraculous constitution could have kept her alive so long, with this continued ejection of food, much less could she have provided Mr. Parker with such an inexhaustible spring of vital fluid. In common cases, it is unnecessary to say, that before blood can be made, food must be received and *retained*.

Mr. Parker had long been the sole medical attendant on Mrs. Bird; but the mesmeric magistrate renders the enormous sanguifaction or the heroic bloodletting equally impossible. Mr. Luxmore said, (on the 18th August,)—

"Before being mesmerised, she rejected her food daily for thirteen years." (!)

Who shall decide between the two?

That Mr. Parker should have been anxious to hush up the inquiries of Dr. Elliot and Mr. Dorville was very natural. To do so, he addressed the following letter, or certificate, to one of the local papers:—

"Sir,—The insinuations conveyed by the public press on Mrs. Bird's character are having such an effect on her bodily health, that, as her medical attendant, I must request your discontinuing to publish any further communication on the subject, until I see that her health is so far reëstablished as not to be impaired by it.

As there is no doubt as to the truth of the case, it is my intention to publish the whole of it when I think fit to do so, which must depend upon Mrs. Bird's state of health; and as complete rest from mental annoyance is absolutely necessary to restore her shattered constitution, the longer that is delayed, so much longer the public will remain in ignorance of it.

I remain, Sir, yours faithfully,

"Exeter, Nov. 11th, 1846." John Battishill Parker.

The indefatigable detectors of the Prophetess instantly brought forward proofs, that at this very time the poor sufferer spent a good part of the day—a November day—in the streets of Exeter, in an open fly! We cannot conclude Mr. Parker's share in the proceedings without stating that he was one of the emphatic vouchers for Mrs. Bird's having vaunted, "enough arsenic to kill twenty men." Thus much for the mesmerico-medical attendant upon the Whipton prodigy.

Professor Gregory's conduct in this affair cannot be passed over without severe condemnation. It has been seen how readily he lent himself to the corroboration of the deceits of Mrs. Bird, torturing chemical facts,—it is not too much to say, bending the very emblem of chemistry and of justice and truth, the immortal balance of Lavoisier,—to mould his opinions according to mesmeric possibilities. We do not hesitate to say, that Dr. Gregory's written opinion, in this case, violates some of the most assured principles of physiology, pathology, and toxicology. If Dr. Gregory could stand by his opinions, as lately expressed, it would be next to impossible to convict any person charged with poisoning by arsenic, if it should be proved that the poisoned person had ever taken Fowler's Solution medicinally. An element of doubt would be introduced into the most certain page of forensic medicine; innocence would go undefended, and vice unpunished. We may contrast the opinion of Dr. Gregory with that of Mr. Herapath, who has probably had more experience in cases of poisoning by arsenic than any living toxicologist of this country. Dr. Gregory's views upon this case have already been given in the former part of this article. Mr. Herapath disposed, by anticipation, of the cobwebs drawn round the subject by the Edinburgh Professor, "who does not "see any reason why such a powder (arsenite of lime) should "not have remained in the stomach *for any length of time*, as "long as it formed a coherent mass, *and that without destroy-* "*ing life!*" The following is Mr. Herapath's wiser conclusion:—

"Such a compound as I refer to, arsenite of lime, might be formed if arsenical solution, arsenite of potassa, were mixed together in a neutral solution containing animal matter, but I cannot understand how it could remain in the human stomach for years, knowing, as I do, that the contents of almost every stomach is acid, from the presence of free hydrochloric acid and bi-phosphate of lime, both of which would constantly tend to dissolve and to decompose it."

Of Dr. Elliot we would speak in terms of the highest praise. His writings are a model of controversy. He does indeed

deserve well for the part he has taken in unmasking imposture and fraud. But for his energy and sustained perseverance, the twaddle of Mr. Luxmore, the vapouring of Mr. Janson, the toadying of Mr. Parker, and the hysterical deceptions of the Whipton heroine, would have been triumphant for a time. And it was not without difficulty, labour, and the endurance of vilification, that he succeeded in exposing this extraordinary case. So much the more should he receive the thanks and commendation of all honest men, and all orthodox members of the profession. We have before us a letter from a gentleman of Exeter, in which it is stated that

"The abuse which has been showered upon Dr. Elliot has been almost beyond endurance; but as he could very well afford to bear it, he preserved his temper, and thus their defeat and his most perfect triumph have been achieved. The correspondence commenced in *Woolmer's Gazette*, Aug. 22nd, 1846, and continued in that paper up to the 14th Nov., when his opponents, being unable to answer his challenge, shifted their ground to the *Western Times*, whither he followed them. The mesmerists of Exeter have left no stone unturned to injure his professional reputation by detraction; they have basely insinuated that he had never attended a medical lecture—that he had been a druggist, and was practising as a physician under the shelter of a German diploma, for which he gave £20. The editor of the *Zoist* has also, in his notice of the controversy, tried his hand at detraction, and by insinuation, not open assertion, has endeavoured to make his readers believe that Dr. Elliot had been a druggist. Fortunately, Dr. Elliot is too well established in practice to be injured by such aspersions."

We need hardly say that the attempts at impugning Dr. Elliot's character and professional qualifications are gross calumnies. He is not only a qualified man, but, in addition to being a doctor of medicine of a British University, he is a member of the College of Surgeons of England, and a licentiate of the Apothecaries' Society. In the heat of the conflict Dr. Elliot received good service from Mr. Dorville, a private gentleman, who enlisted in the cause from the love of truth, and the praiseworthy desire to aid Dr. Elliot's single-handed exertions.

Altogether, this arsenic case, the deceptions of the mesmeric Prophetess, and the delusions of the mesmeric operators, form a tale to startle the sober ear of the nineteenth century. It surpasses any story of the middle or dark ages, detailing the delusions of witchcraft, magic, or demoniacal possession. A century hence, such histories as the Arsenic Prophetess will probably be perused as an evidence of the weakness of the vulgar intellect of this age. Indeed, one might almost suppose, from their credulous and incredulous vagaries, that it was the mission of mesmerists to humble the pride of the present generation before all future times, by furnishing examples of the wonders and absurdities eagerly believed by the public, in what otherwise claims to be an era of fact and rationality. It seems to be the lot of Mesmer to succeed Munchausen in the absurd grotesque. Pity it is that it is not merely bombastic and extravagant lying, palpably labelled as lies to all, instead of a specious pandering to the weaknesses of human nature, inimical to the progress of sound knowledge, injurious to private and public morals, and an ignorant tampering with the health and lives of the community. This case, extraordinary as the deceptions exposed may appear, is only one of many, a specimen of a genus. All mesmeric miracles, like the tricks of legerdemain, when looked at steadily, are no longer supernatural. Thus it was with Chabert, the Fire King; thus it was with the sisters Okey; thus it was with Miss Martineau's waiting-maid; thus it is with Mrs. Bird, the Arsenic Prophetess; and thus it will be with all those who follow in the same oblique paths. In the present state of the law, and of public opinion, we shall have to go on militant, exposing and denouncing the frauds of quackery at one time, and the crimes of quackery at another, until public and professional feeling is aroused at its enormity.

## A DRAMATIC SKETCH.

No. II.

ADJOURNED DEBATE AT ———.

*To the Editor of* The Lancet.

Sir,—You will remember—some persons will never forget—my scene in Old Burlington-street. (See The Lancet of Jan. 30th, 1847.)

I resolved to follow the *Stranger* to his own home, and watch his proceedings. He was obviously a man of determined purpose, and that purpose good and true, when he was himself possessed of the truth. I now send you the account of the first meeting of the Medical Society, on his return. I will not fail to forward you the result of the adjourned debate.

I am, Sir, your obedient servant,

A Looker On.

SCENE—MEETING OF THE MEDICAL SOCIETY AT ———.

*Stranger.*—Sir, As the mover of the adjournment of our last meeting's discussion, I believe I have the privilege of opening the proceedings of the present evening; and I am desirous to do so, because I wish to give a totally different turn to our discussion from that which I then contemplated. I am glad to see so numerous an attendance. I trust the members and our visitors will not be disappointed with what I am about to say and to propose. I resolved, at the close of our last meeting, to investigate the important subject of our deliberations thoroughly. I have even been to town with that object. Yes, I have made a visit to Dr. Forbes, the Editor of the *British and Foreign Medical Review*, from whose writings I took my own views of the case, as I stated them before you, with the confidence which I had placed on the statements of that Review. I saw him and two of his colleagues. I brought the subject before them. I called for a copy of Prochaska. I read from my list of topics. I begged them to open the book and point out the paragraphs seriatim. One by one I proposed four, or it might be five, of the subjects which had engaged us in our debate. To my utter confusion, not one satisfactory paragraph could be found. To my questions, pressed with earnestness, these gentlemen were mute, or returned answers at once shallow in fact, and deep in ignorance and malevolence. I restrained my feelings with difficulty. I will not now, Sir, occupy you further with this interview. On another occasion, if you permit, I will return to it. I left, and hastened to see the individual whom these profligate writers, and I myself, as I fear you will too well remember, had defamed. I was received with courtesy. I quietly mentioned my errand. I begged for information. I received for reply these few words:—"If, Sir, you wish to know in what my labours really and truly consist, procure a very slim volume, published in 1843, of which, on account of the calumny and detraction, but ten copies have been sold. It may be considered, therefore, to this day, as *unpublished*. It is entitled "A New Memoir on the Nervous System." Its cost is only a few shillings. It contains, in a hundred pages, a brief account—as brief as I could make it, (and my style is not diffuse,)—of my views, and, I trust I may still add, of my discoveries. I will not say more of my own part in it; but I will mention five *speaking* engravings, the work of my friend, Mr. Simpson, of Stamford, which I will venture to pronounce as amongst the most interesting and valuable in physiology and pathology. If you wish to do me justice, purchase and

carefully peruse this short work, and compare it with Prochaska *yourself*." This, Sir, and gentlemen, I have done. I have read it, and I will say, that if there be any work worthy of comparison with Euclid in medical writings, this is the work. It is the very opposite to the writings of its critic; terse for wordy, plain for misty, solid for frothy. I hold it in my hand: its bulk need deter no one. I will beg you shortly to examine its contents, its text, and its plates, with me. I will leave it on the table of our Society, for the use and advantage of our members. *It ought to be on the table of every medical society in the kingdom.** And, Sir, as no one can be master of its author's views who has not pored over this volume, I will again beg you to adjourn our debate once more, in order that we may come to the subject *prepared*. I have only myself just imbibed the full idea of the spinal system, its central organ, and its incident and reflex nerves, in its distinctness from all that is cerebral and ganglionic, with all its applications to physiology, pathology, &c., and to the DIAGNOSIS of that great class of the diseases of the nervous system. I will say nothing of the part which I took in our last evening's discussion. I was mistaken—deceived—misinformed by a malignant, but specious reviewer; a man who, in a style of impudent mockery, speaks of its being "grievous to write it down" !—to write down *this* book, I say, Sir. It is indeed grievous to see a man, holding a sort of position in our profession, "write *himself* down;" and not only that, but write himself down an —, (I beg pardon for a little warmth,) for as long as physiology shall last. This is my apology.

*The young M.D.*—I beg, Sir, most cordially to second this proposition; and if I might presume, I would propose a vote of thanks to Mr. —— (*our Stranger*), for his noble candour and most generous conduct.

*The President.*—I will put both these motions at once; they ought not to be separated. [*Carried by acclamation.*]

# Operations Without Pain.

## ST. GEORGE'S HOSPITAL.

THERE were three operations here on Thursday, Feb. 4th, in which the vapour of ether was exhibited again by Dr. Snow, in the presence of Sir B. C. Brodie, Mr. Keate, and a numerous assembly of spectators.

The first operation, by Mr Cæsar Hawkins, was for the removal of dead bone from the tibia. When the patient—a young woman—had inhaled the ether for three or four minutes, the operation was commenced without causing the least cry or struggle. After a minute or two, the inhalation was left off, but resumed again for a short time. The pupils dilated as she became insensible, and the eye was turned up as in sleep; but before the inhaling was discontinued, the pupils had contracted, and remained so for some time. The pulse became frequent, about 140, and remained frequent for some time. The ether was discontinued some little time before the completion of the operation. During this interval, she gradually regained her consciousness; and in answer to questions as to how she felt, complained of a little pain in the forehead, but did not notice what was being done to her limb. As the wound was being bound up, she recognised the sister by her, and began to cry, evidently from mental feeling, for she said she had felt no pain.

The next case was an operation, by Mr. Tatum, for fistula in ano in a man. He groaned a little during the operation, and said afterwards that he felt it just a little, but nothing to signify: he seemed, indeed, quite merry. The operation in this case was apparently commenced a little too soon.

Mr. Cutler performed the last operation, which was the amputation of a scirrhous breast in a woman who had not reached the middle period of life. In this case, the ether was most completely successful; there was not the least appearance of suffering either pain or any kind of uneasiness; and when the patient quietly recovered, she said she had been dreaming she was in France, from whence she had lately come.

In the two latter cases, the process of inhaling vapour did not begin quite so soon as it appeared to do; for the patients began by inhaling merely atmospheric air, and when a little initiated to the process, etherized air from the apparatus was gradually let on, by means of a tap, opening two ways, which had been added since the previous week, and which Dr. Snow said Mr. Ferguson, the instrument maker, had contrived.

Mr. Cæsar Hawkins, after the operation, said that he wished publicly to express the thanks of himself and colleagues to Dr. Snow, who had invented the apparatus, and applied it in these cases. He considered the instrument of Dr. Snow very much superior to those they had previously used; and it had the great advantage of enabling us to regulate the proportion of vapour administered.

* This is also *our* most deliberate opinion.—ED. L.

## MIDDLESEX HOSPITAL.

EMPLOYMENT OF ETHER DURING OPERATIONS FOR THE REMOVAL OF VENEREAL WARTS, FOR STRANGULATED HERNIA, AND FOR ENTROPIUM.

Reported by J. H. ROGERS, Esq., Acting House-Surgeon.

ON February 1st, Mr. Arnott excised a large crop of venereal warts from the labia and perinæum of a young female, who consented to have them removed, on being told that this usually most severe operation could be performed without giving her any pain. She was placed in a recumbent position on a table, and the mouth-piece of the ether apparatus adjusted. At first she coughed and sputtered a good deal, but this soon subsided, and, after breathing deeply for about two minutes, (the nostrils having been compressed by the fingers of an assistant,) the muscles of the face and limbs became relaxed, and the operation was commenced, and completed without occasioning the slightest struggle, or a single movement of the features. She uttered, however, one or two tolerably loud cries, when the operation, which lasted seven or eight minutes, was about half finished; but as these exclamations were unaccompanied by any corresponding action of the muscles of expression, it is probable that they were not indicative of actual pain. The mouth-piece was retained during the whole time, but she was allowed to breathe occasionally through the nose: when it was removed, on the completion of the operation, she remained for a short time in a state of profound stupor, the face pale, the eyes open, and the pupils widely dilated. This state of insensibility gradually passed off, she rose and stood up, staring vacantly about her, like a person suddenly roused from a deep sleep. The expression of her countenance, her action, and tone of voice, bore a striking resemblance to the acting of Malibran in the character of Amina, in the scene where she awakes and finds herself in the bed-room of the Count. On questioning her as to her sensations, she declared that she felt no pain, and was not aware that anything had been done. The anodyne effects of the ether appeared in this case to continue many hours, as after being placed in bed, the patient soon fell asleep, and continued dozing during the remainder of the day, making no complaint of pain or soreness. She said, on the following day, that she recollected crying out, for she was dreaming that she was relating to her mother what Mr. Arnott proposed doing, and that she cried out when he insisted on operating.

On February 2nd, Mr. Tuson operated on an elderly female for strangulated hernia. The ether was tried in this case, but failed, from its being found impossible to adapt the glass mouth-piece to the emaciated cheeks of the patient.

On February the 5th, Mr. Arnott removed the breast of a female, aged fifty, containing a carcinomatous tumour. She came to this hospital because she had been informed that it could be cut out without giving her pain. About four minutes after the inhalation of the ether, the limbs became relaxed, and the operation was commenced. The excision of the tumour, and of several suspiciously indurated masses imbedded in the cellular tissue of the axilla, into which the incisions extended, with the ligature of several vessels, occupied about nine minutes. During all this time, the limbs and features were perfectly tranquil, but she uttered, during the first part of the operation, several subdued groans, but these sounds, as in the former case, were unaccompanied by any action of the external muscles. The wound was covered with some wet lint, and the mouth-piece, which had been kept in for thirteen minutes, was then removed.

The patient continued reclining on the table in the attitude of a person in tranquil sleep. When spoken to, she answered slowly, but distinctly, and said, in reply to a question, that she did not know where she was. "Do you wish to have the

operation performed?" "Yes."—"Would you rather have it done to-day, or wait till to-morrow?" "To-day."—"It has been done; it is all over." "Has it! I felt no pain. I'm so much obliged to you all." Her face during this conversation was pale and tranquil. She appeared in a kind of dreamy condition of mind, unconscious of what was passing around her, except when she was roused by being spoken to. She was removed immediately to bed, wrapped up warm, and her face bathed with cold water, and in a short time she recovered her ordinary manner. No stimulants were given, as it was thought probable that the vomiting which ensued soon after the operation in the case of the old man, reported on a former occasion, was attributable to their injudicious administration. The wound was dressed five hours after the operation, the patient making scarcely any complaint of pain during this process, the anodyne effect appearing to continue in this a in the last case. She passed a very quiet night, and has since gone on most favourably.

On the same day. Mr. Arnott operated for entropium. The patient was a short, stout, red-faced female, upwards of sixty years of age, who had been employed for many years about the hospital as an occasional nurse. The apparatus being adjusted, she breathed with great gravity and perseverance, in spite of the coughing, for full ten minutes. As her face, at the end of this period, had assumed a redness of more than ordinary intensity, without any of the usual effects of the ether being observed, the mouth-piece was removed, as it was considered unsafe to proceed longer with a person of such plethoric habit and advanced age. The operation was then performed on both eyes, the patient perhaps suffering less than the average amount of pain. The failure was certainly not attributable to the vapour being imperfectly inhaled. The apparatus used in this and all the other operations was one furnished by Mr. Bell, of Oxford-street, and fitted with the valves contrived by Mr. Gilbertson. By watching the movements of these valves, which are contained in a transparent glass tube, the operator can at once detect any defect in the adjustment of the mouth-piece. If this does not fit properly, or becomes displaced so as to allow the air to be drawn in at the sides, the valves do not act.* The non-effect of the ether is probably to be attributed to the circumstance of this woman having been all her life in the habit of indulging pretty freely in the nurse's favourite remedy—gin. There was, however, according to her own account, some effect produced, as she stated afterwards, that just before the mouth-piece was removed, she began to dream—a true nurse's dream: she "dreamt that Mr. Arnott was talking to a patient in No. 9 bed." It is probable, then, that if the inhalation had been continued, the full effects would have been produced, her previous indulgence in spirituous liquors rendering her less susceptible of this new mode of intoxication. No ill effects resulted from the inhalation.

## KING'S COLLEGE HOSPITAL.

### EXCISION OF THE SCAPULA AND ONE HALF OF THE CLAVICLE.

Since our last report of operations at this hospital under the influence of ether, many others have been performed under similar circumstances. In some instances, the etherization has been complete, while in others the patients have declined to persist in inhaling. With several, the vapour, though used for a considerable time, has seemingly had no effect, except slight noisy excitement.

On Saturday last, (Feb. 6th, 1847,) one of the most remarkable operations ever yet tried under the influence of ether was performed by Mr. Fergusson.

W. H——, a discharged soldier, aged thirty-three, had his arm amputated at the shoulder-joint, about three years ago, for scrofulous inflammation of the articulation. The articular surface of the scapula being diseased was scooped away. The patient regained a fair share of health; but the wound never entirely healed. The stump gradually enlarged, and indications of extensive disease in the scapula became manifest. Through eight or ten sinuses the probe could be pushed against carious bone. The outer end of the clavicle seemed enlarged.

It was thought that any further partial operation on the scapula would not be advisable, and its total removal was resolved upon.

Hooper's apparatus was first used to administer the ether, but with no advantage. The patient breathed most industriously, but the only effect was slight excitement. Startin's Inhaler was then tried, and the result was most striking. In a few minutes a quiet slumber was induced, when the surgeon proceeded with the necessary incisions. A wound was made along the upper surface of the clavicle, sufficient to permit the division of that bone at its middle with the saw; the skin was next cut along the surface of the acromion and spine of the scapula, to permit the division of the trapezius muscle; these two wounds were then continued in a single line down the cicatrix of the stump as far as the axilla, near to the lower angle of the scapula: the skin was now partially raised from the back part of the bone, a small flap was raised in front, the pectoralis minor was cut from the coracoid process, the scapula drawn backwards to permit the division of the muscles attached to it behind, and the whole bone, with the outer end of the clavicle attached to it, was speedily severed. The axillary artery was open to the end of the stump, but bleeding from it was arrested by pressure on the subclavian, over the first rib. Five or six vessels beside this one required ligatures, but not more than three or four ounces of blood was lost. The wound was stitched, cold cloths were applied, and a roller was carried lightly round the chest. The whole proceedings of the surgeon occupied about fifteen minutes, and during the most of this time the patient was unconscious of suffering. As the ether seemed to lose effect, he breathed it again from time to time, and though in some degree aware of what was being done, as evinced by occasional remarks made to those around, and by slight moaning and moving, he seemed to feel nothing in comparison with the severity of the operation and the magnitude of the wound. Shortly after, as he regained his senses, he declared that he was hardly conscious of anything having been done, and that he felt altogether very differently than on the occasion when formerly under the surgeon's hands.

Feb. 10th.—Up to this date, the patient has been going on favourably; no bad symptom has yet appeared.

This operation is of much interest as regards the influence of ether, and, in a surgical point, of great importance, as it is understood to be the first example of the kind that has ever occurred in this country.

## CHELTENHAM GENERAL HOSPITAL.

By W. Philpot Brookes, M.D., M.R.C.S.E., Surgeon to the General Hospital and Dispensary.

Since reporting my former case, I have successfully performed the following operations under its effect:—

Ann W——, aged sixty-nine, living at No. 1, Burton-street, had been suffering for the last twelve months with fistula in ano, and had been during the whole of that time confined to her bed. She was of a very nervous, debilitated habit, and would not give her consent to the performance of an operation; but upon hearing of my former painless case, she sent for me, and desired to have the operation performed. On examination, I found the whole verge of the anus in a state of ulceration, accompanied with great pain. The probe discovered a fistulous sore, extending full four inches into the rectum, the walls of it of some thickness. Having put her in train for performing the operation, it was done in two days afterwards. The patient was laid on her back with the head elevated, so as to have no difficulty with the ether, the buttocks, raised knees drawn up and held apart. I then passed up my finger and inserted the director, when the inhalation of the ether commenced (with merely a bladder and elastic tube), and she was in a complete state of unconsciousness in two minutes. The bistoury was then introduced, and the fistula divided in its whole length, without her showing the least symptom of pain or uneasiness. When it was over, I asked her if she had quite made up her mind to have it performed. She said, "Yes, please go on with it as quickly as possible." When told it was over, she uttered great surprise. At this operation the following gentlemen were present:—Drs. Wright, Bagnall, Bell, Smith; Messrs. Eves and Orrell.

The next case was that of Ruth M——, aged twenty-one, who wished to have the last molar tooth extracted under the etherial influence; she is of a plethoric, full, and excitable habit. In one minute and a half she was in a state of unconsciousness from the ether, and became quite unmanageable, her face flushed, and she required two persons to hold her. I lanced the gum without any sign of pain, and she recovered her sensibility immediately. As she was very anxious to have the tooth extracted, she again inhaled it; and when under its influence, some excitement returned, and on drawing the tooth with the claw, she cried "Oh!" but on coming to herself, stated she had had no pain; and having had out nine teeth before, she could judge of its effects, and said, "I will never

* This apparatus is described by Mr. Jacob Bell, in the last number of the *Pharmaceutical Journal*, p. 355.

lose another tooth, except I am prepared in a similar manner, so as to have no pain."

Feb. 1st, 1847.—The following cases were operated on to-day in the presence of fifteen gentlemen, most of them members of the profession. John C——, aged fifty-six, a labourer on the roads, residing at Charlton, of a strong plethoric habit of body. Whilst at work he met with an accident (three weeks back) to the middle finger of the right hand; mortification took place, the first joint sloughed away; still he would not consent to the loss of the finger, and the disease extended to the metacarpal bone. Having heard he could have it taken off without suffering any pain, he applied this morning to have the operation performed. The ether was inhaled, and the man under its effects in six minutes; he remained so for five more. The finger was taken off by a V-shaped incision, opening the metacarpal bone half way down with Liston's bone-nippers. The patient did not show the slightest sign of pain, and stated that he heard the bone cut, but positively asserted he felt no uneasiness of any kind, and grumbled much at the suffering we gave him when taking up the arteries afterwards. I allowed this case to remain for half an hour before I dressed it, as I am inclined to think secondary hæmorrhage will often occur after the effects of the ether has passed away; reaction does not until then become perfectly established; small arteries afterwards escape untied if we dress it immediately; and union will not take place so well, on account of extravasation of blood. The pulse in this case was before the operation 84, during the etherial process it varied from 60 to 70.

William G——, aged twenty-one, residing at No. 44, Duke-street; of a pale, exsanguineous habit of body; he has phymosis from syphilis for several months, and wishing to have the glans penis liberated, submitted to the operation. (The ether was inhaled and produced its effects in three minutes.) This was performed by dividing the skin down to the end of the gland without any sign of pain, and he states he did not feel anything of it; pulse, when in the etherial state, was 75, and soft, and before that time was 90.

A servant, aged thirty, had four stumps extracted, without giving her the slightest pain, by Mr. S. Tibbs, surgeon-dentist. The ether was inhaled from a modification of Dr. Snow's apparatus. She got under its influence in less than two minutes, and remained so nearly five. Positively states she felt no kind of pain.

Lot O——, aged thirty-six, residing in Grove-street, of a spare habit of body, has had a disease of the left elbow-joint for the last year or two, and would not consent to its being amputated before, but the general health becoming affected, he now consented. The ether was given with the same apparatus, and after its inhalation nearly four minutes, he appeared quite unconscious; the healthy arm, when raised, dropped involuntarily to the side, eyelids closed, and the usual signs of insensibility to pain. The circular incision was made through the skin; and he cried out most lustily, and continued doing so through the whole stage of the operation. After it was all over, he stated he felt the first cut, and also the bone sawed, but he was in a dream, and smoking a pipe, which some one tried to take from him.

I can only view this case as a failure: I think it right alike to report all, whether failures or not. The other cases were decidedly satisfactory.

I must state, that in the above operation the mouth-piece did not fit nicely to the mouth; and he appeared to have inhaled fresh air by its side.

Albion House, Cheltenham, Feb. 1847.

## ROYAL CORNWALL INFIRMARY.

MALIGNANT DISEASE OF THE TESTICLE.—CASTRATION PERFORMED WITHOUT PAIN, DURING THE INHALATION OF ETHER.—REMARKS UPON INHALERS.

By J. Gorringe, Esq., M.R.C.S.L., Assist.-Surg. to the Infirmary.

A TALL, well-built man, from Poldice Mine, came under my care at the Infirmary on the twenty-eighth of last month, complaining of a swelling in one of his testicles.

*History*:—Of a fair complexion, and sandy-coloured hair. Married, and has three children; always had sufficient food and clothing; abode very damp, and in a valley; lived regularly of late years; but about nine or ten years ago admits he was a great drunkard. No hereditary predisposition traceable; and, with the exception of stammering most annoyingly, he never admits having suffered from any other ailment than the present, the first attack of which he dates to about sixteen years since. Whilst walking to market, he suddenly felt a pain in his right testicle; he put his hand to it, and was astonished to find it very much larger than natural, being about the size of a hen's egg. He made the best of his way home, and going to bed, had medical advice, in the shape of aperient medicine and cold lotions; the pain, however, increased, and the parts became very red. He was now bled from the arm, and ordered to persevere with the former medicine; and at the end of the fourth day he went to work again. He says he always considered it, from this time, a little harder than the other testicle; but never felt anything more about it, until two years ago, being a lapse of fourteen years. At this time, he was working in a mine; and feeling an inclination to void his urine, he put in his hand, and found that the same testicle was again swollen. It had not been painful in the least; but on looking at it, it was red on the surface. He showed it to the medical attendant belonging to the mine, who at first asked him if he had not the clap; but he strongly denied ever having had any venereal taint in his life. Leeches were applied, but still no abatement in its size; and being in no pain, he went to his work again, and so continued, until two weeks before Christmas; since which time it has increased in size rapidly, and occasionally been attended with severe pain in the inguinal region, shooting back to the loins, vomiting, constant inclination to go to stool, &c.

*Present Symptoms*:—The scrotum is now distended with a tumour about the size of a child's head at birth, of a pyramidical shape; smooth and uniform on its surface; very red, and the veins greatly injected. It is elastic, and yields readily to pressure, without pain being caused thereby. On the left side of the penis, and very high up, is situated the left testis, natural in size and to the touch. At the posterior inferior part of the swelling is a soft fluctuating place, about the size of a testis in its natural state. The tumour, when taken into the hand, feels very solid and heavy; no transparency evinced by the candle; harder in some parts than others. The only pain complained of is from its weight; and when he is in bed, with his knees elevated, he is "brave and easy." No enlargement of the inguinal glands, nor any inequality or knottiness to be felt in the spermatic cord. Two marks of the exploring needle are visible on the tumour, which the patient says were done a few days ago, nothing but a drop or so of blood following; they healed without any subsequent inflammation. I communicated the result of a consultation to the patient—that he was suffering from a malignant affection of the testicle in all probability, and that nothing but an early removal, if such were the case, would relieve him—not holding it out to him as a *certain* means of cure, but at the same time explained the chances of a return of the disease. He very readily consented to the operation for its removal; and thinking it a favourable case to try the inhalation of ether, I persuaded him to this also with very little trouble. My next object was to procure an inhaler. A medical friend, resident in this town, very kindly offered me the use of one that had been made under his directions—a very compact little apparatus—consisting of a receiver made of glass, and large enough to hold about a quart of fluid. At the top of this were two openings; in one was fixed an inverted globe of glass, filled with sponge, saturated with ether, and having at its top a very small opening for the admission of a stream of air; and in the other opening was fitted a flexible tube, with a mouth-piece. About two inches from the mouth-piece was a well-constructed valve for the expired air to escape; and still further down the tube was a stop-cock, to prevent the escape of the ether when not in use. An apparatus precisely similar in principle (excepting the expiratory valve) had been tried a week previously at the Infirmary, but without success; fearful, then, lest the present should offer a similar instance of disappointment, I determined upon having at hand a second inhaler, made on another principle. Remembering that whilst an apprentice at the University College Hospital, I had on several occasions inhaled sulphuric ether from a common bladder, until marked intoxicating effects were produced—(indeed, it used to be a great source of fun with us)—and in the chemical lecture-room at the college, I had a distinct remembrance of two cases of insensibility being produced by the inhalation of ether from a bladder—the students falling flat upon their backs; this was in the session of '38-39—while others were merely intensely excited, I determined upon trying the same means, and accordingly procured a bladder, into the neck of which I fixed a metallic tube about four inches in length and three quarters of an inch in diameter; to this was made an admirably shaped mouth-piece of the same material, made after the fashion of the speaking-trumpet used at sea; no valves of any description.

Feb. 5th.—This being the day fixed upon for the operation, I determined upon trying first the virtues of the inhalers upon

another patient, who volunteered on the occasion. The medical staff of the Infirmary, and most of the medical men of Truro, were present upon the occasion.

The more complicated of the inhalers described was first given to the patient, and after ten minutes' trial, symptoms of intoxication alone were produced; he laughed incessantly, but nothing like insensibility was produced. I now exchanged this for the bladder, and in less than one minute he was insensible. The patient to be operated upon was now brought, and placed upon the table, and the bladder given him, containing about three drachms of ether, the bladder being previously immersed in hot water. Silence was kept, and the man's countenance anxiously watched by all present. In one minute, his pupils were observed to dilate, his pulse dropped, and his face assumed a bluish colour. I thought this the best time to commence the operation, and accordingly pierced the diseased mass with a grooved needle, to the extent of about three inches; not the slightest movement was caused by this, the man continuing to inhale lustily. The needle was now exchanged for a sharp-pointed knife, and the parts incised from above the abdominal ring to the bottom of the scrotum. The nature of the disease now became apparent, for I had cut into the encephaloid looking mass—the part which felt the softest, at the bottom, emitted some thick matter; the cord was then exposed, and, previously to dividing it, I passed a ligature very tightly round the whole of it, in order to see whether even this would cause any sensation, for in "Cooper's First Lines" the following passage occurs:—"Castration is one of the most simple, and yet one of the most painful, operations in surgery, especially when practised according to the old method, in which it was the custom to include in the ligature all the vessels and nerves of the spermatic cord. At the moment of doing this, the patient was put to excruciating torture; such suffering, indeed, as few could endure without complaint, however great their fortitude." This produced not the slightest pain, and after being kept on perhaps a minute, the forefinger and thumb of an assistant replaced it, and gently compressed the cord to prevent retraction; two vessels were pulled out and secured. The dissection was then continued, and, in a few minutes, I removed the diseased part, consisting of a mass of medullary looking matter, softer in some parts than others, but generally firmer than the medullary matter of the brain, and intersected by fibrous bands—its weight was one pound and a half. During the whole of this time, the patient betrayed not the slightest evidence of pain, and not a feature altered. The inhaler was now removed from his mouth, and in a short time he became sensible, expressing his gratitude that it was all over, and saying that he would not mind undergoing the same again. That although he was conscious of every step of the operation, and could distinctly see my movements, he felt not the slightest pain. After sponging out the scrotum, and making the parts clean from blood, the cut surface of the cord was minutely examined, and thought to contain some extraneous matter, feeling harder and bulbous about a quarter of an inch from its cut surface, and it was thought proper, by the surgeons present, to remove it a little higher up; this I did at once, and the patient, not being under the influence of the vapour, called out most lustily, and says it was the only part of the operation which he felt. The vessels in the cord being once more secured, and nothing but venous hæmorrhage coming from the scrotum, lint wetted with cold water was applied, and the patient carried to his bed.

As soon as this patient had left the operating room, another entered, having heard of the success which had attended the inhalation, and requested to have his tooth drawn. He was placed in a chair, one drachm of ether put into the bladder, and before he had taken six whiffs, his eyes closed, and he fell back in the chair; the bladder was removed from him, and, after a little difficulty in opening his mouth, I extracted the last molar tooth of the under jaw, on the right side. His eyes still remained closed, and it was about a minute before he came sensible again. I asked him if his tooth was out? He said, yes; he knew that it had been drawn, and recollected every part of the operation, but never felt the slightest pain. He now attempted to walk away, but felt so intoxicated that he was obliged to resume his seat for a short time.

## AMPUTATION OF THE TOE.

By R. L. BAKER, of Birmingham, late House-Surgeon to the Essex and Colchester Hospital.

My patient, M. A. J., a female of thirty years of age, had been a great sufferer for fourteen months with scrofulous disease in the second joint of the second toe of the left foot, for which I had, months since, recommended amputation, to which operation she had not moral courage to submit, her only objection being the fear of the pain of the operation. She having, however, read of the wonderful effects of the etherial vapour, expressed a wish that the remedy should be applied to her own case—i. e., if I thought it advisable. Not perceiving in her case any contra-indications of its use, I consented; and on Monday, the 1st of February, I made an experimental trial of the ether, with the view of performing the operation some future day. This trial proved quite satisfactory, for with four minutes' inhalation she became perfectly insensible, and lay quite quiet, as if in a sound sleep. Having removed the mouth-piece of the apparatus, she in about five minutes recovered from the effects of the inhalation, expressing herself highly delighted with the sensations she had experienced, which, she said, were those of indescribable pleasure. Its use being followed by no unpleasant symptoms, I appointed the 3rd instant for the amputation, which she now anticipated with pleasure rather than dread. At one o'clock P.M. of the 3rd, I proceeded, in company with my friend and neighbour, Mr. W. S. Partridge, to perform the operation: on this occasion we found it much more difficult to procure the full influence of the remedy than on the former, which, I believe, arose from the mouth-piece of the apparatus not fitting so closely as it should have done. By persevering, however, for twenty minutes, we procured the desired effect, at which moment I commenced the operation. The toe was removed and the necessary dressing applied before her consciousness returned. When she had recovered her reason, (to use her own words,) she said she had been millions and billions of miles, and she had seen she did not know who. She then asked if the toe had been removed. When replied to in the affirmative, she would not believe it until she had seen it, and even then seemed almost incredulous. During the operation, she evinced no signs of pain; after consciousness was restored, she remained under considerable mental excitement for about an hour, which then subsided. She has since been doing well, the wound having already healed by the first intention.

## ETHERIZATION.

(FROM A CORRESPONDENT.)

*Some observations on the general effect of the inhalation of the vapour of ether in preventing the severe pain attending the performance of surgical operations, (the dread of which has often prevented operations that would have saved lives,) and in alleviating the great distress of body and mind which patients always suffer on such occasions.*

The following case of amputation of the thigh proves the insensibility by ether to be of a peculiar kind, and to vary considerably, in different individuals, in the nature and extent of its physiological effects, just as wine, spirits, tobacco, opium, &c., produce sometimes various effects from those ordinarily found to follow their use, so, as might be expected, is also the case with the vapour of ether. It may, it appears, in some cases, act as an excitant, and in others produce coma, or it may be attended with effects strongly resembling the nitreous oxide, or laughing gas. It is probable that the variation of the symptoms observed in this case may in some degree depend upon the quality and quantity of the ether, rather than on the difference of constitution, or peculiarity of temperament, two ounces of unwashed ether, instead of one ounce, as has been previously employed. Mr. Squire has observed the marked difference in the effects produced on the same person in the same evening, the first inhalation of the washed ether producing pleasurable sensations, and the ordinary rectified ether, those of an unpleasant character; and shortly after the pleasant sensations being recovered by inhaling the unwashed ether. Dr. Fairbrother has tried both the washed and the unwashed, and no dreams have followed. The washed ether has, however, several advantages. For instance, its taste is not so disagreeable, which removes the objections of some persons to inhale it; it does not leave such an unpleasant flavour on the palate for a long time, and is less likely to induce coughing, irritation, or inflammation of the lungs, small quantities of sulphurous acid and of alcohol being contained in the common ether, while the inhalation of vapour of alcohol might induce a prolonged state of insensibility, and a degree of reaction which might prove inconvenient, if not dangerous, to the patient. Mr. Hooper has observed that the result of the inhalation of ether was less speedy when the patient was given to drinking, and the effects took place earlier in young people than in old. Velpeau mentions, that healthy patients are affected more rapidly than diseased subjects, strong consti-

tutions sooner than weak ones. The temperature at which the vapour of the ether is inhaled considerably modifies its effects.

This circumstance (observes Dr. Snow) would in some measure explain the variety of the results, and account for some of the failures. The operator did not at present know the quantity of vapour they were exhibiting with the air, and would vary immensely according to the temperature of the apartment. It would be seen, by some calculations made by him, that 100 cubic inches of air saturated with the vapour of ether, at a temperature of forty degrees, contain twenty-seven cubic inches of the vapour,

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| 44° | contain | 27 | cubic inches. |
| 54° | „ | 34 | „ |
| 64° | „ | 43 | „ |
| 74° | „ | 53 | „ |
| 84° | „ | 66 | „ |

So that if the temperature of the water in which the inhaler is placed was sixty-five, seventy, or seventy-five degrees, consequently the proportion of vapour in the air inspired would be forty-four, fifty, and fifty-five per cent. respectively. This demands attention; but the temperature of the room for the apparatus may be easily ascertained and regulated with a little care.

Dr. Malgaigne fancied reaction, after the operation in which the patient has been etherized, rather weaker than in ordinary cases.

The most remarkable peculiarities of this case were the resemblance to a fit, or paroxysms of hysteria, or the effects of some powerful stimulus, or mental excitement. During the protracted inhalation she was occasionally restless, throwing her hands about, screaming, screeching, and betraying other marks of uneasiness, the ether inducing, to all external appearance, a serious practical obstacle to the operation.

It is, however, strictly physiological to believe that contortions of the face and limbs may take place during operations, as purely reflex acts, without any volition or emotion of pain. There may be even a cry apparently of pain without consciousness of pain, in the same way that epileptics frequently cry out before falling into convulsions without any subsequent recollection whatever of pain or fear.—The Lancet, Jan. 16th.

The phenomena of intoxication—delirium, furnish us with ample proof that an individual may experience powerful physical and mental suffering, or sensation, of which, at a subsequent period, he may be entirely unconscious, especially in dreaming; that people may cry and scream in their sleep, without knowing anything of its cause after having awakened; and that during profound states of coma they would sometimes start and make noises, while there is plainly nothing but organic sensations remaining.—*Medical Times*, Jan. 23rd.

This is perfectly consistent with the fact,—this case showing a peculiarity of some practical importance,—that the inhalation of the vapour of ether is not rendered less useful or beneficial for not producing an anodyne, or composing effect, in the employment of surgical operations.

Case.—On Thursday, Jan. 28th, in the presence of a numerous assemblage of professional gentlemen and interested spectators, the ether vapour, as an antidote to pain, was tried for amputation of the thigh. This is the third limb which has been removed within the last month at the Bristol General Hospital, whilst the patient has been under the influence of the etherial vapour. An interesting and delicate girl, of nervous temperament, fifteen years of age, dressmaker, suffering from disease of the knee-joint, which had existed nearly seven years, various remedies having been used without avail, and who dreaded the pain of the operation exceedingly. Having been told that a female, aged sixty-three, had had her leg amputated without pain, for disease of the bones and ankle-joint, of eighteen months' standing,—from which she had suffered the most agonizing pain at times, the strongest narcotic medicine producing scarcely one hour's sleep at night, and who had inhaled the ether occasionally with the best effects in allaying the pain, and who went out of the hospital and refused to submit to the operation until she had learnt that it could be removed without pain, as in the case of the young man who had had his thigh off whilst in the etherized condition some time previously; she then returned to the hospital, and readily assented to its being removed; (both of these individuals are quite well, and in a state to leave the hospital, no unfavourable symptoms of any kind having manifested themselves;)—the young girl consented to have the operation performed. There were four experimental trials of the inhalation of the ether, which only produced, to all appearance, temporary insensibility. At a little after one o'clock she began to inhale the vapour of the ether, preparatory to the operation, from the bladder, which was administered by Dr. Fairbrother. After inhaling the ether a few minutes, the patient seemed insensible, when the operator, Mr. Lansdown, commenced. The instant, however, the knife touched her, she cried out, put her hands down to the part, and betrayed other marks of uneasiness. After half a minute to a minute, the operation was proceeded with, and signs of apparent suffering were not to be mistaken; so much so, that it induced some gentlemen who witnessed its effects to imagine that the operation was felt, and the patient was aware of it, and was conscious of what was going on. The pulse remained unaffected, and the pupils dilated, fixed, and did not act during the whole time; the breathing laborious two or three times; but the withdrawal of the tube from the mouth, (which was held so firmly between the teeth that it required some little force to get it out,) and the administration of some wine occasionally, quickly removed this comatose state. The inhalation of the ether was prolonged to twenty minutes, with an occasional intermission; the skin not sensible on being sharply pinched. After the operation was completed, and on awakening to a state of consciousness, and asked if she had suffered any pain, or had any knowledge or recollection of what had been done, she expressed no knowledge, was not aware of what had passed, and said she had had a dream, and thought she was at the bar of judgment pleading for mercy, and that God Almighty was punishing her for her sins. The first thing she was conscious of was seeing the gentlemen standing round her bed. After being removed to the ward, (about twenty minutes after the operation,) several hours afterwards, and repeatedly since, in the presence of several persons, she declared that she suffered no pain or other inconvenience, and that she was not aware that she cried, screamed out, or struggled with her hands. The only thing she recollects is the dream before mentioned. All this she states with an air of sincerity; and there is no reason for questioning her veracity, as she bears a very good moral and religious character, and the dream is that which might be expected from such an individual. It therefore becomes a question, whether the writhings and distorted features in the case above described are to be regarded as proof that the operation occasioned, at the time, the actual agony of which such symptoms are the usual evidence, or whether they were mere "instinctive movements." The result, then, on the question of pain during the etherial surgical operation we witnessed, amounted to this—That, in this case, there is no proof whatever that any pain was suffered, and that the manifestation of pain during the operation is opposed by the positive statement that no pain, suffering, or knowledge of the operation, was experienced.

This case also shows the curious fact, that in the two cases before mentioned, in which there was no evidence of pain or suffering, she being quite calm and motionless, the pulse fluctuated remarkably during the operation, and the pupils were very much contracted; but in this case, the pulse continued exactly the same as before and during the operation, and the pupils dilated and fixed. In the evening, she was cold and chilly; oozing of blood took place from the stump; nausea and vomiting, and the pulse very feeble and weak; and complained of a disagreeable taste in her mouth from the ether. In the course of the next day, all passed off, and no subsequent bad consequences have occurred, and she is going on favourably up to the present time. It is great gratification to this young creature, who would have been the subject of excruciating pain during the amputation, if performed in the usual manner, that there was a perfect cessation from all suffering whilst in the etherized condition.

## Correspondence.

### CHIROPODY.

*To the Editor of* The Lancet.

Sir,—Having read in your valuable publication of December 26th, page 701, an article headed "Chiropody Extraordinary," I now take an opportunity of stating the result of the trial of the chiropodist, and forward to you, for the information of my professional brethren, a particular detail of the artist's mode of operation, and the result of it, in the discovery of a nursery of corns where the most eminent men in our profession appear never to have thought that they were ever grown.

Joseph Wolff, tried at the sessions for the County of Suffolk, held at Beccles on the 4th inst., on a charge of having, in the Borough of Southwold, in that county, on the 1st of December last, obtained, from a gentleman resident in that

town, the sum of 1*l.*, by false pretences, represented in the calendar of prisoners as thirty-five years of age, a labourer of the city of Norwich, (!) but who, by his handbills, had represented himself as Dr. J. Wolff, Chiropodist, patronized by a crowned head, and every grade of nobility and gentry, from the throne downwards, was acquitted by the jury, on the ground, as it would appear, of insufficient evidence, arising, perhaps, out of the loss of materials pretended to have been extracted as corns, and the difficulty of showing that the whole sum charged was a fraud, as what is usually called a corn had been operated upon, and the patient felt ease from it.

The theory of the chiropodist, as frequently stated, is, that corns are generated in considerable numbers in, and spring from, the bone, immediately under what has never before been doubted to be a corn, and in order to the extraction of which, in the cases alluded to, and at which I was present, the following was the ceremony of operation:—Seating himself with his face towards the light, and taking care to object against any person placing himself in a situation distinctly to see the whole operation, the operator threw a handkerchief over his knee, upon which the foot of the patient was laid. The visible corn was then pressed somewhat unceremoniously, to give, it is presumed, the patient a sufficient idea of the pain occasioned by such things, and the value of the service rendered by the removal of them. The chiropodist then proceeded to pare the uppermost layer of the thickened cuticle of every corn upon the same foot, using a number of variously shaped scalpels. He then proceeded to loosen, by means of a set of instruments like gum-lancets, of different shapes, and some of them much rounded, the entire natural corns, turned them up, and on one side, then cut off the more callous part of each, leaving the under layer of the cuticle, of which he contrived to form a sort of flap, which he subsequently made use of. With crooked scissors of various sizes, having clipped away all uneven surfaces from the different corns under operation, then, with suitable solemnity, the operator took from a round box a bottle of mysterious oil, somewhat resembling blood, which he represented as having the power to raise the corns; this oil was with abundant care rubbed over each toe operated upon, and into each excavation made in it, until it foamed; and at this perhaps critical period of the operation, the operator invariably resorted to some manœuvre to attract the attention of any bystander, and each flap before spoken of was carefully closed over the orifice, and the oil wiped from the outer part of the toes. The chiropodist then, by means of an instrument like a large silver tooth-pick, with great adroitness disengaged what he called the corns, and brought them one by one to view, exclaiming, "See de corn!" The object being thus made visible, the operator, taking up a pair of long broad forceps, deeply grooved, and closing with a slide, proceeded to lay hold of it, and suiting the action to the extremity of the case, he affected to exercise the utmost judgment and care in the ceremony of extraction, which having with apparent difficulty effected, the self-created corn was usually triumphantly exhibited, and its point applied to the back of the patient's hand, no doubt, that its power to give pain might be felt. In conclusion, the flap before spoken of was trimmed off; and if there was any appearance of blood, the chiropodist applied small pieces of charpie, dipped in a yellowish-brown astringent, and every toe operated upon was bound neatly up and secured with adhesive plaster.

The Wolff corns, or the spiculæ designated by Dr. J. Wolff as corns, are horny, bristly, or bony substances, which may be manufactured either of the parings of horses' hoofs, or the bones of fish; but I have great reason to believe they were manufactured from the parings of horses' hoofs. In length they are about one quarter of an inch, some jagged, some smooth, some curved, and in size do not exceed that of a small pin.

The Doctor's talent in practical imposition appears to have been carried nearly through the length and breadth, not only of our island, but into Ireland, to say nothing of the Continent. In Ireland, I have evidence of the extraction of 8*l.* from the purse of a lady, and in my own immediate neighbourhood, of 6*l.* for twenty-five spiculæ. From London I have received various communications, and amongst them, of the extraction of fifteen guineas from two gentlemen residing in that fountain-head of medical and surgical knowledge, besides similar, and indeed greater, impositions practised elsewhere. The most gratifying communication, however, has been from Cheltenham, where it appears that the impostor, for his malpractices on the feet of his patients, was sent to exercise his own feet on the treadmill.

The object, from first to last, in the proceedings against Dr. J. Wolff, has been, to expose the absurdity of his theory, and the extent of his trickery; and the object of addressing to you this exposition of the mystery of his operations, has been to show the necessity of great caution, particularly in our profession, in certifying anything not well understood. In my own case, I considered myself perfectly secure from imposition, not simply from the personal recommendation of Dr. Wolff by the gentleman whose house he had just left, but from a splendid book of certificates, containing the autographs and seals of several noblemen, and printed testimonies from many members of high eminence in our profession, on which I could not but rely, as fully justifying a recommendation of the operator to my friends, by whom they were so grossly deceived, and the deception upon whom well warranted, in my opinion, the proceedings which I thought proper, in justice to them, to adopt. ROBERT WAKE, M.D., M.R.C.S.E.

Southwold, Suffolk, Jan. 1847.

## HINDOO MEDICAL STUDENTS.

*To the Editor of* THE LANCET.

SIR,—In THE LANCET of last week, (Feb. 6th,) I observe amongst your "Medical News" a paragraph upon University College, in which reference is made to the Hindoo medical students under my charge in this country. As the remarks therein made contain some important errors, I should wish, in justice to these young men, with your permission, to correct them.

You speak of "two native gentlemen having been educated at University College with such success, as to enable them to carry off the diploma of the Royal College of Surgeons of England." "*One* of these," you state, "has returned to Calcutta; *the other* remains to compete for the scholarship of comparative anatomy given by the College of Surgeons."

Now, Sir, the real facts of the case are these:—*Four* Hindoo students accompanied me from India in 1845, and have since been pursuing their studies at University College, under my superintendence. Of these, *three* obtained the diploma of the College of Surgeons in August last, and *two*, in the same month, passed the first examination for the degree of M.B. in the London University, with so much distinction as to be placed in the first division. They also obtained high certificates in the subsequent examination for honours. The fourth has only been prevented from presenting himself for both these examinations, by not yet having attained the requisite age. His acquirements, however, are such, as I have no doubt will place him at least upon an equality with his countrymen, when he is entitled to become a candidate for the same professional distinctions.

One of the young men returned to Calcutta last month, as you state. He did not share with his friends the desire of possessing the degree of M.D., and being older than the rest, he was desirous of making use at once of his surgical diploma in his own country. He started for India with very high testimonials from some of the most distinguished professional men in London, and I hope will prosper as he deserves in India.

During their career of study at University College, my Hindoo friends have been distinguished by their untiring industry, zeal, intelligence, and high moral conduct. They have been extremely successful in contending for honours at the College examinations. One of these, Bholorath Bose, carried away the gold medal in botany, the silver medal in chemistry, and the same reward in materia medica; and I think he has a fair chance of the comparative anatomy gold medal this year. Another, Jorgie Coma Chuckerbutty, obtained the gold medal in comparative anatomy, and the silver medal in zoology; and all have repeatedly gained high certificates of merit in various other classes. The third, Gopal Chunder Seal, has been clinical clerk to Dr. Williams, and is now dresser to Mr. Liston. I do not know whether any of them propose at present to compete for the studentship of comparative anatomy at the College of Surgeons, which you refer to; but I think either of the two prizemen above mentioned are well qualified to do so, and they may hereafter make the attempt.

The successful result of the experiment upon the advantages to Indian civilization, of educating young Hindoos in England, must be gratifying in the extreme to all who are interested in the welfare of our possessions in the East. To myself it has been delightful to witness, as a triumphant development of principles which I have advocated for many years in India. To the medical profession it should also be a subject of much interest, and some little pride, to behold our art, as on so many previous occasions, once again employed as the instrument of civilization and the means of introducing the lights of learning

and refinement amongst nations plunged in comparative darkness.

Nowhere, perhaps, has so much been done in this good cause by our profession as in India. The original possession of the country by the British government, it is well known, was in a great measure due to the exertions of two talented members of our profession, who, on different occasions, procured most important privileges for the East India Company, as the disinterested reward of their medical skill in relieving some of the native princes from dangerous diseases, thus laying the foundation of our magnificent empire in Hindostan, which, with all its faults of administration, is the greatest blessing that ever was conferred upon India. Since that period, occasions have constantly occurred in the East, where European medical science has lent her aid to advance the cause of humanity and the interests of civilization. The most important blow which has yet been struck at the root of native prejudices and superstition, was accomplished by the establishment of the Medical College of Calcutta, and the introduction of practical anatomy as a part of the professional education of Brahmins and Rajpoots, who may now be seen dissecting human bodies with an avidity and industry which was little anticipated by those who knew their strong religious prejudices upon this point twenty years since.

The voyage to England of the young men who form the subject of this letter is another, and an almost equally important measure of a similar kind. Here, again, the followers of our art have become pioneers of civilization, and our profession has assumed an honourable prominence in the march of improvement.

When it was proposed to induce natives of India to throw aside their strong national and religious prejudices upon the score of emigration, and resort to Europe for education, medical students alone were found sufficiently enlightened and enterprizing to encounter the imaginary dangers of such an undertaking, and to brave the real hardships of permaneptly sacrificing in the cause all the social and domestic relations of life. Such is the penalty which, at present, the high caste Hindoo pays for daring even to eat his dinner on ship-board, much less to travel seven thousand miles by sea.

Few Europeans, even in India, are aware of the extent of moral courage necessary to encounter what my pupils have braved for learning's sake, and for the noble object of convincing their countrymen of the safety with which they may tread this path, hitherto so encompassed with imaginary difficulties.

Before concluding this letter, permit me to avail myself of the pages of your wide-spreading journal, to offer, on behalf of my pupils and myself, an acknowledgment for the kindness and attention we have experienced, during our sojourn in England, from so many different members of our profession, and more especially from the distinguished professors of University College, to whose acquirements and urbanity we are so much indebted. You are indeed, Sir, perfectly correct in stating that we hold that institution in great estimation in India: as well for its distinguished position as a seat of medical learning, as for the liberality and justness of the principles upon which it is founded, it is entitled to our respect and admiration.—I remain, Sir, your most obedient servant,

H. H. GOODEVE, M.D.
Professor of Anatomy in Medical College, Calcutta.

London, Feb. 1847.

## Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted Members of this Institution on Friday, the 5th instant—viz., Messrs. Robert Alexander William Westley, Bombay; Johnson Kaye Baines, Burwell, Cambridgeshire; William Strong Briggs, Derby; Edward Govett, London; John Linton Palmer, Sobeston, Hants; Julius Harward, Wirksworth, Derbyshire; Morris Morris, Barmouth, North Wales; and Charles Downes, Builth, Breconshire.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, Feb. 4th, 1847:—William Philip Harrison, Sheffield; John Frederick Stevenson, Birkenhead, Cheshire; Edwin Simpson, Swadlincote, Derbyshire.

THE CHIROPODISTS.—In the articles at pages 48 and 51 of THE LANCET of January 9th, 1847, we did not allude to Mr. Levi, of Jewin-street, City. It will be seen that our correspondent referred to a transaction that took place some years ago, in which another party of the same name was concerned.

MEDICAL APPOINTMENTS.—Dr. William Pulteney Alison has been appointed First Physician to her Majesty in Scotland, in the room of Dr. J. H. Davidson, deceased; Dr. Robert Christison, to be one of her Majesty's Physicians in Ordinary in Scotland; and Dr. James Young Simpson, Physician-Accoucheur in Scotland.

SEAMEN'S HOSPITAL SOCIETY.—At the annual meeting of the supporters of the Dreadnought Hospital Ship, moored off Greenwich, the Secretary stated that amongst the subscriptions received during the past year was one of 187*l.* 10*s.* from His Excellency Keying, the High Commissioner to the Emperor of China. The number of in-patients during the year amounted to 2509; out-patients, 1629.

CLERICAL AND MEDICAL MUNIFICENCE.—The Rev. Dr. Warneford, so deservedly well known by his many acts of liberality towards the medical profession, has contributed from time to time sums of money, to the amount of *fifteen thousand pounds*, towards the Warneford Hospital for the Insane, established at Oxford, in addition to which, this venerable clergyman has conveyed a valuable estate in Sussex to the uses of the charity.

MEDICAL REFORM.—On Friday, the 5th instant, a deputation from the Council of the National Institute of Medicine, Surgery, and Midwifery, had an interview with the Right Honourable the Secretary of State for the Home Department.

## CORRESPONDENTS.

*Inquirer.*—The provisions of the MEDICAL WITNESSES' ACT were extravagantly misrepresented by the Judges of the Court of Queen's Bench. It was wholly wrong to state that the Coroner was REQUIRED by that Act to summon and examine the medical practitioner who attended White at the time of his death. The words of the Act are, "That, from and after the passing of this Act, whenever, upon the summoning or holding of any Coroner's Inquest, it shall appear to the Coroner that the deceased person was attended, at his death, or during his last illness, by any legally-qualified medical practitioner, it shall be LAWFUL for the Coroner to issue his order, in the form marked *A* in the schedule hereunto annexed, for the attendance of such practitioner as a witness at such inquest."

Again, on the other point, the words of the Act are as follow:—"And it shall be LAWFUL for the coroner, either in his order for the attendance of the medical witness, or at any time between the issuing of such order and the termination of the inquest, to direct the performance of a post-mortem examination, with or without an analysis of the contents of the stomach or intestines, by *the medical witness or witnesses who may be summoned to attend at any inquest.*"

*Mr. Francis, M.R.C.S. Eng.*, regrets the circulation of his handbill, and explains that he was recommended to the step by his friends, on removing to his present neighbourhood. He was badly advised, and we have no doubt he will, on reflection, thank us for obliging him to reconsider the matter. We have no feeling against individuals, but we can never refuse the insertion of genuine documents of the kind in question.

*Mr. Bell's* (Felstead) interesting case shall appear next week.

*Mr. Richardson*, (University of Edinburgh.)—Of course it would first be necessary to see the proposed communication.

*P. M.*, (Aberdeen.)—We think our correspondent may depend upon obtaining the practical instruction he requires at the institution alluded to.

*Mr. Tracey* writes to say, that it was the opinion of Drs. Rigby, Ferguson, P. Smith, and Jefferson, Mr. Haig, and Mr. Savory, that in the Cæsarian operation recently performed at St. Bartholomew's Hospital, the inhalation of ether did produce insensibility during the incision through the abdominal parietes.

*A Metropolitan Student.*—We have not received the communication alluded to.

*An Old Friend.*—Any one ought to be pleased with the abuse of the *Morning Post*; it is the lowest and worst conducted journal in existence.

Communications have been received from—Mr. G. F. Meadows, (Ipswich;) Dr. David; Dr. Dick; Chirurgus; Dr. Fairbrother; Mr. Crosbie Castle Douglas; Mr. Ellis; Mr. Francis; Mr. Bell, (Felstead;) Mr. Richardson; Mr. R. Foulis, (Edinburgh;) Dr. Elliot; Dr. Mayne, (Leeds;) Mr. P. Mackenzie, M.R.C.S.L.; Mr. John Bilsborrow, (Liverpool;) Mr. Tracey;) Dr. Goodeve; A Metropolitan Student; Dr. Mainwaring; Mr. Louis Leslie, (Alton;) Mr. Nathaniel Ward; Mr. Prichard, (Leamington;) Mr. S. Hope Wraith; and Mr. T. Wilson, (Hull;) Dr. Cattell, (Braunston;) Exterminator; One who has taken the Bait, &c.

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Registered, 1846.

## MEDICAL, LEGAL, and GENERAL MUTUAL LIFE ASSURANCE SOCIETY, 126, Strand, London.

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This is the only Society, in connexion with either the medical or legal profession, founded on the principle of mutual assurance, which is certainly the most beneficial to the assured.

The Society has a subscription capital to guarantee the prompt settlement of claims; but it will be paid off as soon as replaced by a reserved profit fund.

Prospectuses, forms of proposal, and every further information, will be readily supplied on application, either personally or by letter, to

R. WILSDON MORRIS, Actuary.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck-street, Cavendish-square. — NOTICE IS HEREBY GIVEN, that a VACANCY having occurred in the office of RESIDENT APOTHECARY to this Institution, by the resignation of Mr. George Stewart, the Directors will meet at the Dispensary, on Thursday, the 25th of February instant, to receive applications for filling the vacant office. Every Candidate for the office must be a Licentiate of the Apothecary's Hall, London, and must personally attend the Board on the above-named day, with a written application, at Eleven o'clock in the forenoon precisely, and produce his Qualifications and Testimonials. The salary is One Hundred Guineas per annum.

By order of the Board,
Feb. 4th, 1847. PETER MATTHEWS, Secretary.

APPARATUS FOR INHALING THE VAPOUR OF ETHER, the form and principle of which were first constructed by Mr. P. SQUIRE, Chemist on her Majesty's establishment, 277, Oxford-street, London, and by the aid of which the first Capital Operation without pain was performed in this country by Mr. Liston, and has since been successfully employed by him and Professor Miller, of Edinburgh, and many others, both in public and private practice.

It consists of two glass vessels, a stopper with a valve, a flexible tube with valves, adjusting ferrule, and mouth-piece.

The upper glass, which is egg-shaped, and is filled with sponge, communicates with the lower one, by its tube opening near to the bottom of it; this lower glass has a broad base, and an indent in the centre, which serves to collect any liquid ether that may happen to fall through the sponge whilst the instrument is at rest; around the edge of this, and encircling the descending tube of the upper glass, is placed a collar of sponge, which absorbs any excess of ether falling into the indent.

The ether is poured into the urn at the top of the apparatus, it falls through four channels in divided streams, diverging so as to completely wet the sponge.

The air is admitted at the valve* in the arm of the stopper, it traverses the whole of the sponge in the upper vessel, descends by the tube to the bottom of the apparatus, and has to pass through the sponge around the tube, consequently gets thoroughly saturated with the vapour of ether before it can arrive at the flexible tube.

The flexible tube rises from the lower vessel upon a metallic mount, containing a valve which is shut when the apparatus is at rest, as is the valve in stopper, effectually preventing any loss of the ether. At the other extremity of the flexible tube is a glass mouth-piece.†

The valve placed near the mouth-piece lets off the expired air, thereby insuring an entirely fresh supply of mixed vapour and air at each inspiration.

And last, though not least, is the ferrule: this puts the management of the power of the vapour, at all temperatures, entirely under the control of the operator; he can adjust the strength, from the feeble taste of the etherial vapour to the full power the apparatus is capable of giving, (and which will be found fully adequate to any case.) This is found of great advantage, particularly where the air-passages are very irritable when the vapour is first taken in; the patient may commence with full inspirations, and continue them with confidence, whilst the ferrule is gradually closed and the full effect is produced; thus no time is lost. In this apparatus, Read's patent Spherical Valves are used, which are self-acting, and in concert with the air-pressure, requiring but a small effort in breathing.

Sold, price 3 guineas, by P. Squire, 277, Oxford-street, and J. Read, Regent's Circus, Piccadilly.

N.B.—The instrument is figured in the "Pharmaceutical Journal" for February, in connexion with a paper on the subject.

* The motion of this valve assures the Operator that the patient is drawing his supply through the apparatus, and the rate at which it moves is some indication of the quantity of air passing.

† An elastic mouth-piece, which incloses the nostrils also, so that the lungs are filled by the natural passages without restraint, is supplied at a small additional charge.

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THE ETHERIAL INHALER, according to Dr. Boott and Mr. Robinson's principle, is constructed by Mr. HOOPER, Operative Chemist, PALL MALL EAST.

*** A diagram, with explanation and directions for use, can be obtained, if desired.

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ETHER INHALERS, as recommended by ALFRED SMEE, Esq., F.R.S., and now so extensively used by the principal London and Provincial Hospitals. Manufactured by Horne and Co, Successors to E. Palmer, 123, Newgate-street, London. Price, complete in case, £2 12s. 6d.—Agents, Messrs. Gale, Baker, Warde, and Oldfield, Bouverie-street, Fleet-street.

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ETHERIAL INHALERS.—The Apparatus of Dr. SNOW, as used at St. George's Hospital, and described in THE LANCET of January 30, is manufactured by D. FERGUSON, Instrument Maker to St. Bartholomew's Hospital. Price £2 2s.

Also, Mr. TRACY'S, used at St. Bartholomew's Hospital, and described in THE LANCET of January 23. Price £2 2s.

21, Giltspur-street.

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NEWLY-INVENTED AND REGISTERED GRADUATED GALVANIC MACHINE.—GABRIEL DAVIS, Optician, Mathematical and Philosophical Instrument Maker, 24, Boar-lane, Leeds, begs leave to inform the Medical Gentlemen, that, after many years' experimental research, he has succeeded in producing an instrument, which, he flatters himself, will be found worthy the attention of all parties engaged in the application of Galvanism as a medical agent. The machine, besides possessing the most intense power, can, by moving an index, be regulated to the greatest nicety—an application, of which he is the sole inventor, and never before applied to any machine yet in use. The inefficiency of Mercury and Platina Contact is entirely remedied by his New Roller Break, which, the longer it is used, is the less liable to get out of repair. Parties residing at a distance can obtain a Machine, packed in a Mahogany Case, with Directing Handles, Smee's Silver Battery, directions for use, and all complete, by a remittance of £5.

N.B.—G. DAVIS takes this opportunity of informing the Medical Profession that he makes every description of ETHER INHALERS.

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ROYAL COLLEGE OF PHYSICIANS.—The Lectures of the present year will be delivered at the College, Pall Mall East, at Four o'clock on each of the following WEDNESDAYS and FRIDAYS:—

GULSTONIAN LECTURES.—Dr. WILLIAM BALY, Feb. 10, 12, 17. "On Dysentery: its Pathology and Treatment."

CROONIAN LECTURES.—Dr. GEORGE BUDD, Feb. 19, 24, 26. "On Diseases of the Stomach."

LUMLEIAN LECTURES.—Dr. JAMES ARTHUR WILSON, March 3, 5, 10. "On Pain: the Pathology, Varieties, and Treatment."

LECTURES ON MATERIA MEDICA.—Dr. GOLDING BIRD, March 12, 17, 19, 24, 26, 31. "On Electricity and Galvanism, as Physiological and Therapeutical Agents."

By order of the President,

February, 1847. J. B. SEDGWICK.

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## SCOTTISH PROVIDENT INSTITUTION,

FOR MUTUAL LIFE ASSURANCE, ANNUITIES, REVERSIONS, &c.

THIS Office was established in 1837, to afford the advantages of *Mutual Assurance at very moderate Premiums.* These will be found, *at early and middle ages, about 20 per cent. below those of most similar offices,* as illustrated by the subjoined comparison of rates:—

| Age. | Annual Premium for £1000. In Scot. Prov. | In other Offices. | The higher Premium will at once Assure in the Scot. Prov. |
|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. |
| 25 | 19 0 0 | 24 0 10 | 1,265 0 0 |
| 30 | 20 15 0 | 26 14 2 | 1,287 0 0 |
| 35 | 23 8 4 | 29 18 4 | 1,278 0 0 |
| 40 | 27 7 6 | 33 19 2 | 1,240 0 0 |

Full tables, Annual Reports, &c., may be had at the London Office, No. 12, Moorgate-street, Bank.

Physician—Dr. DICK. J. R. LEIFCHILD, Secretary.

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TO THE MEDICAL PROFESSION.—The Guardians of the Poor-law Union of WILTON, near Salisbury, are desirous to contract with a Medical Gentleman (duly qualified, in accordance with the General Medical Order of the Poor-law Commissioners) to undertake the duties of a Medical Officer of the District, comprising the undermentioned parishes, at a salary of £100 per annum. Surgical, Midwifery, and Vaccination Fees to be paid for in addition:—

| | Population in 1841. |
|---|---|
| The Parishes of Bishopston .. .. .. .. | 569 |
| ,, Broad Chalke .. .. .. .. | 775 |
| ,, Bower Chalke .. .. .. .. | 447 |
| ,, Fifield Bavant .. .. .. .. | 45 |
| ,, Ebbesborne Wake .. .. .. | 306 |
| | 2142 |

Residence in the District will be required.

As there is no Medical Practitioner living in the District, nor within several miles of it, it is considered that a favourable opportunity offers to a medical gentleman of establishing himself in a Practice.

Testimonials to be sent to me on or before the 25th February instant. Personal attendance not requisite on that day.

Wilton, near Salisbury, Feb. 4th, 1847. THOMAS THRING, Clerk.

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H. J. & D. NICOLL, REGISTERED PALETOT MANUFACTURERS and TAILORS to their Royal Highnesses Prince Albert, Prince George of Cambridge, his Grace the Duke of Wellington, &c., beg respectfully to announce that the celebrated Llama Cloth is made by them also in warmer substances to suit the present season. The above Firm with confidence anticipate that this introduction will receive from the public an equal approval with the well-known gentlemanly light overcoat, called the Registered Paletot, for summer wear, which is already honoured with the constant patronage of all that seek an unaffected gentlemanly appearance.

It is respectfully suggested, that moderate prices are strictly maintained for every article of dress supplied at either of their London establishments—viz., 114, Regent-street, and 22, Cornhill.

The Registered Paletots, 6th and 7th Vic., cap. 65, of both the winter and summer substances, are kept ready, in every colour, for immediate wear. These can only be obtained in the Metropolis as above, and of their recognised Agents in the chief provincial cities of the United Kingdom. Also of the principal Stores in the United States, British India, and America; but in Bombay only of Messrs. Waghorn and Co.

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This day is published, No. V. for February, of

THE DUBLIN QUARTERLY JOURNAL of MEDICAL SCIENCE; INCLUDING the LATEST DISCOVERIES in MEDICINE, SURGERY, and the COLLATERAL SCIENCES.

Published on the 1st of FEBRUARY, MAY, AUGUST, and NOVEMBER.

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Lithotomy. By Sir Philip Crampton, Bart., F.R.S., with Illustrations.

Aneurism by Anastomosis in the Cavity of the Anterior Nares. By Samuel Wilmot, M.D., President and Professor of Surgery to the Royal College of Surgeons in Ireland.

Remarks upon the Removal of Loose Cartilages from the Joints. By Robert Liston, F.R.S., Professor of Surgery to the London University School of Medicine.

Observations upon Epidemic Dysentery and Diarrhœa. By Joseph Lalor, M.D., L.R.C.S.I., Kilkenny.

Practical Observations on some Congestive, Inflammatory, and Ulcerated Affections of the Uterus. By Evory Kennedy, M.D., late Master of the Lying-in Hospital, Dublin. With Coloured Plates and Illustrations.

On the Efficacy of Electricity, Galvanism, and Electro-Magnetism, &c., in the Cure of Disease. By M. Donovan, M.R.I.A.

II.—REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Recent Works on Pathology: Vogel, Hoffmann, Wagner, Valentin, Hassall, Liebig, and Mulder—Noble and Wolkott on Phrenology—Burrowes and Copeman on Cerebral Diseases—Swedenborg's Œconomy of the Animal Kingdom—Coley and Underwood on Diseases of Children—Catalogue of St. Bartholomew's Museum—Searle's Philosophy of Life—Milroy, White, &c., on Quarantine and Plague—Kennedy's Fever Hospital Report—Ellis's Clinical Surgery—Ormerod's Clinical Surgery.

III.—RETROSPECTS, REPORTS, AND SCIENTIFIC INTELLIGENCE.

Report on the Progress of Ophthalmic Surgery, with Illustrations and Original Cases. By W. R. Wilde, Surgeon to St. Mark's Ophthalmic Hospital.

IV.—MEDICAL MISCELLANY.

Original Cases, by Dr. Cusack, Sir Henry Marsh, Drs. Pemberton, H. Kennedy, Gelston, Darley, Hughes, and The Editor.

Biography of David Maebride, M.D., author of a Methodical Introduction to the Theory and Practice of Medicine, Experimental Essays, &c. With a Portrait.

Dublin: Hodges and Smith. London: Longman and Co.; Simpkin and Co., and W. S. Orr and Co. Edinburgh: Maclachlan and Stewart, and Sutherland and Knox. Glasgow: D. Chambers.

# The Royal Society.

## REPORT

OF THE

## SPECIAL GENERAL MEETING,

HELD AT

## SOMERSET HOUSE,

*February* 11, 1847.

PRESIDENT—THE MARQUIS OF NORTHAMPTON.

THE PRESIDENT first read the by-laws relating to Special General Meetings of the Society, and then the following requisition, which had been presented to the Council:—

"We the undersigned Fellows of the Royal Society of London for improving Natural Knowledge, do hereby, in conformity with the Statute, c. 12, s. 2, require a Special General Meeting of the Society to be convened, for the purpose of considering and determining on the legality of the circumstances under which the award of the Royal Medal in Physiology for 1845 was first recommended by the Physiological Committee, and under which it was actually made by the President and Council.

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| "T. WHARTON JONES, | J. R. MARTIN, | R. BRIGHT, |
| J. COPLAND, | R. E. GRANT, | G. GULLIVER, |
| MARSHALL HALL, | J. WEBSTER, | R. LEE." |
| W. F. CHAMBERS, | | |

Mr. Sergeant STEPHENS said, I rise to speak to order: there is no question in this requisition raised for discussion, and unless there be you have no power to proceed. The important words in the requisition are, "for the purpose of considering and determining on the legality of the circumstances." Your lordship will perceive that the legality or illegality of the award has not been raised on the face of this requisition. The question of legality or illegality can only attach to acts, the circumstances are not the acts; but the body of the Society at large has no power to interfere with the discretionary powers of the Council. Corporations are created by the Crown; the power of the Council of the Royal Society is a delegated power, which it cannot transfer to the Society at large; the Society has no power to interfere with the Council. The Charter of Charles II. appointed Visitors, and the Visitors have power over the Council to rescind their acts. If abuses arise, the body at large can appeal to the Visitors, and state their complaints. If the requisitionists have any complaints, they ought to appeal to the Visitors, who have power to rescind the acts of the Council, and to correct abuses. But even assuming that the Society at large has the power of controlling the acts of the Council, and that the Council is amenable for its acts to the Society, the inquiry has been too long delayed.

The Marquis of NORTHAMPTON remarked, that the same difficulties which the learned Sergeant stated had presented themselves to him; being the representative both of the Council and the Society, he was anxious to preserve the privileges of both. Where a question had arisen in which he was a party, he should regret if the meeting were dissolved without discussion. He invited the opinion of any Fellow on the preliminary point. A great difficulty had arisen from the delay; there was a peculiarity in the case. The decision on the award of the Royal Medal in Physiology for 1845, was made on the 1st of December, the anniversary day, when the Council was just going out of office. There are no members of the Council who made the award who are now members of this Council; the only members of the Council who made the award, and of the present Council, are the two Secretaries and myself. The difficulty that stared him in the face was, that he was not merely acting for himself but for a Council that had no existence. He had no Council to consult.

(*At this stage of the proceedings it appeared highly probable that the meeting would be dissolved without any discussion.*)

Dr. WEBSTER said, as one of the requisitionists, he rose thus early, in consequence of the noble President having stated that the Royal Medal in Physiology was not awarded by the Council till the 1st of December, 1845, and that all previous proceedings on the matter had been set aside. Such being the case, he (Dr. Webster) thought this was not a legal award;—1st, because the resolution had not been confirmed before the Medal was given away; and 2ndly, because the meeting of the 1st of December could not make such award, as he doubted its being a properly constituted Council. He entertained this opinion on the grounds, that at the anniversary meeting held on the 30th of November, 1844, the officers and Council were only elected for the ensuing year, as stated by Dr. Roget on the part of the scrutators on the day of election; and in the *Philosophical Transactions*, where the list was published, a note with three asterisks appears immediately under the names of the new Council, stating, "*This Council will continue till November 30th*, 1845." Such being the facts, the meeting alluded to could not make any award after the period for which the Council was elected had passed, seeing that the powers delegated to them by the Society at the former anniversary had ceased and determined on the 30th November previously. He (Dr. Webster) was a physician, not a lawyer; nevertheless, according to his judgment, the award made on the 1st of December, 1845, was not valid for the above reasons; and he considered that the award of the Royal Medal was illegal, and, consequently, had lapsed to the Crown.

The Marquis of NORTHAMPTON said, the 30th of November, 1845, fell on a Sunday, which was a *dies non;* and that he thought the Council remained in office till their successors were appointed. According to the opinion which had now been stated, he supposed that we were now no Society at all.

Mr. WARREN said he understood perfectly what the requisition meant. This was not the proper occasion for special pleading: his learned friend Mr. Stephens, and he, were not now discussing a legal point either in Westminster Hall or the Old Bailey, where neither of them ever went, but at a meeting of the philosophers and gentlemen of England. He appealed to the President's good sense in the matter of the objection, if the requisition was not perfectly intelligible, and if it was now fit to be quibbling about the expression, "legality of circumstances." We should be perfectly ridiculous in the eyes of all the world if the meeting now separated without discussion. Let us inquire fairly into the legality of the award. It does not signify whether the expression "legality of circumstances" be correct or not: Mr. Stephens should have conveyed previously to your lordship his objection to the by-laws. We are legally summoned; the President and Council have called us together on this occasion. In the name of common sense, if we look at the requisition, is it possible to mistake its meaning? Are we brought here for nothing? Do we not see a special and proper object for our consideration and determination? My friend has asked, what is the meaning of "legality of circumstances?" We are not met here to decide any question, except the points contained in the requisition; and he therefore submitted, that to the consideration of the requisition the meeting must go. He little expected at the threshold of the inquiry such a technical objection. The meeting is summoned in strict obedience to the by-laws, and he believed that the by-laws were valid. Let us address ourselves, then, at once to the requisition.

Sir J. W. LUBBOCK rose to speak to the legal question. For myself, he said, I give no opinion; but I wish to mention circumstances which are known to me and the senior Secretary, which are not known to other individuals. Shortly after the election of the Duke of Sussex, the by-laws were examined, and I was Treasurer, and communicated with his Royal Highness on the subject of the by-laws; and by his direction, before they were finally passed and confirmed by the Council, were submitted to Mr. Few, who stated that there was nothing in them at variance with the strict letter of the Charter. My strong impression is, that, by his Royal Highness's direction, they were also submitted to Lord Campbell; but coming here to-day, I had no expectation that I should have to task my recollection with transactions so remote.

Mr. BROUGHTON made some remarks, and inquired whether the requisition was such as to justify the meeting in going on. There was a complaint, and it should be made to the Visitors, and not to the Society at large.

Mr. GROVE said he did not come there intending to say one word; but it seemed strange that the meeting should be held to hear lawyers dispute about a technical point. There could be no doubt about the validity of the by-laws, and the result of the meeting would be a simple expression of opinion. Could Mr. Stephens say, that by expressing that opinion they should do anything illegal—subsequently, if any extraordinary act is performed, it might be a nice point how far it could be legally done? Can it be said that in any way we compromise the honour of the Society? that we are not at liberty to express the moral sense of the Society? Are we to make ourselves the laughing-stock of the public press?

The Rev. Mr. SHEEPSHANKS observed, that the Council had invited the Society to be present, and whether they attend to what we say or no, it is ludicrous and ridiculous to assert that

we cannot meet here because some future act may involve us in responsibilities we do not now foresee.

The PRESIDENT here said, we, the Council, were willing persons to call you. We called you because we were compelled to do so. The by-laws are good laws. The question is, whether any resolution might be put into my hands that might be an illegal resolution. We are legally here, —we are not going to talk high treason; there is nothing whatever to stop our tongues. We might object to the resolution. There would be nothing illegal in recommending that such circumstances should not again recur. He (the President) would therefore call upon Mr. Wharton Jones to proceed.

Upon this invitation, Mr. WHARTON JONES rose and said:— My lord, in commencing the statement which I have to make, I would beg leave to observe, that I am sure that in calling this special general meeting, the requisitionists have had no other object in view but the honour and interests of the Royal Society. For myself, I can truly affirm that I have had none other. I can truly affirm that I entertain the highest respect and veneration for the Royal Society; and that I have always endeavoured, to the best of my small ability, in conformity with the obligation I came under when I subscribed my name in the Charter-book, to promote the good of the Royal Society, and to pursue the ends for which the same was founded. In the pursuit of these ends, I have not only communicated to the Society whatever observations in the department of science which I cultivate I have been fortunate enough to make, and which appeared to be sufficiently worthy of being submitted to its notice; but also exerted my best endeavours to resist the encroachments of error, and to maintain and vindicate scientific truth—an achievement which the founders of this Society proposed to themselves as second only to the discovery of new truths, and a duty which, I believe, all here present will admit with me to be incumbent on every fellow of the Royal Society.

Still striving to pursue these ends, and believing that in the matter of the award of the Royal Medal in Physiology for 1845, not only the spirit, but the letter, of the recognised laws and regulations of the Society has been violated, and loyalty to science set at nought; and that acts have been committed injurious to the honour and interests, and altogether subversive of the objects, of the Royal Society, I have taken an active part in promoting the calling of this meeting, and stand here to justify the necessity and propriety of the proceeding.

Preparatory to going into the particular circumstances of the case, I will, with your lordship's permission, read, 1st, extracts from anniversary addresses of your lordship's illustrious predecessor in the presidential chair, his late Royal Highness the Duke ofSussex, and also from an address of your lordship's, for the purpose of calling to the remembrance of the Society the arrangements which are understood to be observed by the President and Council in regard to the insertion of papers in the *Philosophical Transactions*, and the award of medals, and also the mode in which the Committees are presumed to discharge the functions delegated to them by the President and Council; and 2ndly, the regulations which were laid down for the award of Royal Medals by her Majesty, Queen Victoria, in restoring the foundation of them, for which the Royal Society is indebted to his late Majesty George IV.

The anniversary address by his late Royal Highness the Duke of Sussex, from which I am now about to read extracts, was delivered on the 30th November, 1833.

"There is one arrangement admirably calculated, in my opinion, to increase the usefulness, and to uphold the credit, of the Royal Society: I mean, the resolution adopted by the Council to allow no paper to be printed in the *Transactions* of the Royal Society, unless *a written report of its fitness* shall have been previously made by one or more members of the Council, to whom it shall have been especially referred for examination. This resolution has been acted upon for the greatest part of the last year, and some of those reports of a favourable nature have been read before the Society, and printed in the *Abstracts of our Proceedings*. It is in consequence of the important influence which this plan is likely to have upon the well-being of the Society, that I am induced to enter somewhat in detail into the reasons which have led to its adoption."

After enumerating the advantages which have resulted from the practice of the Royal Academies of Sciences and of Medicine of Paris, his Royal Highness went on to say: "It was from a conviction that many similar advantages would result from such a system of reports in the Royal Society, that the members of the Council were induced to agree to its adoption; and it is to be hoped, that when a longer experience has given to such a plan a more complete organization, and has shown the practical extent to which it can be conveniently carried, it will then become a permanent law of the Council."

And then, after commenting on the distinguished character of the *Philosophical Transactions*, his Royal Highness says:

"It becomes us, therefore, to guard these national archives of the progress of knowledge with the reverence which is due to them as monuments inseparably connected with our own national honour; and to watch with our utmost care, lest any addition should be made to them which can be considered as unworthy of the character of the stock upon which it thus becomes engrafted: and it therefore is the bounden duty of every fellow of this Society, whether it be considered as imposed on him by the terms of the obligation which he signed at the period of his admission as a member, or as derived from the still higher and more comprehensive ties which bind every friend of the great institutions of his country, to maintain their efficiency and credit, and to allow no private or personal cause of jealousy or discontent, no trivial or unfounded plea of want of leisure from business or occupations, to interfere with the devotion of his best exertions to uphold the character and promote the interests of the Royal Society."

Your lordship's anniversary address, from which I now proceed to read an extract, is that delivered on the 30th of November, 1839.

"I have stated, gentlemen, that your Council had recourse to the scientific committees for assistance in drawing up instructions for the Antartic expedition, in different branches of knowledge: those committees, who were named only two years ago, were at first apparently more a matter of form than of substance: they have now been found capable of doing excellent service. Not only has your Council consulted them on the questions already alluded to, but also, observing that the several committees are composed of the most competent judges of the merits of the memoirs in the respective departments of science communicated to the Society, they have in general referred the papers to them to report upon, previously to their coming to a decision regarding their publication. At the same time, the Council retains its responsibility for its acts, and the chief officers of the Society are officially members of each of the scientific committees. The Council have derived a further assistance from these committees in the adjudication of our Medals."

Her Majesty Queen Victoria's regulations for the award of the Royal Medals are "That the Royal Medals be given for such papers only as have been presented to the Royal Society, and inserted in their *Transactions*."

I now come, my lord, to the particular circumstances of the case; and in order to make myself as intelligible as possible, I will first briefly state the grounds on which the legality or propriety of the circumstances we have to consider is questioned, and afterwards adduce the evidence in support of those grounds.

According to the requisition, two distinct points are proposed for our consideration—viz., 1st, the legality of the circumstances under which the Royal Medal in Physiology for 1845 was first recommended by the Physiological Committee; 2nd, the legality of the circumstances under which the award of the said Royal Medal was actually made by the President and Council.

As to the first point: *The legality or propriety of the circumstances under which the award of the Royal Medal in Physiology for* 1845 *was first recommended by the Physiological Committee.* This is questioned, on the ground that the original recommendation *did not proceed from the Physiological Committee duly constituted*, but from an unauthorized meeting of certain members of the Physiological Committee, who usurped to themselves the functions of a duly constituted meeting of the Committee of Physiology.

The circumstances, I believe it will be proved to the satisfaction of the Society, were these:—On the 27th of October, 1845, the Physiological Committee met, pursuant to a summons, which stated that, besides other business, the recommendation of a paper for the award of the Royal Medal in Physiology for 1845 was to be considered. The meeting having met, Mr. Lawrence (in the absence of the chairman, Sir B. Brodie) took the chair. After some part of the business had been transacted, Dr. Roget, it would appear, stated to the meeting that it was a mistake in the summons that the recommendation of a Royal Medal in Physiology was to be considered; that there was no Royal Medal in Physiology for 1845, and that, therefore, there was no further business before the Committee. Upon this announcement, Mr. Lawrence, having twice put the question, whether or not there was any further business, duly dissolved the meeting, and left the chair. After the meeting had thus been dissolved, Mr. Lawrence left the

apartments of the Royal Society, but all the other members who had been present at the meeting remained. After Mr. Lawrence had left, some one referred to the announcements regarding the Royal Medals in the *Philosophical Transactions*, when it was discovered that, as stated in the summons to the members of the Committee convening the meeting which had just been dissolved, a Physiological Medal did fall to be awarded in 1845. This discovery having been made, the members of the Physiological Committee who had been present at the meeting duly convened and constituted, but which Mr. Lawrence, the chairman, had dissolved, and who—namely, the members of the Physiological Committee—still remained in the apartments of the Royal Society, sat down, placed Dr. Todd in the chair, and proceeded to determine what paper should be recommended to the Council for the award of the Royal Medal in Physiology, as if they had constituted a meeting of the Physiological Committee duly convened.

Here I would observe, my lord, that as the President and Council do not hold themselves bound implicitly to act on the recommendation of the Committees, but retain the responsibility for their acts, the illegality of the award of the Royal Medal in Physiology for 1845 strictly hinges on other points than the irregularity of the proceedings which have now been described; but it was necessary to bring them under the notice of this meeting, in order to illustrate the peculiarities of the transaction.

I now come to the second point: *The legality or propriety of the circumstances under which the award of the Royal Medal in Physiology for* 1845 *was actually made by the President and Council*, is questioned, on the ground that the paper to which the President and Council awarded the Medal was at the time quite unknown to the Society at large, never having been read farther than its title, and was not eligible in terms of her Majesty Queen Victoria's regulations, not having been inserted in the *Philosophical Transactions*. And here I would answer the objection raised by Mr. Stephens, that the question was not sooner brought before the Society. The reason why it was not so brought is, that the paper, a knowledge of the contents of which was a necessary part of our case, was not published until eight or nine months after the transaction.

The particular circumstances, I believe it will be proved to the satisfaction of this meeting, were these:—On the 30th of October, 1845, the Council met, and on the simple recommendation of the unauthorized meeting of certain members of the Physiological Committee, voted the award to Mr. Beck's paper, not, as ought to have been the case, on the strength of a written report from a duly constituted meeting of the Physiological Committee. I repeat, *not on the strength of a written report*. But there is a report, some one will perhaps say. I answer, there is indeed a *report*, and the history of it I now proceed to sketch. But before doing so, I would beg leave to caution the meeting not to confound the report, the history of which I am about to sketch, with a certain other report or reports, alleged by Dr. Roget, in a letter to Dr. Lee, to have been brought before the meeting of the Physiological Committee on the 27th of October, or the unauthorized meeting of certain members of the Physiological Committee, I do not know which; but the very existence of which report or reports has been altogether, and most positively, denied by Mr. Bell, the Secretary of the Physiological Committee, and which denial has never been met by Dr. Roget.

To return to the report. About two weeks after the President and Council had voted the award of the Medal, a requisition was sent to the Physiological Committee for a statement of the grounds on which the recommendation of Mr. Beck's paper for the award of the Royal Medal in Physiology was founded.

In accordance with this requisition, the Physiological Committee met on the 20th of November, and requested Drs. Sharpey and Todd to draw up a report on the claims of Mr. Beck's paper.

At a meeting of the Committee of Physiology on the 27th of November, the report on Mr. Beck's paper by Drs. Sharpey and Todd was read and adopted.

On the 1st of December, the Council met an hour or so before the assembling of the anniversary meeting, and received the report of the Committee of Physiology; and on the strength of it did by a new resolution vote the award, having, it would appear, rescinded their vote of the 30th of October, and disallowed the recommendation from the unauthorized meeting, on the strength of which the vote of the 30th of October had been come to.

At the anniversary meeting the Medal was given away—before, therefore, the vote for its award was confirmed.

That such are the leading facts of the case which this meeting is called on to consider and determine, I now proceed to adduce evidence to prove—evidence which will, at the same time, bring out other facts illustrative of the character of the whole transaction. And first, of the evidence as to the circumstances under which the award of the Royal Medal was first recommended by the Physiological Committee. In reference to this, I would beg that the minutes of the meeting of the Physiological Committee of the 27th of October be read.

Mr. Bell, the Secretary of the Physiological Committee, then read as follows:—

*Committee of Physiology, Oct. 27th*, 1845.

Present: Mr. Lawrence in the chair. Dr. Bostock, Dr. Todd, Dr. Roget, Mr. Bowman, Mr. Kiernan, Mr. Bell, and Dr. Sharpey.

It was resolved,—That Mr. Erasmus Wilson's paper "On the growth and development of the epidermis" be not recommended to be printed in the *Transactions*.

It was resolved,—That Mr. Wharton Jones's paper "On the blood corpuscles, considered in the phases of their development," be recommended to be printed.

It was resolved,—That Prof. Purkinje be recommended to the Council to be proposed as a foreign member.

It was resolved,—That the Council be recommended to award the Copley Medal to Prof. Owen for his work on the intimate structure of the teeth, entitled *Odontography;* and on account of his various other important contributions to Comparative Anatomy and Physiology.

Mr. Lawrence having left the Committee, the chair was taken by Dr. Todd, and the Committee proceeded to consider the award of the Royal Medal.

The following papers were named:—

Dr. Barry on Spermatozoa observed in the mammiferous ovum.
Dr. Arthur Farre on the organ of hearing in the Crustacea.
Mr. Newport on the circulation of the Myriapoda.
Dr. Davy on animal heat.
Mr. Newport on the reproduction of lost parts in insects.
Mr. Simon on the comparative anatomy of the thymus gland.
Mr. Wilson on the parasitic animalcules in the sebaceous follicles.
Mr. Matteucci's electro-physiological researches.
Mr. Wharton Jones on the blood corpuscles.
Mr. Addison on some peculiar modifications of the force of cohesion.
Mr. Rigg on the formation and secretion of alkaline earths.
Mr. Stephenson on the theory of vision.
Mr. Erasmus Wilson on the growth and development of the epidermis.
Mr. Beck on the nerves of the uterus.
Dr. Lee's Supplement to his paper on the nervous ganglia of the uterus.
Dr. Davy on the temperature of man.

It was resolved,—That the Council be recommended to award the Royal Medal in Physiology to Mr. Beck for his paper "On the nerves of the uterus."

Dr. Lee's Supplement to his paper on the nervous ganglia referred. Wm. Lawrence.

Mr. Wharton Jones resuming, said—If what has now been read be a correct record of what took place at the meeting of the Physiological Committee on the 27th of October, 1845, then what I have stated in regard to the meeting of the Committee having been dissolved by Mr. Lawrence, must be incorrect.

At this stage of Mr. Wharton Jones's statement, Mr. Lawrence rose and said that he understood that Mr. Jones intended to ask him some questions as to what took place at the meeting of the Committee of Physiology on the 27th October; he therefore begged that Mr. Jones would now ask them, as he was called away by a pressing engagement.

Mr. Wharton Jones, addressing the President, said, My lord, the questions which I wish to ask Mr. Lawrence are—Whether he dissolved the meeting of the Physiological Committee on the 27th October, 1845, at the time he left the chair; or whether, as the minutes would make it appear, he simply transferred the chair to Dr. Todd?

To these questions Mr. Lawrence unhesitatingly answered that he *did* dissolve the meeting!

Mr. Jones resumed: From what Mr. Lawrence has stated to the meeting, it appears that when he left the chair he dis-

solved the meeting.—Here Mr. Jones was interrupted by one of the Secretaries, (Mr. Christie,) who said, "*not dissolved*, but adjourned—adjourned."

On this interruption, Mr. Jones turned to Mr. Lawrence, and repeated his former question, and Mr. Lawrence distinctly answered, "*I dissolved the meeting;*" and then added, "*the meeting was broken up.*" And to a question from Mr. Warren—viz., whether, supposing there had been more business brought forward, he could have stayed longer at the meeting, Mr. Lawrence answered, "I could have stayed longer had there been any business to transact." This question was twice repeated by Mr. Warren, and received the same answer.

Mr. Jones went on to say—It being thus proved that when Mr. Lawrence left the chair he dissolved the meeting, it is quite evident that all that has been read from the minute-book of the Committee of Physiology of what took place subsequently, is no record of any part of the proceedings of the Physiological Committee at their meeting of the 27th of October, 1845, but a mere unauthorized interpolation, and that as such, it ought to be erased from the archives of the Society.

I now come to evidence as to the circumstances under which the award of the Royal Medal was actually made by the President and Council. This I will arrange under three heads—viz., evidence as to the circumstances under which the award of the Royal Medal was for the first time voted by the President and Council; evidence as to the circumstances which led to the Report I have already referred to being drawn up; and evidence as to the circumstances under which the award was for a second time voted, and the Medal given away before the vote was confirmed. In reference to the circumstances under which the award was for the first time voted by the President and Council, I would beg that the minutes of the meeting of the Council on the 30th October be read. (The printed minutes were read, and found to contain nothing whatever relating to the award.) That the award of the Medal was voted by the President and Council at the meeting of the 30th October, 1845, does not appear from the minutes which have now been read. But that it was so voted, I believe has not been denied—it has, indeed, been repeatedly admitted.

At this point, the President rose and admitted that the award had been voted on the 30th of October, but that when the irregularities connected with the recommendation of Mr. Beck's paper for the award became known to the Council, they rescinded the resolution, and erased the minute.

Mr. Wharton Jones.—It thus appears that the resolution come to by the Council on the 30th of October, to award the Royal Medal in Physiology to Mr. Beck, was rescinded, and the minutes erased. I have therefore nothing more to say on the point, but proceed to the circumstances which led to the report being drawn up. About the middle of November, and two weeks after the meeting at which the President and Council had thus voted the award of the Royal Medal in Physiology, the requisition I have already referred to was sent to the Committee of Physiology for a statement of the grounds upon which the recommendation of the award of the Royal Medal in Physiology had been founded.

In reference to this, I would beg that the minutes of the meeting of the Committee of Physiology of the 20th of November, 1845, be read. Mr. Bell read as follows:

> "Resolved,—That Dr. Todd and Dr. Sharpey be requested to draw up a report on the claims of Mr. Beck's paper to the award of the Royal Medal; and that Mr. Beck's paper be sent in succession to the several members of the Committee of Physiology resident in London."

Mr. Jones repeated the last words of the resolution, "that Mr. Beck's paper be sent in succession to the several members of the Committee of Physiology resident in London:" What was the object of thus sending the paper to the several members? Was it that they might learn, for the first time, what was in the paper?

Here, my lord, we have an extraordinary combination of contradictions. We have a requisition sent to the Physiological Committee for a statement of the grounds of the recommendation of Mr. Beck's paper for the award of the Royal Medal in Physiology, about three weeks after the award had been voted! (Sensation.) And in order to answer this, we have the Physiological Committee applying themselves to learn what was in the paper, after it had been recommended for the award!

I now beg that the minutes of the meeting of the Physiological Committee of the 27th of November, 1845, be read. (The minutes were read by Mr. Bell.) From these minutes it appears, that at this meeting the report on Mr. Beck's paper by Drs. Sharpey and Todd was read and adopted; but do these minutes record all that took place at the meeting?

Here Mr. Gray rose, and said that he supposed that in asking the question, Mr. Jones referred to a motion which he (Mr. Gray) made, and which was seconded by Mr. Lawrence, to the effect, so far as he could remember, that the minute of the 27th October, recommending Mr. Beck's paper for the Royal Medal, be rescinded.

Mr. Wharton Jones.—I now come to the circumstances under which the award was for the second time voted.

For evidence on this head, I beg that the minutes of the meeting of the Council on the 1st of December, 1845, be read.

The minutes contained the report from the Committee of Physiology on the claims of Mr. Beck's paper, the reading of which Mr. Jones waived; but the noble President read the last paragraph. The rest of the minutes were as follows:—

> "Read,—Letters from Mr. T. W. Jones and from Dr. Robert Lee on the subject of the award of the Royal Medal.
>
> "Resolved,—That the Royal Medal in Physiology for the present year be awarded to Thomas Snow Beck, Esq., for his paper, entitled, "On the Nerves of the Uterus," which has been ordered for publication in the *Philosophical Transactions*.

Mr. Jones.—From these minutes it would appear that the Council, by a new resolution, voted the award on the 1st of December, on the strength of the report of the Committee of Physiology.

In reference to this resolution, I would ask—Does the mere order for insertion in the *Philosophical Transactions* bring a paper within the meaning of her Majesty's regulations?

Here the noble President rose and said, he would answer the question by at once admitting that it did not bring the paper within her Majesty's regulations; but Mr. Christie, the Secretary, rose and said, that it had occurred before, that Royal Medals had been awarded for papers not yet published in the *Philosophical Transactions*. Mr. Jones, however, maintained that there was no such precedent. For, said he, if we look into the announcements in the *Philosophical Transactions*,—a list of which he exhibited,—we shall find that all the Royal Medals on her Majesty's foundation are stated to have been given for papers published in the *Philosophical Transactions*, with the single exception of the Royal Medal in Physiology for 1845.

In conclusion, my lord, I would ask, What is the character of the report on the strength of which the Council did re-vote the award? The report, my lord, does not truly represent the paper, (confusion;) the report is not justified by the contents of the paper; but, as your lordship is aware, does, as I have stated in a communication to the Council, contain allegations, some of which betray ignorance on the part of the Physiological Committee, whilst others are altogether inconsistent with common matter of fact. This, my lord, is my case; and I believe it is such as to warrant me in proposing for the adoption of this meeting the following resolution:—

> "That it is the opinion of this Special General Meeting of the Royal Society of London for improving Natural Knowledge, that the award of the Royal Medal in Physiology for 1845 was made under circumstances characterized by great irregularity, and in violation of her Majesty Queen Victoria's regulations—viz., 'That the Royal Medals be given for such papers only as have been presented to the Royal Society, and inserted in their *Transactions*;' and that therefore the said award ought to be considered as null and void."

Dr. Copland, in seconding the resolution just moved by Mr. W. Jones, said that any remark which he could offer on the proceedings now exposed, could only weaken the strong impression which they could not fail to make on this meeting, especially as these statements were corroborated and were admitted by the noble President. Dr. Copland would therefore merely observe, that it is most important, as regards the honour of the Royal Society, and the credit of science in this country, that the awards of the Royal Medals should be made without irregularity, and without unfavourable imputations of any kind. It would not signify much how the present meeting might decide as to the proposed resolution, or as to whatever amendment might be moved, inasmuch as the unanswerable statements now made, and the admissions of the noble Marquis, would lead to an improved state of proceedings in future; and the requisitionists would thereby attain all the objects which induced them to request the Council to call this special general meeting.

The President now admitted, that as the paper to which the

Royal Medal in Physiology in 1845 was awarded by the Council had not been inserted or printed in the *Philosophical Transactions*, it did not come within the terms of the Queen's regulations, and consequently was not eligible for the award. It is my distinct opinion, said his lordship, and he was ready to admit, that the Council committed a mistake in awarding the medal to a paper which had not been printed in the *Philosophical Transactions*. Our decision was erroneous, he added; we misinterpreted the terms. The irregularity of the award must be admitted, from the paper not having been printed in the *Transactions*. We admit that we committed an error; but Dr. Lee and Mr. Wharton Jones, who protested against the award on the 1st of December, were equally unacquainted with the regulations.

Dr. Lee here rose, and said, that he was fully aware, before the 1st of December, that the paper was not eligible for the award; and he stated that, in the Committee of Physiology on the 27th of November, it had been pointed out in the most distinct and positive manner that a Medal could not, by the Queen's regulations, be legally awarded to the paper in question.

The President replied, that the Council and Committee of Physiology were not the same bodies. Whatever punishment the Society might inflict, said his lordship, for the error committed by the Council, it must fall on himself and the two Secretaries, Dr. Roget and Mr. Christie; for of the other members of the Council in 1845 there were none in office in 1847. When the mistake was discovered, the recurrence of a similar error was rendered impossible by a new regulation adopted by the Council.

Professor Bell said he would make a few observations on the acts of the Committee of Physiology of the 27th October, 1845. He admitted that the statement of Mr. Wharton Jones was substantially correct. Circumstances, however, had occurred in that Committee, which, unless explained, might lead to erroneous conclusions about the manner in which the members conducted themselves. He had nothing to do with the legality of the award of the Medal by the Council. On the 27th of October, the Committee met for the purpose of considering the recommendation of the Medals to the Council. Immediately after the Copley Medal had been considered, the question was, whether there was any further business? Dr. Roget stated that the Physiological Medal did not come under consideration that year. Mr. Lawrence left in haste; and in such haste, that no other member of the Committee had left the room: and on that day there was not on his (Mr. Bell's) part any knowledge whatever, or supposition, that the members were going into any other business. The meeting was dissolved. The members that remained were conversing together in little knots, as was usual after business. In this state, Dr. Roget said that he was in error, and that the Committee had to recommend the Royal Medal in Physiology that day. Here Dr. Roget rose and stated that he mistook a Physical for a Physiological Medal. Dr. Roget discovered, continued Mr. Bell, on looking into the *Philosophical Transactions*, that it was a Physiological Medal that they were to award. The members, in consequence, reconstituted themselves into a Committee without Mr. Lawrence. They then entered into the consideration of the merits of all the papers mentioned in the minutes; and agreed to recommend the award of the Royal Medal to Mr. Beck. On the 6th of November, the next meeting of the Committee took place, Mr. Lawrence was in the chair, and he confirmed the minutes. He made no observations at the time.

Mr. Warren inquired if the minutes had previously been read before Mr. Lawrence confirmed them; to which Mr. Bell replied, that it was the custom for the minutes to be read before being confirmed; but he could not positively affirm that it was done on this occasion. The proceedings of the Committees of the 20th and 27th November were then narrated by Mr. Bell.

Here Mr. Wharton Jones rose to speak, but was not permitted by the President.—Cries of "Spoke, spoke!" from several quarters.

Professor Owen rose, and proceeded to give an account of the manner in which he first became acquainted with Mr. Beck's paper, in order that he might remove an impression which must have been made, that the members of the Committee of Physiology were wholly unacquainted with it when the award was recommended by them. He said he had been requested, at different times, by Dr. Lee, with whom he had long been on terms of intimacy, to see his dissections and preparations; from Mr. Beck, with whom he was almost entirely unacquainted, he had received similar invitations. Here cries of "order, order," stopped the Professor; and the President said the question before them was not the truth or error of any opinions or representations.

Mr. Gray, after observing that he had been one of those who actively opposed the award, moved the following amendment, which was seconded by the Reverend R. Sheepshanks:—

> "That whereas the President of the Society has already expressed, from the Chair, an opinion on the irregularity which attended the award of the Royal Medal in 1845; and whereas the Council issued new regulations with regard to the Royal Medals, as soon as they discovered that those enacted in 1838 were inconsistent with the royal grant; it therefore does not seem expedient to the present meeting that any further proceedings should be taken in the matter."

Dr. Todd rose, as one of the authors of the Report, to protest against the statements which Mr. Wharton Jones had made, that the Report contained allegations, some of which betrayed ignorance on the part of the Physiological Committee, whilst others were altogether inconsistent with common matter of fact: Dr. Sharpey also joined in this protest.

Mr. Wharton Jones here made another effort to speak, but was not allowed by the President. Afterwards, permission was granted him, and he commented severely on the conduct of the members of the Committee of Physiology who held the unauthorized meeting on the 27th Oct. 1845.

Sir J. W. Lubbock thought that the passing of the resolution moved by Mr. Jones would be a vote of censure on the Council, although it appeared, from the whole history of the transactions, that they had not the slightest knowledge they were transgressing the regulations of her Majesty.

Dr. Bright, as one of the requisitionists, wished to say that he was glad the inquiry had taken place. He expressed unqualified confidence in the honour of all the members of the Council and Physiological Committee, and said he would as readily trust them as he would his own father. He was glad that the Council had been afforded an opportunity of making those explanations which the meeting had heard; and he trusted that the greatest regularity would be observed in all their future proceedings.

Mr. Warren said, although he expected that several subjects, and the names of several gentlemen, would have been introduced into this discussion, which had not been so, and that consequently the discussion had been narrowed into a very little compass, the President having ruled that nothing which went on in the Physiological Committee, except the dry legality or illegality of the recommendation and award of the Medal, should be considered, both of which are now formally admitted to have been illegal, and to such an extent and importance as to render necessary what has been effected—namely, a permanent alteration of our regulations in that respect,—though the matter had been thus narrowed, and such only were the results of the meeting, he rejoiced that it had taken place. He (Mr. Warren) was of opinion that there had been great and gross irregularity and illegality in their proceedings. He had listened to them with equal pain and astonishment, having come thither in an honest and impartial spirit, a fellow of the Royal Society, to see whether there was really any ground, as had been strenuously asserted from without, for impugning, not only the legality, but the *bonâ fides* of the proceedings of those members of our body on whom had devolved such important functions. He (Mr. Warren) could not go into matters which his lordship had thought proper to prohibit in this discussion; but he held it to be a matter of vital consequence to the reputation of the Royal Society, both in this country and abroad, not only that its honours should be conferred with scrupulous propriety and justice, but that the *donee* of its medals should have obtained that medal in such a manner as to entitle him ever after to wear it with conscious credit and honour. Whether it had been so in the present case had not been an object of special inquiry to-day, except that its adjudication was attended with proceedings of the greatest possible irregularity and illegality. He (Mr. Warren) hoped the result of these proceedings would be, that we should never again have to witness so painful a scene as the present; and that all the proceedings of the Royal Society of London would hereafter be conducted in an unexceptionable manner.

Mr. Babbage observed that he entirely concurred with those members who maintained that the Society's medals *ought* always to be distributed with the most careful regard to justice. Unfortunately, however, this had not been the

case, and the members now present would probably hear with astonishment, *that the two first Royal Medals awarded by the Council of the Royal Society were deliberately given in direct and wilful violation of the laws laid down by that very Council;* and further, that when this want of faith was regularly brought before the succeeding Council, they refused to take any steps to restore the character of the Society.

The PRESIDENT here rose, and stated that the learned member was not in order, inasmuch as he had referred to other medals than that of 1845, the only one under discussion.

Mr. BABBAGE remarked that he held in his hand proofs of the assertions he had made; but if the Society were unwilling to listen to him, he should bow to the decision of the President.

The Marquis of NORTHAMPTON, after having complained of certain anonymous statements which had appeared in the public prints, alleging that he had resigned the President's chair, and that he was opposed to all liberal changes, put the amendment, which was almost unanimously carried.

## THE HUNTERIAN ORATION, FEB. 15TH.

Mr. GREEN delivered the Oration to a crowded auditory. The appearance of the President (Mr. Lawrence) was the signal for a mingled storm of cheers and hisses. Mr. Green was received with great and general applause. He commenced by passing a high and eloquent eulogium on Hunter, from whom we dated our rise as scientific surgeons. He proceeded to say, that however elevated as a surgeon, Hunter rendered essential and enduring service to the whole art of healing, by bringing the practice of that art in closer relation than it had hitherto been with the natural sciences. He referred to his museum, not only as an orderly arrangement of animal life, but as the nucleus of the science of comparative anatomy. He then briefly alluded to the great services rendered to science and our profession in general, by Hunter having regarded life as a law, and banishing the various hypotheses which had been held respecting it.

How could we regard his excellence as a pattern to others? It could not be overlooked or disregarded, that his trait was genius. The orator then proceeded to explain, in an elaborate manner, his view regarding the true nature of genius, and expatiated on the necessity of application and industry, in order that genius itself should acquire power and facility in educing its manifestations. Hunter was a wonderful instance of industry and application, and the divine Milton himself owed much of his skill in "weaving harmonious numbers," to his having began in early life industriously "to build the lofty rhyme." Education, then, was the means of educing out the powers of the mind. He then proceeded to say, that in order to carry out the provisions of the late Charter, and with the view of raising the character and attainments of English surgeons, a preliminary liberal education would be one of the requisites in the candidate for a fellowship, such liberal education being guaranteed by a degree, or an equivalent to it. By this means the character of the profession would be elevated, and hold its rank with the other professions.

He then proceeded, in a strain of eloquence, not always, however, quite intelligible, to show the value of education. Language, geography, literature, classical, modern, and profane, mathematics, and logic, severally and individually engaged his attention, the advantages of each being illustrated by examples, and in a manner which showed that the orator had been a "pupil of Samuel Taylor Coleridge."

Lastly, he dwelt for a few minutes on medical science. He said it was scarcely necessary for him to say that every man in practice should have a proper amount of technical knowledge and skill; indeed, no honest man would be without them. What, then, was that amount? He would answer, such an amount as would render such practitioner capable of applying all the resources of our art—all, indeed, that the profession could supply. Every man who had taken advantage of the opportunities afforded by our institutions would be able to do all that the physician or surgeon could do. The second qualification which he would name for a medical practitioner, was scientific insight, the pursuit of his profession as a scientific one, and the avoidance of puffing and quackery. Of all things, let him avoid that pest of society. (Cheers.) He feared, however, that the contest between legitimate medicine and quackery must last as long as there was moral and physical infirmity, and hope, fear, and credulity, predominated over reason and judgment. The legitimate candidate for practice should hold himself aloof from such degrading practices, and base his pretensions to public favour on science and intelligence. In order to secure this science and intelligence, the education of the surgeon should be commenced in colleges and universities; the early mental and moral training afforded by these institutions would engender honour and gentlemanly feeling, an attachment to all ancient institutions, and, he hoped, an eventual union of the profession with the national church. The last remark drew forth many expressions of dissent.

On leaving the chair, the President was again subjected to the general expression of disapprobation.

# Original Papers.

## THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

### I.—VEGETABLE TEXTURES.

THE science of morphology, which treats of the gradual transformation of the primary elements of vegetable structures into the various special organs of the species, has long formed an interesting and essential department of physiological botany. The plan upon which the metamorphosis takes place "is," according to Dr. Lindley, "notwithstanding the infinite variety observable, extremely simple, and executed by modifications of the leafy texture."

If the structure of a leaf of flowering plants be carefully examined in very thin sections, with a sufficiently high magnifying power, (750 diameters linear,) it will be found composed of two distinct cellular elements, a fibrous tissue, spiral vessels, stomata, and an immense assemblage of air-vesicles, or air-bubbles. On the upper surface of the leaf is a thin, transparent, homogeneous membrane, divided into a number of cellular compartments, irregular in form and outline, and variable in size in different species of plants. On the under surface is a similar membrane, in which the cellular compartments are thickly interspersed with the stomata. The cellular compartments and irregular outlines thus visible on the under and upper surfaces of the leaf, are the exterior and outer portion of a very fine and strongly coherent cellular texture, running through the entire thickness of the leaf, and so disposed as to form numerous divaricating air-passages connected with the stomata.* Within the meshes of this coherent cellular texture, around the walls of the divaricating intercellular air-passages, and in close apposition with the air contained within them, is a less coherent cellular element or texture, consisting of smaller and but slightly adherent corpuscles or cells filled with the green granules of the *chlorophylle*, each granule consisting of a number of minute molecules.

The term cellular tissue or texture has been indiscriminately applied to so many portions of vegetable structure, that it is necessary to state prominently the point which a careful microscopical examination of a leaf appears to me to establish between the coherent cellular texture, the cuticle and supporting frame-work, and the incoherent cellular texture forming the parenchyma.

If a thin section be taken from the main rib, or any of the other ribs of a leaf, the cellular texture disclosed has the following properties and appearances:—It is strong and coherent; the spaces of the cells are nearly or quite free from chlorophylle granules, and the cell-walls are comparatively thick, the structural material not occupying the central parts of the cells, but being collected at the cell-walls, and apparently outside and between them.

If having previously sliced away the outer integument of the leaf, a thin section be taken of the green parenchyma, the cellular element displayed has a very different appearance. It consists of smaller, distinct cells, arranged around oval or rounded vacant spaces, and if the succulent leaf of *Sedum acre* be crushed between two slips of glass, the incoherent cellular elements are found scattered and dispersed upon them.

It is well known that two important functions are performed by leaves—respiration and secretion; and it appears from my examinations, that in the leaves of *phanerogamia*, each function has its appropriate anatomical structure—the coherent cellular textures ministering to the form of the leaf, and to respiration; the incoherent cellular texture, to secretion or nutrition. That the interior of a leaf is full of air may be

* These air-passages, when a section of the parenchyma has been made, display oval foramina, similar to those seen in the section of a lung.

demonstrated by a microscopical examination of the parenchyma; and that the air is situated in numerous air-passages, is also equally evident, at the same time. That this air may be forced out by heat is readily shown by immersing a leaf in boiling water, when the under surface becomes thickly coated with minute air-bubbles, which appear to escape by the stomata; for the upper surface of the leaf, if uninjured, never allows of the escape of similar bubbles. When, therefore, the broad upper surface of a leaf is exposed to the noonday sun, the air occupying the air-passages must expand; and if all the passages be filled with air, some portions of it, altered, doubtless, by the respiring functions of the incoherent cellular texture, must escape, either through the stomata, in which the air-passages terminate, or by other means. But when the sun's rays are obscured by passing clouds, and at night, the air within the leaf, becoming colder, will contract in bulk, and there will be space for fresh portions of the outward air to enter. Heat, or caloric, therefore, is the efficient cause; and change of temperature—sun and cloud—day and night—the conditions of respiration in the leaf; inspiration taking place during the passage of clouds, and at night; expiration going on when the sun shines upon the leaf.

In most of the herbaceous plants, the green matter of the lower leaves visibly disappears during the inflorescence and the growth of the seed—that is to say, they wither and dry up. This is remarkably the case in the *sedums*, *lilies*, &c., and the fact is observable in all tender plants, should there be any lack of moisture at the important time of flowering. The following, among many other examples, may be related in illustration:—If a plant of the garden nasturtium (*Tropœolum majus*) be pulled up whilst in vigorous growth in the autumn, and thrown upon the ground in the sun, it will continue flowering for a month or six weeks, putting forth new shoots, new flowers, leaves and seeds; but during all this time the older leaves are gradually, from below upwards, one after another, exhausted of their green matter, withering and shrivelling up. From these and many other facts well known to botanists, but which it is unnecessary to particularize, it is concluded that the green matter contained in the cells of the incoherent cellular texture of the leaf is of the nature of a secretion elaborated within the cells, giving sensible properties or qualities to the leaf, and essential to the growth of the subsequent parts of the structure, the flower, the seed, or the bud; while the coherent cellular texture gives form and stability to the leaf, and administers to the function of respiration.

The distinction between the coherent and incoherent cellular textures clearly exists in nature; the former may be seen in the wood and pith; the latter in the bark and leaves. These two textures may be oftentimes conjoined, and run by transitional stages into each other; still they are as frequently disassociated, and when they are so, they are as distinct in appearance and mechanical properties as they seem to be in function.*

The general nature of the parenchymatous part of leaves, which I have termed the incoherent cellular texture, has been well explained by Link and others, and was figured by Mohl in 1828; but the most complete account is that of M. Adolphe Brongniart, in 1830, of which the following is an abstract:—

The cuticle is a layer of cellules, adhering firmly to each other, and sometimes but slightly to the subjacent tissue, from which they are entirely different in form and nature—in form, for the cellules are depressed, and in consequence of the variety of outline they present, form meshes, either regular or irregular; and in nature, because these cellules are perfectly transparent and colourless, and probably filled with air. They scarcely ever contain any organic particles, and are probably but little permeable, either to fluids or gaseous matter; while, on the other hand, the cellules of the subjacent parenchyma are filled with the green substance that determines the colour of the leaf. Beneath the upper cuticle are two or three layers of oblong cells, generally of much less diameter than the cells of the cuticle, and therefore easily seen through it; the cells have little intervals or spaces between them, and in leaves that have stomata on their upper surface, there are among the cells some large spaces through which the stomata communicate with the interior of the leaf. On the under surface of the leaf, the cells of the parenchyma are irregular, often having two or three branches which unite with the limbs of the cells next them, and so form spaces which are larger than the cells themselves, and either correspond directly with the stomata, or are in communication with them.*

(For examples of the incoherent cellular parenchyma of a leaf, and of the coherent cellular structure of the cuticle and ribs, I refer the reader to Dr. Lindley's "Introduction to Botany," plate 1, figs. 2, 3, 6, and 7; plate 3, fig. 5, ed. 1832.)

Mr. Edwin Lees, who is well known as an indefatigable and practical botanist, has permitted me to state his opinion upon the structure of a leaf.

"I have perused Dr. Addison's account of the vegetable tissue, and seen his demonstrations with the microscope repeatedly. It appears to me that the distinction of coherent and incoherent cellular structure is not only correct in fact, but of considerable importance in a physiological point of view. It is clear that the coherent cellular structure forms the supporting framework of the leaf; and that it abounds with air is satisfactorily proved by Dr. Addison's experiment of immersing a leaf in boiling water, when the under surface gives exit to numerous air-vesicles. It therefore appears correct to attribute to this structure an important function in respiration; and it appears equally correct to suppose that the system of nutrition and secretion goes on in the cells containing the granules of chlorophylle, which are frequently found but very slightly coherent. The coherent and incoherent structures are not easily demonstrated perhaps as distinct structures in every leaf, but I believe they exist. Though well aware, with other botanists, that leaves carried on the operations of respiration and secretion, yet the different functions attributed to the two kinds of cellular tissue have never previously, I believe, been insisted on. The fact necessarily leads to inductions before undeveloped."—Edwin Lees, F.L.S., Fellow of the Botanical Societies of London and Edinburgh.

If the structure of a petal be examined in the same way with a microscope, we find a coherent cellular structure, abounding with air, to which, indeed, the whiteness and opacity of a white petal is wholly due. This coherent cellular texture has various forms, and the transparent homogeneous cell-walls are frequently marked with delicate *striæ*. The cells usually contain either a coloured fluid, or numerous coloured granules and molecules; and it is evident if the structural elements of a petal are formed by a process of metamorphosis from the leafy texture, that it is the green granular chlorophylle of the cellular parenchyma that has experienced the greatest amount of change; in other words, whereas the colour of the leaf is green, and the colour of the petal blue, scarlet, or yellow, so therefore, if the structural elements of the petal are metamorphosed out of the leafy texture, it must be the incoherent cells containing the green matter,—the secreted and proper juices of the leaf, that have experienced the greatest amount of change. If we extend the microscopical examination to lower forms of vegetation, we find the fibrous or woody textures, and spiral vessels, to disappear, the leaves of mosses and the fronds of ferns consisting wholly of cells, filled with a green matter, and rendered coherent by a thickening of their walls. Still lower, we find in the *confervæ* elongated cells, joined end to end, each cell containing green granules of chlorophylle. Lastly, there are vegetable textures, consisting of cells filled with green matter, and of so slight a coherency, that the merest touch is sufficient to separate them from each other.

The order of vegetable structure then appears to be:—

1. Forms consisting of incoherent cellular texture,—masses of cells or corpuscles with an interior (generally green) matter. These are the lowest forms—*algæ* and *lichens*, in which every cell or corpuscle is both a respiring and a secreting structure.

2. Forms consisting of coherent cellular texture,—cells with an interior (generally green) matter, cohering either end to end, as in the *confervæ;* or on all sides, as in *fungi*, *mosses*, and *ferns*. Here, again, every cell is both a respiring and a secreting structure.

3. Forms consisting of a compound cellular texture, in which two distinct cellular elements, with distinct functions, are conjoined and co-exist,—the coherent cellular element connected with the stomata and air-passages ministering to respiration, and the incoherent, with the green granules of the chlorophylle within them, executing the function of secretion. And it would appear, that in the leaves of *phanerogamia* there is a large quantity of air stored up in the air-passages, formed by the coherent cellular texture for the uses of the incoherent cellular texture. As we ascend in the scale of

* Cellular tissue is found in three essentially different states, membranous, fibrous, and parenchymatous; membrane and fibres, combined, form a fibro-cellular, and parenchymata and fibres form a fibro-corpuscular texture.

* See, for a more detailed account of the structure of leaves, "Lindley's Introduction to Botany," particularly p. 85, ed. 1832.

life and being, so we find more and more clearly special organs or textures appointed to special functions. Let me therefore recapitulate the points I wish to urge upon the reader's attention. In the lowest forms of vegetable structure, the functions of secretion, growth, and respiration, are conjoined in each cell or corpuscle, and these cells, in many cases, cohere so slightly, that the texture falls to pieces on being touched or handled. In some instances, the structure is no more than a light cellular powder, and in others mucoid or soft. But in the leaves of *phanerogamia*, there is a coherent texture supporting the stomata, and administering to the respiratory function; and also a less coherent texture executing the function of secretion.

I am sensible that the terms incoherent and coherent, as applied to the leaf, do but partially and inaccurately express the distinctions insisted on between the secreting, the soft and brittle, cellular textures, and the non-secreting, coherent, and elastic ones; between the green cellular parenchyma, and the outer cellular membrane of the leaf. The distinctions are, however, very palpable, and in animal structures so important, that I purpose, in order to avoid confusion of terms, and yet preserve the distinctions set before us by Nature, to use the term, corpuscular texture, for the very soft, opaque, and friable cellular textures, limiting the term cellular to those which are coherent, transparent, and elastic. For example, the liver and intestinal villi, I would say, are corpuscular textures; the lung a cellular texture,—the two former being opaque, friable, and incoherent; the latter, transparent, elastic, and coherent.

(*To be continued.*)

## ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

## THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from p. 147.*)

*Cinchona.*—Tonics may be divided into two sorts—those that are both specific and general, and those that are merely general. The former have also been sometimes named antiperiodics; the latter, corroborants.

Among tonics uniting specific and general properties, cinchona and its preparations hold the first place. Intermittent fever is the disease in which they are most signally efficacious. They both control the recurrence of the paroxysms, and reduce the tumefaction of the spleen which characterizes this fever.

No satisfactory theory as to what is the *modus operandi* of bark has yet been adduced.

In adynamic or typhoid fever, in gangrenous inflammation, in foul and exhausting suppurations, bark lends us powerful aid.

In strumous cases, it is peculiarly indicated, particularly in the form of the disulphate of quinine.

This is perhaps the most convenient of the preparations from cinchona bark, as its dose may be most exactly regulated, while it is of small bulk and easily taken.

However, in intermittent fever, and more particularly in typhoid cases, attended with much and urgent adynamia, some prefer, and with reason, a vinous tincture of the bark, or a vinous infusion of the disulphate. In the latter cases, the doses of the bark or of quinine may be very large.

In some cases, quinine occasions severe cephalalgia. We had an opportunity of observing this in a recent instance. A patient subject to strumous ophthalmic catarrh was exposed, in rather peculiar and unexpected circumstances, to a cause leading to a urethral discharge. After the specific nature of this had been evidently got rid of, and the discharge itself apparently cured, the latter constantly reappeared, causing to the gentleman who was the subject of it much mental and other annoyance and anxiety. At length, suspecting that the discharge was now of a strumo-catarrhal character, substitutive of the conjunctival one, of which he had been longer than usually free, I ordered (after a considerable variety of other treatment, both local and general) quinine in large doses, which certainly greatly mitigated, though it did not at first entirely check, the urethral discharge. But repeatedly, during its employment, the most alarming cephalalgia supervened, requiring the quinine to be laid aside for the time, and when resumed, to be taken in very diminished doses.

The union of morphia in intermittent fever is often useful.

In South America, calomel is sometimes joined with quinine in the treatment of intermittents, thus:—

Calomel, eight grains; disulphate of quinine, twenty-four grains. To be divided into eight pills, two to be taken every half-hour during the intermission.

In dyspeptic cases of simple atony of the stomach and bowels—that is, in which the tongue and fauces are neither furred nor red, but clean and exsanguine, in which there are want of appetite, flatulence, torpid bowels, moderate pulse, and a tendency to chilliness—quinine alone, or combined with aloes, ginger, or cloves, will be found useful.

When, again, there is a foul tongue, with either costiveness, or with fæcal evacuations, crude and wanting in due colour and consistency, and accompanied with cachexia and debility, a pill, containing two grains of quinine, two of the blue-pill mass, and one of myrrh, and taken before breakfast and before dinner, will often do well.

In some cases of irritable stomach, unaccompanied with signs of hyper-vascularity of the mucous membrane of the tongue and fauces, the conjunction of extract of hop, lettuce, or hyoscyamus to the quinine, ensures for the latter a quiet reception in the stomach and duodenum.

In all those cases, too, of gastrodynia or cardialgia, unattended with erythema or vascular turgescence of the mucous membrane, quinine, united with iron, zinc, sulphate of copper, or nitrate of silver, is indicated, the extracts of hop, lettuce, hyoscyamus, conium, and even the hydrochlorate of morphia, being given in conjunction. Many neuralgic affections, both deep-seated and peripheric, are to be treated by the same means.

*Citric acid.*—When a course of acids is indicated, citric acid may be ordered. However, we prefer, in general, sulphuric or hydrochloric, as acting with greater certainty and effect. In scorbutic cases, and in those supposed to consist in, or to be accompanied by, a want of plasticity in the blood; in defective appetite; in languid action of the liver; in yellowness of tongue and conjunctivæ; in fœtor of breath and evacuations, the use of nitric acid is indicated.

*Citrus aurantium and C. medica.*—The orange and the lemon. These are indicated dietetically in the same cases in which the subject of the immediately foregoing notice is indicated medicinally.

*Claret.*—The use of this wine is appropriate in the cases referred to in the two preceding notices. However, in cases of chronic gout, and in some cases of rheumatic disposition, its use is questionable. In preternatural acidity of the urine, also of chronic duration, and accompanied with dysuria and lumbar uneasiness, claret and acidulous wines, and aliment generally, are to be abstained from.

*Coffee.*—Taken in moderately strong decoction or infusion, and of moderate temperature, coffee is an unexceptionable beverage for the majority of persons. It exhilarates and invigorates without hurtfully stimulating. It has a peculiar effect on the cerebral organs, promoting, in a more remarkable degree than, perhaps, any other drink, the normal action of the intellectual and imaginative faculties. Hence, to the use of pure and strong infusions of coffee some ascribe the lively and imaginative characters of the Arabs. And it is certain that Voltaire, and other intellectual men of his time, regarded coffee as a beverage which peculiarly both quickened and recruited reason and imagination.

In cases, however, of chronic disease, in the treatment of which, every circumstance, whether *lædens vel juvans*, is to be taken into account, it may become necessary to interdict the use of coffee, as of other drink and food, which, in ordinary circumstances, would be indifferent, if not even positively useful. As we have formerly remarked, homœopathic practitioners, whose system necessarily imposes on them a somewhat nice scrutiny of the effects of diet, have a jealousy of both coffee and tea, and more of the former than of the latter.

It undoubtedly unduly quickens the circulation with some persons, produces in others unpleasant thirst and heat; some it constipates; and in some it causes acid eructations.* But, as we have observed, it agrees with most persons, if taken in moderate quantity, strength, and temperature.

We regard it as an instance of clumsy nomenclature, that the name caffeine should be given to a principle which occurs in coffee, but which is also found in tea. Surely, a name, indicative of its double origin, should have been chosen, and not the above partial and confusing one.

*Colchicum.*—This is a plant of no small importance. In its properties, it is partly diuretic, partly cathartic. It acts very decidedly on the liver, removing torpid states of that organ, and causing yellow or even dark stools to succeed grey or white ones.

* Owing, doubtless, to caffeic acid.

In France, colchicum is ranked among diuretics, and undoubtedly it promotes the action of the kidneys, and by facilitating the secretion of uric acid, is proper in cases of gouty or rheumatic diathesis, and obviously controls the paroxysms of arthritis and rheumatism. In what manner does colchicum act on the kidney? Not directly, we apprehend, but indirectly, by promoting the action of the liver. We have elsewhere called attention to a fact of some importance, that often when the liver does not secrete duly, and when, consequently, the stools are pale and scanty, neither does the kidney act sufficiently, the urine being high-coloured or turbid, and of diminished quantity. In such circumstances, anything that acts on the liver, as, for example, a few grains of calomel or blue pill, causes, very soon after, an improved action of the kidney. We believe it to be in this indirect manner that colchicum acts diuretically.

Its action both on the liver and kidneys is satisfactory. When its diuretic effect is wanted, and that speedily, the acetum colchici is to be preferred. When its cholagogue and cathartic effects are more particularly desired, the extract, wine, or tincture, is to be selected. These, more particularly the first of them, should rarely or never be given alone, and uncombined with some other more safe and certain purgative, as mercury, aloes, colocynth, scammony. Because colchicum, given by itself, sometimes entirely fails to act either as a renal or alvine evacuant, and being absorbed, operates alarmingly on the nervous system, causing the most marked moral and physical prostration.

In cases of gout in robust subjects, accompanied with much hepatic engorgement, and in whom the tongue and conjunctivæ are yellow, the most efficient combination is of that of the wine, tincture, or acetum of colchicum, given in draught, with from two to six drachms of sulphate of magnesia, and two to six grains of nitrate of potass. This may be repeated every three to six hours, until the bowels and kidneys are decidedly acted on. In these cases, the dose of the wine or tincture may be from ten to sixty drops.

In old and worn-out gouty subjects, in whom any tendency to metastasis has manifested itself, and in the subjects of chronic rheumatism, we must be more guarded in the use of the neutral salts; more careful to conjoin with the colchicum cordials, aromatics, and even stimulants. In such subjects, the extracts or tinctures of rhubarb or aloes are the best purgatives to combine with the colchicum. The compound infusion and tincture of senna may also be tried.

Many persons of gouty or rheumatic habit or diathesis, but who have never had a fairly formed attack of either disease, are subject to innumerable neuralgic affections, of very anomalous and perplexing character. Both patient and practitioner are puzzled, and perhaps alarmed, by them, until either a regular fit of gout, or some rheumatic symptoms, both attended with more or less renal derangement, explain at once, and relieve the preceding obscure and troublesome lesions of sensibility and secretion. A quantity of uric acid is voided, and health is, for the time at least, nearly or wholly restored.

In subjects of this kind, the anomalous nerve-aches referred to may be often removed, and a regular attack of gout or rheumatism prevented, (a matter of great importance,) by the timely use of colchicum. A little of it should be given nightly, or twice daily, with some ordinary aperient; the neuralgic and other precursory symptoms will subside, and a crisis be averted

A useful ordinary anti-gout pill (one, we mean, adapted to mitigate an actual paroxysm) consists of perhaps two parts of the extracts of colchicum and colocynth, and a half part of hydrochlorate of morphia; and repeated every hour or two hours, till bowels and kidney are acted on; which occurring, pain subsides.

A solution of any of the preparations of iodine is said to form an antidote to an over-dose of colchicum.

*Cold.*—Cold is a therapeutic of no insignificant value in some forms of gastric irritation and stomachic debility.

Some persons have a sensation of heat and thirst in the mouth and throat, often attended with a feeling of fulness in the stomach and gullet. The tongue and fauces will, on inspection, be seen to be preternaturally red and tumefied; and in a similar condition, no doubt, is the whole mucous membrane of the œsophagus and stomach. The symptoms above named are most visible, and most felt in the morning, when, if a draught of cold water is taken, the passage of the fluid over the heated surface of the mucous membrane of the throat and stomach is perceived with more than healthy distinctness.

In such cases, a draught, immediately on leaving bed, of from a pint to a quart of cold or even iced water, and this repeated several times during the day, is perhaps the simplest and safest mode of relief. Of course, a mild and simple diet must also be observed.

Again: in persons whose muscles are well-developed, and whose faces and hands are florid, and indicate active cutaneous circulation, there is occasionally obvious evidence of languid digestion, such as flatulence, and evacuations unmistakably indicating crude and imperfect chymification.

In such cases, the external application of cold, by affusion or in bath, by determining to the central organs the nervous influence and circulatory fluid, now too largely expended on the periphery, will soon restore activity and energy to the stomach and duodenum.

Bentinck-street, Manchester-square.

## ILLUSTRATIONS OF THERAPEUTICS.

By RICHARD LANYON, M.D., LL.D., F.A.S., &c.

### THE PALLIATIVE TREATMENT OF HYDROCELE.

If we compare the advantages of the trochar with the permanent cure by injection, there can be no doubt but the radical plan of treatment is in every instance to be preferred. But the relief to be obtained by acupuncture is so simple, and attended with so little inconvenience or pain, that I have never yet met with a patient who would not make choice of its occasional adoption, rather than submit to the use of the trochar, or the alternative of injecting the tunica vaginalis testis. Mr. Lewis* deserves the thanks of the profession for his excellent elucidation of his easy method of removing the fluid; but it does not appear that surgeons in general have divested themselves of their prejudices in favour of the usual plans of treatment, or his recommendation would long since have been favourably received or repudiated by the medical community. I have met with several cases where the simple introduction of a common needle, of large size, into the sac, has invariably caused the removal of the fluid, after an interval of twenty-four hours. I regret not having taken minutes of these cases, but it is immaterial, as the simple fact of success is the point of importance to be appreciated by the profession. Three of them, however, for particular reasons, I am enabled to record. The first is that of a solicitor, aged about fifty-six, who applied to me, in the beginning of the year 1838, for the relief of an immense hydrocele of the right side, and as he had never undergone any treatment, after pointing out to him the usual methods adopted by surgeons, I put into his hands the paper of Mr. Lewis, at the same time informing him that I had no experience to offer him with respect to the operation. He submitted unhesitatingly, but somewhat credulously, to the treatment by acupuncture, and, to our great astonishment, the scrotum corrugated and the fluid disappeared after the lapse of a few hours. The operation was repeated on the 22nd of the September following, and the fluid was absorbed as before. The needle was introduced, for the last time, on the 14th of December of the same year, after which the patient walked to his residence, a distance of five miles. Probably the friction in walking produced violent inflammation, and family affliction preventing my visiting him, the medical gentleman who was consulted advised the rubbing-in of an ointment containing a preparation of iodine, which increased the inflammation to such a degree as to require the application of leeches. The result was, a radical cure, which the irritation caused by walking would in all probability have effected.

The second case is that of a highly respectable medical gentleman, who had never heard of the operation until I related to him my success in the former instance. As there had been a difference of opinion respecting the nature of the tumour, it was thought advisable to consult a gentleman of great experience, who pronounced it to be a case of *pure* hydrocele. Not satisfied with giving his opinion, the great man condescended to add a written and elaborate description of the steps of the trochar operation, not forgetting prescriptions for the radical cure by injection, for which, of course, I felt infinitely obliged. My friend, however, chose the acupuncture, which, although it did not empty the sac completely, reduced it to a comparatively small size, and so well satisfied was he with the success of the operation, that he preferred its occasional repetition to the usual plans of treatment recommended by the faculty. On the 27th of June, 1842, I received from him the following note:—

* See THE LANCET, vol. ii. 1835-6.

"My dear Sir,—I write this in case I should not find you at home, to say that the operation has completely succeeded, I think, better than on former occasions. The scrotum, I may say, is reduced to its natural size. The effect of the operation is very extraordinary.—Yours very truly, ———"

The needle was again introduced on the 18th of September following, the tumour not being half as large as usual. From that time until the 31st of March of last year, my patient required no assistance, when the operation was again performed, and the fluid disappeared after the lapse of a few hours.

On the 8th of July, 1843, a respectable tradesman requested me to introduce the trochar, for the relief of an immense hydrocele of the left side. Being at a neighbouring town some time since, he was there assisted by this operation, and on that account wished to have it repeated, but I prevailed on him to try the effect of acupuncture. The fluid was absorbed in an astonishingly short space of time, and the operation has not since been required.

This method of treatment has been so uniformly successful in my practice, that I should recommend its adoption in preference to the radical or palliative plan usually pursued. It is not only safely, easily, and quickly performed, but, unlike most other operations, is attended with a very trifling amount of pain; so that I believe patients would usually prefer this kind of occasional relief to the comparatively tedious methods dictated by modern surgery.

### ERGOT OF RYE IN RETENTION OF URINE.

May 23rd, 1844.—An old man, who on many occasions has been relieved by the introduction of the catheter, has just now an accession of this troublesome disease. Instrumental relief has been required as many as three times within the last twenty-four hours, and he is still unable to urinate. Having gleaned from one or two of your correspondents the very important information that the ergot of rye has been used with success in such cases, I determined on giving it a trial. Thirty grains were infused in three ounces of boiling water, and strained when cold, of which he was directed to take a third part every six hours. After the third dose, he passed about half a pint of urine without impediment, and the natural function was restored. The relation of single cases of success, it is true, cannot be of much weight, but they are important, as serving to strengthen the evidence of previous investigations. I am, however, enabled to say, that as in obstetric practice instrumental delivery is of less frequent occurrence since the introduction of the ergot, so will the catheter in many instances be abandoned when general experience shall have fully appreciated the value of this remedy in retention of urine. Its *modus operandi* appears to be attended with some peculiarities which it may be as well to notice. In the first place, whenever my patient had a paroxysm, the urethra was never closed gradually, but became impervious without any intimation, and it was always observed, that when the catheter was being introduced, it met with opposition about half way up the urethra, which was presently overcome by allowing the extremity of the instrument to bear gently against the stricture, when, by a sudden reduction of the spasm, the instrument as suddenly, and without any assistance on the part of the operator, entered the bladder. Hence I conclude that the ergot here acted the part of an antispasmodic, for this was clearly a case of spasmodic stricture. Dr. Ross's patient* evidently laboured under want of power to expel the urine, and adynamia of the bladder appeared to be the defect in the case related by Dr. Houlston.† In one of the numbers of the *Provincial Medical and Surgical Journal*, Dr. Jeffreys published an instance of the same kind, where he was equally successful with the same remedy. All these cases depended on want of tone; but my patient is not disposed to paralysis—at all events, there is no evidence that such a disposition exists; I am therefore not justified in concluding that an adynamic state of the bladder is the cause. The ergot then, like opium, appears to be a sedative or stimulant, depending on the dose, and probably on other circumstances which further experience can alone unfold. Dr. Houlston directed six grains three times a day, and Dr. Jeffreys began with ten grains daily, increasing the dose to double or treble the quantity; whilst Dr. Ross varied the dose from ten grains to thirty in the twenty-four hours. In my case a medium quantity (ten grains) was given every five or six hours; but whether its operation in producing apparently diametrically opposite effects depended on the more frequent repetition, must be decided by future clinical observation.

* The Lancet, vol. i. 1834-5, p. 557. † Ib. p. 836.

### PARAPHYMOSIS.

The son of a farmer, about seven years of age, had been suffering several days from paraphymosis before his parents were made acquainted with it, how many could not be ascertained, but certainly four or five. The parts were much distorted, and the inflammation, of course, very considerable. From the amount of swelling, it appeared next to impossible that the prepuce should be brought over the glans penis without the use of the knife, and to increase the difficulty, the parts were so irritable that the most gentle pressure produced the most exquisite pain. Cold water was drawn immediately from the well, and the penis immersed in it for several minutes; the consequence was, a diminution of the irritability, and greater facility was obtained for the subsequent manual operation. With the thumb and forefinger of my left hand, thrown into the form of a ring, I embraced, of course, gently at first, the strangulated prepuce, and by easy traction attempted to draw it over the glans penis. At the same time, the fingers of the right hand were employed in gently pressing the denuded glans, thus mechanically overcoming a distention of parts by producing partial vacuity of the bloodvessels, as recommended by the late Sir Astley Cooper. Thus the gentle pressure backward antagonizing with the action of the other hand in its forward pressure, tended materially to assist in overcoming the strangulation. At first my efforts appeared to be unavailing, but after a short time I was satisfied that the size of the glans was reduced. The left hand unceasingly retained its original position behind the corona glandis, but the right was occasionally removed, and epithems of the coldest water I could procure were applied in the interim. In this manner, after persevering exactly twenty minutes, the reduction was suddenly effected.

The treatment in this case is exceedingly simple, and its adoption is recommended by almost every author who has written on the subject. But there is reason to fear, indeed I know, that in many instances, the indiscreet division of parts is too frequently made to supersede this more soothing and often successful operation, which should, in the majority of cases, have a preliminary trial. The gentleman who has written the article on "Paraphymosis," in the "Edinburgh Medical and Physical Dictionary," confines the manual operation to the incipient stage; but in the case just related, strangulation having existed several days, the approach of more formidable symptoms showed that the incipient condition no longer existed, and that success was not even then built on a forlorn hope. The true clinical conclusion, then, appears to be, that, in common justice to our patients, in the majority of cases, incision should be preceded by attempting manipulatory reduction. It would be occupying too much space in your valuable journal to illustrate these remarks by relating cases; suffice it to say, that experience has taught me to conclude, that not in the incipient stage only, but at any time before the actual existence of mortification, relief may safely be attempted, and in many cases effected, without being driven to the necessity of dividing the stricture. The late highly respected Mr. John Bell rather opposes this opinion, in the following emphatic passage:—

"In the incipient stage of paraphymosis, we may often, with due dexterity and attention, bring the prepuce over the glans, by pushing the glans gently back with the thumb of each hand, while with the fingers we draw the prepuce easily forward. In the more advanced stage, however, no attempts of this kind should be advised, as it is in its commencement only that it ever succeeds, and when it does not prove useful, it is apt to do harm, by inducing an increased degree of irritation in the parts to which the pressure is applied."*

It almost amounts to heresy to differ from such high authority; but as high authority is not at all times immaculate, it may be doubted whether the amount of pressure which is apt to do harm is at any period admissible. He admits that gentle pressure at the commencement may be used with advantage, but that gentle pressure, subsequently, "is apt to do harm," and does not then succeed. "Pushing the glans gently back" would not, at any period, whilst there is a chance of success, greatly increase the irritation, or superinduce such symptoms as would inevitably lead to a destruction of parts.

A more modern author (the celebrated Dr. John Mason Good) does not confine the manual operation to any particular stage, but says that, "in many instances, of both kinds, (phymosis and paraphymosis,) relief has been easily obtained by grasping the penis with a very cold hand, and dexterously urging the prepuce forward, or drawing it backward, according to the nature of the case."†

* "Study of Medicine," vol. ii. p. 332.
† "System of Surgery," vol. vi. p. 64.

Mr. Lawrence's opinion differs materially from that of Mr. John Bell. The latter gentleman asserts that the manual operation only succeeds at the commencement of the attack, but Mr. Lawrence confidently asserts, that "when you see a case of this kind, within three or four days of the occurrence of the paraphymosis, you will seldom fail in restoring the glans to its natural situation."*

In the case I have related, and many others within my recollection, relief has been obtained at a more advanced period; the most prudent course, therefore, appears to be, to allow circumstances, and circumstances only, to direct us as far as regards the practicability of this preliminary operation. "The history drawn from the past will apply to the future, and be a useful guide to those who come after us, as well as to ourselves."

Lostwithiel, February, 1847.

P.S.—The medical gentleman whose case is detailed in this paper, again submitted to acupuncture, successfully, on the 17th of September of last year.

## Rebiews.

*On the Pathology and Treatment of Scrofula.* Being the Fothergillian Prize Essay for 1846. By R. M. Glover, M.D., Lecturer on Materia Medica in the Newcastle School of Medicine. London: Churchill, 1846. 8vo, pp. 315.

Recollecting the contributions which have been made within the last few years on the subject of scrofula, by M. Lugol, Dr. Tyler Smith, and Mr. Phillips, we should at once have pronounced this a superfluous addition, had we not known the circumstance which led to its composition. In our various notices of the above volumes, the principal questions connected with the subjects of which this treats have been so fully discussed that it is quite unnecessary to repeat the views then expressed. Of the peculiar merits or demerits of the present production, it remains but to say, that if it does not advance our knowledge on many of the important points of which it treats, it certainly will not leave the reader's knowledge behind that of the present day. The *pros* and *cons* are fully stated in all matters of doubt. Several graphic illustrations are given, and on the whole the production may be pronounced highly creditable to the writer, as an able and accomplished physician.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

February 9, 1847.—Mr. Arnott in the Chair.

Professor Owen was admitted an honorary fellow, amid much applause; and, at the conclusion of the usual proceedings, returned thanks in a very appropriate speech, declaring, that of all the honours he had received, he should esteem the present one the greatest.

An Account of a Case of Encephaloid Disease of the Heart. By Edw. L. Ormerod, M.B., Demonstrator of Morbid Anatomy at St. Bartholomew's Hospital.

The subject of this communication was a man, aged forty-eight, who had had his right testicle removed, for what was supposed at the time to be simple enlargement of the organ, in August last. Shortly after the operation a tumour appeared in the epigastrium, but the wound healed rapidly and he returned to his work. In the course of a week or two he had to give up work from debility, and came into St. Bartholomew's Hospital, under the care of Dr. Roupell, for the last fortnight of his life.

The chief point of interest concerning the tumour in the abdomen was the fallacy thrown over the diagnosis by the discovery of pus in the urine, a fact explained after death by the existence of suppurative nephritis in the right kidney. On examination of the heart, a systolic murmur, of a musical character, was heard at the apex, and a blowing murmur at the base prolonged equally along the aorta and the pulmonary artery.

On examination after death, a large tumour was found to extend down the front of the spine, but loosely attached to it, traversed by the aorta and ascending cava, the cavity of the latter being almost obliterated by pendulous, flocculent masses connected with its walls. The right common iliac vein was ulcerated, the left obstructed by a laminated coagulum, the circulation being apparently maintained by enlarged lumbar veins. None of the abdominal viscera were implicated.

The right ventricle of the heart contained a mass of encephaloid matter, of a lobulated form, springing from its anterior wall, one lobule extending into the ring of the tricuspid valve, or at least intervening between its tendinous cords, another reaching up nearly to the pulmonary valves, and a few more, smaller ones, lying towards the apex of the heart. The wall of the ventricle was a good deal changed at the point whence the lobule sprung; elsewhere it was healthy. The tumour consisted of nucleated with some caudate cells, dispersed through a loose amorphous tissue.

The author limited his observations to two points,—the auscultation of the heart, and the nature of the tumour there. With regard to the auscultation, this case seemed to show that the presence of a growth of this kind, even of such a size, could not certainly be made out during life by any signs proper to the tumour itself, it could only be detected, as any other foreign body might be, by its accidental interference with the functions of the heart. It was casually illustrated, while on this part of the subject, how cancer of the pericardium might also exist without being detected by auscultation.

With regard to the nature of the tumours (which part of the paper was omitted, on account of the length of the following interesting paper) the author endeavoured to place in the order of their different stages of growth the few cases of endocardial cancer hitherto published. Presuming an analogy to exist, according to Rokitansky, between these tumours and the globular vegetations of Laennec, there seemed to be a regular gradation from the masses which hang on the endocardium, as if deposited there by the blood, to the lobular growth, which, true to the nature of cancer elsewhere, had destroyed the muscular structure of the heart in one part of the preparation exhibited to the Society.

Case of Internal Strangulation of Intestine relieved by Operation. By Golding Bird, A.M., M.D., F.R.S., Assistant-Physician to Guy's Hospital; and John Hilton, F.R.S., Assistant-Surgeon to Guy's Hospital.

Dr. Bird remarks, that the attention of the Society having been lately occupied with the consideration of the practicability of diagnosing the seat and nature of the obstruction in cases of internal strangulation, with a view to its relief by operation, he ventures to hope that the history of the following case will not be considered devoid of interest.

Dec. 21st, 1846.—Dr. Bird was called to Bocking, in Essex, to see Mr. C——, a young gentleman twenty years of age. Eight days previously he was as well as usual, having merely had constipated bowels for a couple of days, when, in the morning, whilst in bed, he became sensible of a slight dragging or sense of giving way about two inches to the right of the umbilicus, towards the spine of the ileum. This sensation was soon replaced by a sense of soreness and tenderness. During the following six days, nothing passed from the bowels except with the aid of a copious enema. Purgatives and a tobacco enema failed in procuring stools. Three days previously sickness commenced; a sense of uneasiness and distress was produced by firm pressure on the spot where the dragging was first felt; the abdomen was flat and collapsed. On inquiry, it appeared, that when a child he had been the subject of mesenteric disease, and some years afterwards, of an ailment, supposed, from the symptoms, to have been peritonitis. The absence of hernia, as well as of any previous hæmorrhage from the intestines, or of exposure to the influence of lead, the improbability of the presence of malignant disease, proved the non-existence of the most ordinary cause of insuperable constipation. Recollecting the dragging sensation and previous existence of peritonitis, Dr. Bird ventured to give an opinion that the mechanical obstruction depended upon a knuckle of intestine becoming strangulated in some manner under a band of false membrane. The character of the vomited matters and the empty state of the cæcum and colon at once referred the seat of obstruction to the small intestines. Trial was made of metallic mercury, after which the pain and vomiting ceased, and no important change occurred until Dec. 25th, when pain and vomiting returned. The propriety of an operation was entertained; and Dec. 28th, the writer requested the assistance of Mr. Hilton for this purpose, and they arrived at the patient's house at nine o'clock P.M., being just fifteen days from the commencement of the illness. The abdomen was scarcely more distended than on the 21st, but the muscles

* The Lancet, vol. i. for 1829-30, p. 814.

were more irritable, assuming a state of spasmodic contraction on the slightest manipulation. No great uneasiness experienced on pressure. Pulse 90; skin soft and cool, and tongue moist. The patient was placed in a room in which a temperature of 88° to 90° was maintained.

Mr. Hilton states, that having arrived at the same conclusion respecting the nature and seat of obstruction as that described by Dr. Bird, he fairly represented the various arguments and facts for and against an operation to the patient, who expressed himself decidedly desirous of the attempt being made to relieve him. An incision was made from the median line to within an inch of the pubic symphysis, and the abdomen opened. Several convolutions of distended and congested small intestine so completely blocked up the opening, that it was necessary to enlarge the incision for about one inch and a half above the umbilicus. After dividing a band of adhesion between two portions of small intestine, and making a careful search in different parts of the abdomen, Mr. Hilton found on the right side about six or seven inches of ileum in a state of strangulation, having passed through an annular opening formed in part by another portion of the same small intestine, and by some old membranous adhesions to the brim of the pelvis, over the external iliac bloodvessels. By gentle traction on the strangulated intestine at the opposite side of the opening through which it had passed, Mr. Hilton succeeded in liberating it from its incarcerated position. The intestines were replaced with some difficulty, and the abdomen was closed by a continued suture. After the operation, which lasted about an hour, the patient was somewhat collapsed, but there was no marked anxiety of countenance. He afterwards became restless and delirious, and died about nine hours after the operation. On examination of the body, several strong cellular adhesions were found between the convolutions of the intestines. The cæcum and colon were distended with fæculent matter. Mr. Hilton regards the direct results of the operation as very satisfactory, and in a surgical aspect, successful. The hiccough and vomiting ceased; the obstruction was relieved, and fæculent matter had passed as far as the upper part of the rectum. So long as any doubt remains as to the seat of obstruction, the author thinks it the safer plan to adopt the median section of the abdominal parietes. After noticing the disadvantage arising from the patient's friends not consenting to an operation at an earlier period, he observes, that the circumstances of the case fully justified the proceeding which was adopted; and, notwithstanding its fatal termination, he would advise the same plan to be pursued in a similar case, provided the indications be as clearly expressed. Mr. Hilton remarks, in conclusion, that he believes this to be the first recorded instance of any surgeon in this country having succeeded in his attempts to relieve an internal strangulation by an operation.

Mr. Fergusson thought this paper of such interest and importance that he should regret to see the meeting separate without passing some opinion regarding it. The subject was interesting alike to the surgeon and physician; for though the latter usually had charge of such a case as demanding internal treatment chiefly, the surgeon was often required to determine the seat of obstruction, and to use such means as are in his power to overcome it. The question of an operation in cases of this description demanded most serious consideration, and he believed that it would be satisfactory to the profession that the subject should be noticed in this Society. He had himself long been interested in cases of the sort, for at an early period in his professional life he had seen several instances in which operations had been proposed, but older heads (to whom he was always disposed to bow) had objected. Within the last few years he had seen operations twice performed in such cases. In one he had himself laid open the inguinal canal, in expectation of finding a hernia, but this had been an error in diagnosis; there was no hernia, and the patient eventually died. In the other case, he had been asked by the physician in attendance to operate, but a difference of opinion arose about where and how the operation should be done. There was fulness in the region of the cæcum, which led the physician to think that the operation should take place there, but he himself having a strong opinion as to an incision in the linea alba being the best under the circumstances, had declined doing as the physician desired. An operation was performed, however, by another surgeon; the walls of the abdomen were cut through, and the swollen intestine was punctured with temporary relief. The patient died some hours after, and, on inspection, it was found that the obstruction was caused by a fibrous band, (which confined a portion of the small intestine,) so situated, that had the finger been passed into the peritonæal cavity at the linea alba, it must have been detected, and, in all probability, the operation would have been successful. He (Mr. Fergusson) was of opinion, that under such circumstances as had been detailed in the paper just read, an operation was quite justifiable. All parties agreed as to the danger of wounds in the abdomen; but in such examples as this it was to be remembered that the danger was imminent otherwise, and that, in fact, there was no other chance of life for the patient. The operations which had been so frequently performed within the last few years, for removal of enlarged ovaria, had proved that there was not such risk on opening the peritonæal cavity as had been generally supposed, and therefore, where all other means failed, in cases of internal obstruction, he should not, if the features otherwise were favourable, hesitate to advise an operation. It was an important matter to decide as to where the incisions should be made. He thought that, as a general rule, the linea alba should be selected, and that the surgeon here had very judiciously chosen that part. If he (Mr. Fergusson,) had an objection at all to what was done, it was, to the lowness of the incision at first. It had been found necessary to carry it upwards in the course of the umbilicus, and it was his opinion that the incision should at first always be in the vicinity of the umbilicus. It was almost impossible in such cases to determine from symptoms as to the exact seat of obstruction; and notwithstanding the care and skill evinced by the excellent physician who had examined this instance, it would appear from the surgeon's account that the obstruction had not been detected until the hand had been carried all round within the abdomen. These cases were very different from those wherein some modern surgeons opened the intestines above an obstruction from malignant disease. The main object in such instances was, to give temporary relief, by opening the distended bowel; but in cases like that before the Society, the operation was done with the double view of relieving the stricture and bowel at the same time; and as the incision into the peritonæum was a sort of exploratory one, he should certainly recommend the linea alba, near the umbilicus, as being the centre, as it were, from whence all parts of the cavity could be most easily reached.

Mr. Bransby Cooper spoke at considerable length on the subject. He agreed with Mr. Fergusson, that the case related was an important contribution to the Society and the profession, but the difficulties surrounding the diagnosis of these cases and the operation for their relief, were not removed by the narrative before them. These questions were still to be decided—When are we to operate? Where are we to make our incision? What are the causes of the obstruction? Let it be remembered, that in some cases where ulceration had supervened on other disease, constipation was the remedy employed by Nature to remove the evil. Interference in such cases would do harm. He contended that there was no analogy between cases similar to the one detailed and those in which ovarian cysts had been removed, for the peritonæum in the two cases was altogether in a different condition. He thought that the danger of opening the peritonæum had been underrated, and referred to our success in those cases of hernia in which the strangulation had been relieved without opening the sac, as evidence of the truth of his remark. He remarked on the pulling about of the intestines in the examination as a formidable proceeding, and concluded by asking Mr. Hilton whether he would have dared to operate earlier than he did, if called upon to do so.

Mr. Quain could not regard any operation in which the cavity of the abdomen was laid open as otherwise than a very serious one; and he referred to the comparative results of those operations for strangulated hernia in which the hernial sac had not been opened, and those in which that membrane had been divided, as proving the peril of any opening into the abdomen. Still, he entertained the opinion that an operation would be justifiable if the internal strangulation were clearly ascertained. In this condition, however, lay all the difficulty: the whole question turned on the accuracy of the diagnosis—on the accuracy with which it could be determined beforehand that the obstruction depended on the presence of a mechanical cause susceptible of being removed by the operation.

Cases had lately been before the Society, and one was now referred to by Mr. Fergusson, in which a single band of natural formation, not a product of disease, had been found to cause strangulation of the bowel. He had no doubt that in such cases the operation was called for, and ought to be performed, if their nature admitted of being satisfactorily determined from the symptoms. But it should be remembered that other cases, accompanied with similar symptoms, were

not so simple in their nature. In the case detailed this evening, there had been not a single band in the abdomen, but many; and they were the result of previous inflammation. Several portions of the intestine were found connected together by membranous bands; and one of these on the left side was divided in the operation. The case appeared to be one of chronic peritonitis.

To illustrate a different form of disease, attended with symptoms in a great measure of the same kind, he mentioned a case that came under his own observation. He had been called, a few years ago, by a physician in the country, to see a man who was suffering with all the symptoms of strangulated hernia. The attack of illness had begun with obstruction of the bowels, and, as he was informed, nothing but obstruction existed in the first instance. The lower bowels were opened by enemata, but the disease advanced to a fatal termination. On examination of the body, there was found a part of the small intestine, near its termination in the colon, (about an inch or less in breadth, and including the whole circumference,) lying against the vertebral column, dark grey in colour on the outside, and contracted. The mucous lining of the part was likewise of a dark-grey colour, and was corrugated. Above this point, the intestines were largely distended; the colon was empty. He thought it probable that the diseased part of the intestine would have mortified if the life of the patient had continued some time longer. There was, in this case, no constricting band of any kind, or pressure; nothing, in short, to account for the condition of the gut. A friend, to whom he mentioned the case, told him that he once opened the body of a person who died in similar circumstances, and the post-mortem appearances were the same.

Returning to the diagnosis, which he regarded as the main point, the fixed local pain, and the absence of the symptoms of inflammation in the abdomen, are probably most to be relied on. In the important case read to-night, the pain was constant at one point, and it was attended by a dragging sensation. The movement of the abdominal muscles, which was described, appeared to be very singular. The tenderness on pressure which accompanies inflammation of the peritonæum was said to be wanting; inflammation, however, existed at the time of the operation, for bloody serum escaped when the abdomen was opened.

On the whole, considering the complications which existed in this case, he feared that it would not tend materially to diminish the difficulty in our way in determining the cases fitted for the operation.

Mr. Hilton said he felt much pleased at finding, through the observations which had been made by the gentlemen who had spoken, that they agreed, on the whole, in the propriety of doing what had been done in this case; and that their remarks might be made available in recommending such a proceeding in another case of the same kind. In reply to Mr. Fergusson's only objection, he could not see what would have been the advantage of making the incision, in this case, at the umbilicus, and of using it as the centre of an exploration. In the first place, it would have been against the conclusion at which we had arrived before the operation was commenced, in reference to where we might expect to find the obstruction at the lower part of the right side; and further, the necessity for enlarging for the section beyond the umbilicus would not have occurred had not the small intestines been so much distended as to block up the opening already made. In answer to Mr. Cooper's question—Would we have dared to proceed with this operation at the time Dr. Bird first suggested it as the only favourable chance for the patient? he said, undoubtedly, had the indications been as obvious and as clearly expressed as they were at the period of his seeing the patient, and he would have pursued the same plan. The manner in which Mr. Cooper referred to the details of the manipulations in examining the abdomen, as being first to the right side, and then to the left, might, at the first glance, have a tendency to disparage that proceeding; but it must be borne in mind, that it was a very important examination, completed by merely passing the hand into the abdomen, and without disturbing the intestines, to ascertain that this was not a case of obstruction, depending upon any abnormal adhesions to the abdominal parietes. That point ascertained, it became necessary to look for the cause more deeply seated, and it was only necessary to displace the intestines, when he determined to make a complete exploration on the right side. He might here remark, that he found, as he had anticipated, that the bringing into view the completely empty intestine became the best guide towards discovering the seat of the obstruction, and he thought that this might henceforth be used as a valuable auxiliary in detecting the locality of the stricture in any other similar case; indeed, it was almost the first thing to be looked for; at least such was the importance which he attached to it. Mr. Quain had said that this case did not add much to our existing knowledge regarding these obscure cases, and that as there were so many adhesions, it might have been difficult to tell which of them was the true cause of the symptoms. He (Mr. Hilton) thought that the occurrences, as mentioned in the detail of the operation, and the fact, that notwithstanding such an imaginary difficulty, the real seat of the obstruction was actually, and with facility, noticed, might be considered the best reply. Having reflected with much anxiety on the importance of this case, he was still of opinion that they were right in adopting the plan that was carried out, and that it was the only remaining chance which could be offered to the patient. It had been said that similar cases of constipation had occurred, with symptoms as urgent and as of long duration as the one before the Society, and had ultimately recovered without any such operation. Now, he did not believe that such cases had really corresponded to this one; for he felt quite certain, that by no possibility could the portion of intestine have been liberated from its incarceration, except by the means employed. He had endeavoured to ask himself whether anything more could have been done for this patient; and he must say, that he thought they were wrong in giving such exact directions for the surgeon who had the charge of the case after the operation—viz., to abstain from the administration of any nutrition for many hours. They were guided in this respect by the recommendation of those gentlemen who had made abdominal sections for other diseases; but he had little doubt, if the surgeon had acted on his own responsibility at the time, he would have done so with advantage, and would have given the patient stimulants at or about five o'clock in the morning, when the symptoms were obviously those of exhaustion; for the patient certainly did not die of the immediate collapse of the operation; from this he had obviously rallied; and Mr. Hilton was compelled to conclude that he died from exhaustion. He thought that the case altogether pointed distinctly to our capability of recognising such a case from one of intus-susception, which, as far as he knew, after its existence for a few days, was always accompanied by more or less of hæmorrhage from the bowels; and it at the same time strengthened the conclusion, on which they acted, that the operation, as completed in this patient for the first time in this country, was an operation not only justifiable, but advisable in similar cases of internal strangulation of intestine.

## MEDICAL SOCIETY OF LONDON.

Monday, February 8, 1847.—Mr. Dendy, President.

### EVILS OF INJECTIONS IN UTERINE DISEASE.

Dr. Oldham read the following paper:—In July, 1836, I assisted to inject the uterus of a young female in Guy's Hospital, who was supposed to be affected with uterine leucorrhœa. A small quantity of warm water was ordered to be thrown into the cavity of the uterus, which was accomplished in the following manner:—A gum-elastic catheter, perforated at the extremity, was introduced into the channel of the cervix, as high as the os internum, and about a drachm or so of simple tepid water was injected into the cavity by a syringe, which fitted into the extremity of the tube. Very severe pain in the cavity of the pelvis, felt both centrally and towards the pubes, immediately followed, which required hot fomentations and opiates to allay it. When these symptoms abated, the uterine cavity was again injected in the same way, when much more severe inflammatory symptoms succeeded. Acute pain in the hypogastric region, with active febrile symptoms, were the indications of peritonitis, which yielded to bleeding from the arm, and by leeches, with other antiphlogistic means.

Case 2.—I was hastily summoned to see a lady in my neighbourhood, Sept. 5th, 1846, at eleven o'clock at night, whom I found writhing about on the bed, evidently suffering most acutely. On inquiry, I found that she was in the act of using a vaginal injection, composed of a solution of nitrate of silver, with one of Clarke's metallic syringes, when suddenly, as she was injecting the fluid, she was seized with the intense pain in which I found her. The pain was felt deep within the pelvis, and was referred by her to the lower part of the rectum and the sacrum. She became faint, began to vomit, and sweated profusely. Without loss of time I gave her three grains of calomel, with a drachm of laudanum, and fomented the lower part of the abdomen and vulva with very hot poppy decoction. In three hours' time, the pain abated, and she be

came tranquil. The fomentations were sedulously applied during the greater part of the night, and some saline medicine, with antimony and calomel, were exhibited. The following morning she was much relieved; but there was deep-seated tenderness in the region of the pelvis, with some fever. She passed water freely, and the bowels had been well relieved. She was now transferred to the care of her usual medical attendant, who lived several miles from her residence, under whose care she recovered.

When first I saw this lady, and heard the circumstances under which she was attacked, I felt persuaded that the fluid which was injected by the vagina had traversed the uterus and Fallopian tubes, and had probably reached the recto-vaginal pouch. I learned that she had been the subject of uterine disease for seven years, and had consulted several obstetric physicians, and the plan of treatment which had been adopted for some time, and under which she had obtained marked relief, was to inject a solution of nitrate of silver, in the proportion of two grains to the ounce, every night before going to bed; and occasionally, if there had been much pain in the region of the ribs, she injected a solution of opium. One of the effects of the continuance of this plan was, that the thick epithelial lining of the vagina was loosened and cast off, sometimes in detached portions, and at others in the more perfect form in which it is here seen, forming, in fact, an accurate copy of the mucous membrane of the vagina, dyed of a greyish-blue colour.

On examining the uterus per vaginam, I found that the organ itself was much enlarged; it was heavy and low down, and by pressing over the pubes the fundus could be easily touched, and the womb caught and held by the coöperation of the two hands. There was a good deal of tenderness in the posterior wall, which could easily be touched by the examining finger. The cervix was tumid and soft. The anterior lip was prolonged considerably beyond the back one, and it had a rough granular feel, which I knew depended on the filling out of the large mucous crypts of the cervix. The os uteri was sufficiently open to allow of the tip of the index finger to enter it.

For two months past this lady has been more immediately under my own care. The size of the womb, and the enlarged anterior lip, have been greatly reduced by scarification, leeches, blisters to the sacrum, warm hip-baths, and the frequent and direct use of the solid nitrate of silver. When seen by speculum, the inner surface of the anterior lip was found very much injected, and Naboth's glands distended with mucus, of a pearly lustre, and appearing like so many Graafian vesicles set in the soft, raised, vascular tissue of the cervix.

My object in thus briefly relating these two cases is, not so much to invite a discussion on the diseases themselves as upon the particular remedy which caused similar and dangerous symptoms in both. They fairly open the question of the propriety of using fluid injections into the cavity of the unimpregnated womb; and the second case implies a restriction on the employment of even vaginal injections. The source of danger is not, I believe, on account of any hazard peculiar to the use of lotions on the mucous membrane of the womb, but from the ready and immediate transit of any fluid through the Fallopian tubes into the peritonæal sac, being shed over the ovary, and passing into the recto-vaginal pouch. The facility with which this is effected may readily be tested by passing the tube of a common injecting syringe into the cavity of the cervix of a uterus recently removed from the body, as high as the os internum, and then, with very moderate force, injecting a small quantity of water, when the tubes will be seen to fill out, and the fluid escape from the fimbriated extremity. The result of this, so far as the experience of these two cases goes, is immediately to cause severe pain in the neighbourhood of the uterus, then inflammation of the serous membrane in the pelvic region, and the probable production of false membranes in and about the uterus and its appendages, if the patient fortunately escape a worse result. If this view be correct, it goes far, in my own mind, to prohibit the use of fluid injections into the cavity of the womb; and, indeed, I have never ventured, in any of the diseases which have come before me, voluntarily to adopt this expedient. It may, however, be alleged, that the experience of Continental writers, particularly M. Lisfranc, in whose hands the practice has been useful, and harmless of any such grave results, is a sufficient security against the apprehension which I entertain. It is always difficult to answer an objection of this kind, unless backed by a large experience; but two suggestions occur to me: 1st, it is possible, by very great care, to inject only a few drops of fluid, so small in quantity, and with such moderate force, as that none of it should reach the infundibulum? and 2ndly, I believe that if the extremity of the injecting-tube were only just inserted into the os externum, that, in many cases, the fluid would be injected against the walls of the canal of the cervix, without being directed through the contracted aperture of the os internum, and thus none of it in the uterine cavity. It is only under these suppositions that I can understand the harmless nature of this mode of injection.

The question may, then, be asked—Are we to be debarred from applying local means for the cure of diseases of the mucous membrane of the womb? In answer to this, I would say, that there are comparatively few diseases which require this aid, and that the so-called uterine leucorrhœa is amongst these rare affections. If, however, a clear case of disease of the lining membrane of the womb is well ascertained—say, for instance, mucous ulceration of this part, or a small patch of fungoid disease—I should prefer to carry the solid nitrate of silver, concealed in a proper instrument for the purpose, just as it is in cases of stricture of the male urethra, into the cavity of the womb; or else to inject a small quantity of an ointment, which might, I apprehend, be effected without the danger which attends fluid injections. On two occasions I have carried the nitrate of silver, solid, into the cavity of the uterus, without exciting any undue inflammation; but I have not adopted the latter suggestion of injecting an ointment, although I think it applicable as a therapeutic means.

The second case exemplifies a possible source of danger from injecting the vagina, although undoubtedly it is remote and rare. Injections may very generally be used by any of the various instruments which are adapted for the purpose, without any risk whatever. The principal objection to them is more from the imperfect way in which they are applied, and practically, therefore, to their inefficiency, rather than to any fear of their doing harm. The condition, however, of the uterus, in the case I have mentioned, which is by no means unusual, ought to suggest great caution in their employment. A womb which has been the subject of engorgement for any length of time becomes large, hard, and heavy; it sinks down by its own weight, and generally falls back a little, so that the fundus lies towards the promontory of the sacrum, and the cervix is directed forward, the os uteri being more centrally placed. The weight of the womb diminishes its mobility, it becomes comparatively fixed, and it frequently happens, that false membranes form about it, still further fettering its movement. The result of this chronic congestion is seen also in the cervix, which becomes large and massive; the anterior lip is prolonged, sometimes considerably beyond the posterior one; both lips become more rigid, and the os uteri is rendered open and large. It will be sufficiently obvious, that the pipe of one of the bent metallic syringes would be very likely to be placed, under these circumstances, just against the inner edge of the front lip of the womb, and thus the stream of fluid be thrown into the gaping orifice of the cervix, and so through the upper part of the sexual passages. No doubt such an accident would be, and really is, of very rare occurrence, and the more rare, because in these cases generally the glands of the cervix pour out a large quantity of their peculiarly thick mucus, which effectually blocks up the passage. But for some years past, I have avoided the employment of fluid vaginal injections in cases of this description, first, because by means of the speculum we have better and more direct remedies at hand, and then, because of the very danger which happened in the case I have related.

Mr. Stedman inquired whether Dr. Oldham had had any experience of the use of the oxide of iron in these cases; and also of the practice of dilating the os uteri for the relief of dysmenorrhœa, and for the cure of sterility, which he believed was now being extensively practised by certain practitioners at the west end of town.

Dr. Oldham had used the oxide of iron, but without any great success. He had found the sesquichloride of iron and olibanum more useful. In regard to the second question, in cases where, on examination, the sexual organs were found to be fully developed, but the cervix and os uteri contracted, he had practised dilatation with advantage, both in the cure of dysmenorrhœa and sterility; but when the sexual organs were small and imperfectly developed, he had found no advantage from it. He related the case of a female in whom the former state of these organs existed, who had been married two years without having borne any children, and who had in consequence been very badly used by her husband, in whom dilatation had been practised with complete success, she falling pregnant very shortly afterwards.

The President inquired whether Dr. Oldham considered "dilatation" to do good in these cases, by stimulating the

organs to a proper performance of their functions by an "excito-motory" action, or by setting the secretion at liberty mechanically?

Dr. Oldham thought the contracted state of the os uteri &c. interfered with the secretion of the menses, by impairing the functions of the organ, and that these were restored to a healthy action by its dilatation.

Mr. Safford Lee, (a visitor,) in reply to a question from Dr. Oldham, said that he had seen advantage from Dr. Rigby's practice of injecting the "blue ointment" (in a liquid form) into the womb, for the relief of fibrous tumours of that organ. He had known slight symptoms of peritonitis follow this practice, but doubted whether the fluid ever passed up the Fallopian tubes.

Dr. Oldham thought that these symptoms might arise occasionally from air being forced along these tubes into the peritonæal cavity during the use of injections.

Dr. Bennett thought that the application of nitrate of silver, in its solid form, to the vagina, in the cases alluded to, would be calculated occasionally to produce very great irritation, and was objectionable on that account.

Dr. Oldham had never used it in acute cases.

The President said that he was in the frequent habit of using the nitrate of silver, in its solid form, in the acute conjunctivitis of children, and had never seen any harm arise from it. According to the freedom with which it was applied, it might be made either a powerfully or a moderately stimulating application. He thought it would be a perfectly safe remedy in the cases alluded to.

Dr. Oldham spoke of the great advantage arising from the use of the "potassa fusa" as a caustic in certain diseases of the uterus, and asked the experience of Mr. Safford Lee on this subject.

Mr. Safford Lee said, that in chronic inflammation, with enlargement and thickening of the cervix uteri, he had found this application very useful. In such cases, the effect seemed to be, that when the slough produced by this caustic was thrown off, a softening of the surrounding texture took place, very favourable to the case. Great care was, however, necessary in the application of this caustic, as, if any of it got upon the mucous membrane of the vagina, it produced intense irritation. He was in the habit of using the caustic protected by a stick of wax, and of passing up the vagina a piece of wool or cotton, well oiled, previous to its use, and of allowing a portion of this to remain at the upper part of the passage, near the cervix uteri, so as to receive any drop that might fall.

Adjourned.

## British Medical Journals.

A late number of the *British and Foreign Review* contains a lengthened analysis of a work by M. Porta on the

### LIGATURE AND TORSION OF ARTERIES.

The most interesting facts are those which relate to the successful application of torsion, particularly in cases of divided arteries. The results are far more satisfactory than they have been found by other surgeons; indeed, so favourable, as to justify a substitution of this process for that of the ligature, more particularly in cases where the smaller arteries have been divided, and the securing which is a source of painful delay in operations.

"'From the beginning I kept an exact register to the number of four hundred; then I neglected to record the daily cases in hospital and private practice, in which torsion was applied, except in cases of amputation. It was applied to the occipitals, temporals, maxillary, superior thyroids, some branches of the subclavian, the thoracic, external pudic, spermatic, &c., and to the digitals, so that there is no artery of the fourth or fifth order upon the surface of the human body that has not been repeatedly twisted, after accidental wounds or cutting operations; and the result of so much practice, during nine years, has been fortunate beyond every expectation. I well remember, in some cases, to have been obliged to repeat the twisting two or three times; but I do not remember that the ligature was ever necessary on account of torsion having failed. Thus I have ceased to employ the ligature for wounded arteries of moderate size, and now employ torsion only, as to the advantages of simplicity and celerity it unites others, as it may be done without assistance, and does not leave foreign bodies in the wound.

"'With regard to the large arteries of the extremities, I have already applied torsion, in sixty-five cases, after amputations and disarticulations, principally performed in the Clinique, and some in private practice. Although the operation in these cases has not succeeded so fully and securely as in the preceding, yet in the majority it has answered. For the arteries of the forearm and leg, radial, ulnar, tibial, interosseal, torsion, either simple or after separation of the end of the artery, has constantly succeeded, except in two cases, in one of which, the anterior tibial, and in the other, posterior tibial, gave way, and the ligature was required. On the brachial it has always succeeded; and of twenty-three operations on the femoral and popliteal, it has failed in four cases, two already mentioned, the twisted portion having given way, and ligature being necessary. I know that with some surgeons of my acquaintance, laceration and hæmorrhage have been more frequent; but that may depend upon error in method or management. Fricke has enjoyed very good fortune, having only one case of hæmorrhage in thirteen torsions of the brachial, femoral, popliteal, and tibial arteries. He, however, has no bounds to his enthusiasm, and prefers the new operation in all cases, and twists with success even ossified arteries, which are not susceptible of torsion. On the other hand, the cases of Delpech and Textor are inconclusive, and of no more weight against this operation than the first unfortunate trials of the Hunterian operation in France by Desault and Deschamps.'

"The author goes on to argue, that ill success is more frequently to be attributed to incapacity in the operator than to the condition of the vessel. If not twisted enough, the current of blood will reopen it; if too much, the coats give way. He continues: 'The results of practical surgery correspond with, and are even more favourable than, the results of zootomy.'

"The conclusions are, that in wounds of arteries only can torsion take the place of the ligature; and as it is perfectly safe and secure when practised on the smaller arteries, it ought to be performed when those arteries are divided. The question with regard to the larger arteries is not yet settled; but it would appear that although torsion answers in the majority of cases, still the ligature affords greater security against secondary hæmorrhage."

### THE CONTENTS OF THE FŒTAL STOMACH.

In the *Edinburgh Monthly Journal*, Dr. G. Robinson details a series of experiments performed on different animals, which appear, so far as can be judged without repeating them, to support the following conclusions:—

"1. That the stomach of the fœtus, during the latter period of its uterine existence, invariably contains a peculiar substance, differing from the liquor amnii, and generally of a nutritious nature.

"2. That in its physical and chemical properties, this substance varies very much in different animals, being in no two species precisely similar.

"3. That in each fœtal animal, the contents of the stomach vary much at different periods; in the earlier stages of its development consisting chiefly of liquor amnii, to which the other peculiar matters are gradually added.

"4. That the liquor amnii continues to be swallowed by the fœtus up to the time of birth; and, consequently, after the formation of those matters, and their appearance in the stomach.

"5. That the mixture of this more solid and nutritious substance with the liquor amnii constitutes the material submitted to the process of chymification in the fœtal intestines.

The opinion that the fœtal chyle is principally formed from these matters, however, by no means implies a supposition that the nutrition of the fœtus is thus accomplished. For the actions which proceed in the chylopoietic viscera of the fœtus are, I imagine, chiefly useful from their gradually preparing the different organs for the important functions assigned to them in the economy of the mature animal; whereas the nutrition of the fœtus is undoubtedly effected by its placental vessels, the venous capillaries of which (or, to speak more correctly, the streams traversing them) possess an absorbing power precisely similar to that of the mesenteric veins. And as a portion of the fœtal blood, charged with the albuminous substance there absorbed, after passing through the umbilical vein, circulates in the bloodvessels of the liver, the presence of an albuminous fluid in the hepatic duct, as noticed by Drs. Lee and Prout, is by no means inexplicable. Viewed in this light, the umbilical vein of the fœtus will answer to the mesenteric veins of the adult, while the ramifications of the hepatic duct, in addition to their ordinary function, may be considered as, to a certain extent, representing the lacteals.

# THE LANCET.

LONDON, SATURDAY, FEBRUARY 20, 1847.


Our readers will have seen, in the first pages of the present number, the important report of the proceedings at the late special general meeting of the Royal Society. The charges of misgovernment of the Royal Society, within the record of the meeting, long pressed in the pages of The Lancet, have now been transferred to the rooms of the Society at Somerset House. The profession has seen in what lame and impotent modes the parties accused have defended themselves, in the arena afforded by the press: the profession may now see that when the same charges are made face to face with the parties concerned, the rejoinder is equally lame, equally impotent. We could desire no better vindication than this, if vindication were necessary, for the course we have pursued upon this most important subject.

Every fact was re-stated, every charge re-urged, against the Committee of Physiology, and the President, Secretaries, and Council, for the irregular and illegal award of the Royal Medal in Physiology for 1845. The President partly admits that the award of the Medal in question was in open violation of the regulations of her Majesty the Queen, for the distribution of the Royal Medal, which requires that the paper to which the medal is given must first have been inserted in the *Transactions*, and promises that the regulations shall be better observed for the future. The only excuse offered was that made by Mr. Christie—namely, that other medals had been before given in the same illegal manner. The question was raised of the legality of the meeting at which the award was first recommended, and Mr. Lawrence emphatically declared, that the meeting was dissolved by him before he left Somerset House. Mr. Christie attempted to turn the dissolution into adjournment, but Mr. Lawrence again repeated—"I dissolved the meeting," leaving the senior Secretary, Dr. Roget, the Secretary of the Physiological Committee, Mr. Bell, and Dr. Todd, the chairman of the surreptitious meeting held after the dissolved meeting of the legally constituted Committee, without a word for their defence. Thus, then, the truth of the two points urged against the officials, and so long denied—namely, the irregularity of the meeting at which the first recommendation for the award was made, and the illegality of the final award, —stand fully and irrefragably proved.

There was one point in the conduct of the Marquis of Northampton at the general meeting, alike discreditable to his presidential and aristocratic rank. This was, the eagerness with which he seized upon the difficulty raised by Mr. Stephens respecting the length of time which had elapsed between the award itself and the special general meeting for considering its legality. The Marquis well knew, when he seized upon this straw, that the delay in calling the meeting arose from the delay of the Council in printing Mr. Beck's paper after the illegal award of the Medal, and the long vacation of the Society. Without the paper the case was not complete, and the paper did not appear in print till the middle of 1846; and in the month of June, 1846, the Society fell into its annual sleep from June to November. The Marquis also professed a difficulty, owing to the disappearance of the Council which awarded the Medal. He was obliged, he said, to take the whole blame upon himself and the senior and junior secretaries, as the only members of the former Council now members of that body. We are able to reply, that when the illegality of the proceedings was first urged, he (the Marquis) expressed his willingness to take the acts of the Council upon himself; and therefore he has no right now to plead it as a burden. Furthermore, though the Council as such has disappeared, do not the members of it still exist as fellows of the Society, and can they escape from the responsibility of their public acts? Suppose an ex-Minister were to plead in Parliament his non-existence, and the entire irresponsibility of himself and colleagues, because they were no longer a Ministry. Equally ridiculous is the attempt of the Marquis to ride off from the field safely upon the defunct Council. Credit also was taken for the promptness with which the repetition of the illegality was provided against by a minute of the Council, explaining that they would henceforth observe the letter and spirit of the regulations; and this credit is embodied in the resolution passed by the meeting. This is as hypocritical as the rest. The Marquis and his Council refused again and again to move a step when urged to do so privately. It was not until the denunciations of The Lancet reached his ears that he bethought himself of setting the Society right for the future. The regulations were ordered to be enforced, not by a sense of justice, but by a dread of public odium. The Marquis complains bitterly of the misrepresentations of the press. We are now able to aver, that in all we said of the reform of the Royal Society in The Lancet of Oct. 10, 1846, was substantially correct, even to the proposed resignation of the President. The first moiety of the reform, which we then announced for the first time, has been notified in the daily papers of the present week, as the following extract, now going the round of the press, will show.

"*Important Changes in the Royal Society.*—For some time the Council of the Royal Society have discussed the desirability of altering the mode of electing fellows, with the view of limiting the number of new members to be annually admitted, and preventing the introduction of persons whose claims are trifling; and they have at last come to the following resolution on the subject:—After the commencement of March next, as we understand it, there will be but one election, of fifteen fellows, in the year; the first being in March, 1848. The names of the candidates will be suspended the whole year; and just preceding the election, a list of all candidates will be sent to every fellow, together with the names of fifteen recommended by the Council for election. It remains to be seen whether or not the members generally approve of this plan, or even will acknowledge the right of the Council to make this change, without first appealing to a general meeting."

So much for the contradiction of our statements by the President of the Royal Society. If there existed, in this country, the usage which prevails in Spain, of giving titles in accordance with the mental qualities of the wearer, we should know what description of title the Marquis of Northampton would deserve.

Other points came out in the discussion, of which we had not formerly taken notice. The most important was the fact, that the Council had actually erased minutes which would have been condemnatory of themselves, from the archives of the Society, and it was attempted at the meeting to foist a false minute upon the Society in place of that which had been erased. This is in perfect keeping with other acts which we have exposed, such as the substitution of a false report; the holding illegal meetings of committees; the award of medals

in direct violation of the statutes and the regulations accompanying their foundation: and the insertion of papers in the *Philosophical Transactions* which have never been read to the Society, or approved by the Council. All these things are true, and will long distinguish the marquisate of the Royal Society. The proceedings are all of a piece; and we may mention one other illustrative fact. By referring to the minute of the proceedings on the 27th of Nov. 1846, it will be seen, that, among others, two papers were put up for competition for the Royal Medal in Physiology: one by Mr. ERASMUS WILSON, "On the growth and development of the epidermis;" the other by Dr. LEE, a supplement to his paper on the nerves and ganglia of the uterus.

Now, of these two papers thus put up for the medal, the one by Mr. ERASMUS WILSON had positively been previously blackballed on the question of publication; the other by Dr. LEE had been read, but never referred for the question of publication until this same meeting. Thus, at one and the same sitting,—for a medal to be given for papers already "*inserted*" in the *Philosophical Transactions*, they give the medal for Mr. BECK's paper, which had never been read or seen except by the secretaries and Drs. TODD and SHARPEY; another paper is first blackballed, and then put up to compete for the medal; and a third is put up for the medal, and immediately afterwards they gravely inquire whether it is worthy of being printed or not. Truly, "the force of folly could no farther go;" and we ask—Ought the honour of the Royal Society to be longer left in such incapable hands? Two points arose during the meeting, which were immediately suppressed by the President. One was the declaration of Mr. BABBAGE, that the two first Royal Medals had been given wilfully in contravention of the regulations, and that the Council had refused all inquiry and redress. To this point we may add, that in the course of our investigation of the subject, we have shown that the Royal Medal for 1836 was given illegally, and that in the presentation of this medal to Mr. NEWPORT, his Royal Highness the Duke of SUSSEX was made to tell a positive falsehood,—to assert that a paper had been published when it had not been so. Though the subject was stifled at the meeting, Mr. BABBAGE owes it to the Royal Society and to himself to produce the proofs of these transactions. The other point was the declaration made by Mr. WHARTON JONES, in his most able and lucid exposition of the case, to the effect that the report of Drs. SHARPEY and TODD referred to topics which were actually not contained in the original paper, and that it was otherwise inconsistent with fact. This declaration was protested against by Dr. TODD and Dr. SHARPEY; but a simple protest will not be sufficient; the matter must be probed and sifted to the bottom.

The special general meeting, of which we this day give the first full account, cannot fail to exert a great influence upon the future career of the Royal Society. It will be a fight-mark in its history, to which all those who may be aggrieved for the future can look with confidence. It gives the Royal Society a new Charter—a new vitality; the charter of publicity and free discussion, more powerful for good than any charters it can ever obtain from kings or princes—a charter which changes the constitution of the Society from an irresponsible oligarchy to that of a free republic. It is the first time the Royal Society has ever been brought successfully under the influence of public opinion—an influence from which it can never escape for the future. This is that charter for well-doing which so healthily pervades all our great institutions, and which has now been introduced as a new element into the first scientific body in the empire. Out of evil cometh good. And this good could never have come to pass in our day but for the imbecile and fatuous persons whom chance, rather than desert, has placed at the head of the Royal Society. Science owes as much to their weakness as to their wrong doing. If they had but held their tongues and pens, our philippics would have been in vain. But they came to the toils one after another; Dr. ROGET, Mr. CHRISTIE, Mr. BELL, Mr. NEWPORT, Dr. TODD, Dr. SHARPEY, and lastly, the MARQUIS OF NORTHAMPTON himself, each supplying some clue to the establishment of the case against them collectively, until at length they are brought to an account before a public meeting of the Society at large, with the proofs against them so strong and damning, that they are forced to submit to a resolution, confessing freely, and without any attempt at justification, the gravamen of the indictment which had been laid against them. No flippancy of behaviour can carry them over this fact.

The meeting may be said to have done all that it could do. It has condemned the legality of the award of the Royal Medal in 1845; it has discussed the extraordinary circumstances under which the award was made. The aim of all has been, not to injure, but to purify and defend the Society from its own natural guardians. The meeting had no power to rescind any of the acts of the Council, neither has the Council itself any such power. That power is left to the Visitors of the Society, established by charter in the reign of CHARLES the Second; such Visitors consisting of the Lord Chancellor, the Archbishop of York, and the Secretaries of State. These will forthwith be appealed to, and with a vote of the Society at large against the alleged and proved illegalities, the issue can hardly be doubtful.

But such being the admission of the President, and the deliberate vote of the general meeting, what becomes of the scientific value of the Medal for 1845. No man of spirit would keep a medal for a day, the award of which has thus been declared accidental and illegal.

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THE Oration delivered at the College of Surgeons, on Monday, by Mr. GREEN, was lengthy, metaphysical, and Coleridgean, rather than Hunterian. Politics were eschewed, so almost was HUNTER, and so we might say were Medicine and Surgery. To those who delight in disquisitions and nice distinctions, the Oration commends itself as good. To those who can only bear a modicum of airy speculation to earth-born common sense, it must have appeared tedious and wire-drawn. Probably Mr. GREEN may heartily despise the latter class of hearers, but certainly, in a mixed assemblage, we think the subjects handled in the lecture might have been treated so as to bring them more home to the business and bosoms of the auditors. Mr. GREEN certainly did not present his hearers with the points of character possessed by JOHN HUNTER for surgical acumen. He would evidently not like a race of surgeons formed after the Hunterian model. With a due assertion of the rights of original genius, and a due respect for extra-professional acquirement, we conceive Mr. GREEN pitched his delivery in too falsetto a key. According

to him, the surgeon should be an epitome of all the knowledge which has ever been since the world began. He must be great at every point, from a philosophical knowledge of A B C, to the highest touches of university education. He must not only be a member of the College of Surgeons, but a member of the National Church; he must not only be conversant with the constitution of the animal man, but he must reverence our glorious constitution in Church and State. To amputate, he must not depend upon such dexterity as a Brodie or a Liston may boast, but he must study the Torso and the Laocoon. In fact, none but a race of surgical Crichtons would satisfy Mr. Green. This is all very well for Utopia, but hardly stands the tests and shocks of this working-day world. At the same time that we make these necessary strictures, we are bound to admit that the Oration was throughout delivered in choice and even eloquent language, in a voice and with a manner such as are not often seen in medical oratory, so that the delivery must have been gratifying to many of the audience.

We should observe that at the doors of the College a porter with some of the Zoistical trash, in the form of pamphlets, published by Mr. Bailliere, was placed, to insult those who passed, by the distribution of a few miserable pages teeming with quackery and the vilification and abuse of professional men. The bad taste of publisher or author must have disgusted all who had the trash thus thrust into their hands like the bills of Moses and Son at Exeter Hall, or like the obscene announcements of the quacks upon the foot-pavements.

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A fussy outcry has been made respecting the appointment of Mr. Paget to the Professorship of Surgery at the College of Surgeons. The chief objection is, that Mr. Paget is an anatomist and physiologist, rather than a practical surgeon. It is somewhat odd, that, in an institution the chief honour and ornament of which is John Hunter, any objection should be made to physiology. The very foundations of British surgery as a science was laid by John Hunter in physiology, who, though great in surgery, was far greater in physiology, and we are deceived if it will be found injurious to the present race of surgeons to recal to their minds the true foundations of all surgery. To do this no one can be better qualified than Mr. Paget. In many departments which we could point out, surgery and surgical pathology have been suffered to run behind physiology. Let Mr. Paget remedy this evil, or even take a step towards it, and his professorship will not be below that of his predecessors.

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In a recent trial at Westminster Hall, involving the liability of members of railway provisional committees, it was attempted to prove that, because the names of certain parties had been published as professional committee-men of a proposed railway, they were therefore actual members of the said committee, and responsible as such. The trial took place before Lord Chief Justice Wilde and a special Jury, and Sir Thomas Wilde, in refuting the assumption, used the following illustration, upon which we propose to make a brief comment. He held that the mere publication of their names

"Was not sufficient evidence to fix the defendants with having individually sanctioned the contract. It could not be assumed that the defendants were members of the managing committee of the company from their not contradicting an advertisement. An advertisement was before him in which he found himself and several gentlemen of the bar advertised as having taken "Cockle's Pills" with great benefit, and bearing testimony to that effect. (A laugh.) Now he never took any of "Cockle's Pills," and that advertisement must not be assumed to be evidence of a fact against him because he did not contradict it."

It is scarcely worth while to remark on the lying advertisement of the quack pill-monger, further than to observe, that he ought forthwith to be drummed out of the profession. It only affords a specimen of the mildest forms of deceit resorted to by quacks to further the sale of their nostrums, and places a person claiming to belong to the medical body in the same category with Holloway and Morison.

But we think the Lord Chief Justice might have looked at the subject in another light, than as merely affording a jocular illustration of a legal point. We would submit to his lordship, as one of the appointed fountains of law and justice—Is it becoming to his high station to state that he knowingly permits a quack to forge his name and use it as a decoy to the public, without attempting in any way to prevent it? We would ask—whether the selling of a quack medicine by the aid of his lordship's name falsely and fraudulently used, be not obtaining money under false pretences?—and whether he does not, in suffering the matter to continue without any attempt at prevention, become, morally speaking, a party to the fraud? As long as Sir Thomas Wilde remained ignorant of the false use of his name, the case was different, but we think a responsibility rests upon him to prevent such a matter, when he states publicly that the dishonesty comes within his cognizance. It is not merely the mischief which may be inflicted by the antibilious advertisers of false testimonials, but any single tolerance of such an evil extends its support to the whole system of lying, fraudulent, and murderous quackery. To go back to the point which called forth the illustration, would not the persons falsely advertised upon railway committees have their remedy, and would they not use it against those parties who had by a falsehood attempted to put their property in jeopardy? How much more ought a judge, then, to interfere, if not to vindicate himself, at least to defend the public in a matter not involving mere property, but health and life!

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## COURT OF EXCHEQUER,

*Westminster, Feb. 11th, 1847.*

### Wakley, M.P., *v.* Cook and Another.

The Attorney-General and Mr. Bramwell appeared for the plaintiff, and Mr. Cockburn and Mr. Lush for the defendants.

It will be remembered that an action was tried in June, 1845, in which the plaintiff charged one of the present defendants with having published a libel on him, in a pamphlet of which the defendant was the editor and proprietor. The plaintiff in that action obtained a verdict for £150 damages, and the payment of the costs of the suit. The action tried on Thursday last was for the re-publication of the same libel, and for other libellous matter, in the form of comments arising out of the first suit.

The Counsel addressed the Court in brilliant speeches, and after a lucid charge from the Lord Chief Baron, the Jury returned a verdict for the plaintiff with £175 damages. This verdict also throws the costs of the suit upon the defendants.

## A DRAMATIC SKETCH.

No. III.

ADJOURNED DEBATE AT ———.

*Mr.* ——, (*the Stranger.*)—Mr. President and Gentlemen, I now rise to redeem my pledge to bring before this Society the subject of Dr. Marshall Hall's splendid and useful discoveries,—for they are both. I shall scarcely advert to the writings which originally and, as you know, so deceptively, first drew my attention to this subject. The Editor of the Review in which these writings are to be found, has been out-Whytted, and he has now found that his Prochaska will serve him as little as his Whytt. (I beg pardon for a pun.) The medical public have learned how much credence may be attached to writings of this character, under the existing *régime*, and are disgusted. I trust much good will arise out of facts so glaring. But to my important topic—a topic which, whether I regard it in a physiological or a practical point of view, is equally fraught with interest and utility. The first aspect under which I would beg to present the subject is one of ANALYSIS. As the chemist takes up an ore, supposed to be well known, and, subjecting it to analysis, finds it to contain precious metals, gold, platinum, and silver, of the existence of one of which, the second, (the most useful in the arts,) no suspicion previously existed; so Dr. Marshall Hall, by a refined analysis, detects and singles out, in that organ which was formerly designated the cerebro-spinal axis, or the spinal marrow, a new element, not known, not suspected before. Gentlemen, let this idea take deep root in your minds, and the rest will be easy. A new element is discovered, existing within the spinal canal; all is not a mere cord of cerebral nerve and ganglionic connexion; intermediately between these two is the true, the real SPINAL MARROW, the axis, or centre, of a system of true spinal nerves, as distinct from the cerebral and ganglionic as these are from each other. If, in a frog, we remove the brain, we remove the very centre of the cerebral system. There is henceforth no sensation, no volition, consequently no perception or voluntary motion. If, now, we remove the viscera, there is no ganglionic system, nerve, or function. Is this obvious? Does, then, nothing remain? Certainly: there remains the true spinal system: the cerebral and the ganglionic having been removed, this is still left in all its energy. It is the platinum discovered in the ore of gold and silver. This spinal centre, this true and real spinal marrow, was hidden amidst the meshes of the intra-vertebral cord of cerebral nerves, and the intra-vertebral connexions of the ganglionic system—a labyrinth, the thread to the intricacies of which we owe to Dr. Marshall Hall. As the spinal centre, (cerebro-spinal no longer,) so the special spinal nerves were so mingled with the cerebral and the ganglionic, that they were equally undetected. It is to the same physiologist and physician that we owe the discovery of a distinct and special system of incident and reflex nerves, in essential and special connexion with their own peculiar centre, *the* spinal marrow. With this spinal system —this special centre, and its incident and reflex nerves—are associated a special source and mode of action, and a special series of functions. The source of action which is designated *excito-motor*, is the *vis nervosa* of Haller, acting according to newly-discovered laws, modes, or forms, which are designated *reflex*. In this manner the spinal system is the special nervous system in *all* the *acts* of ingestion, egestion, retention, and exclusion, in the animal economy, and consequently of the preservation of the individual, and the perpetuation of the species. This system borne in mind, we have, further, a bright light guiding us in the diagnosis, and consequently in the practice, in the important class of the diseases of the nervous system. What shall I say of those who meanly attempt to derogate from the merits of this discovery! Nothing! I leave them to the scorn of the well-informed of their professional brethren. (*Sits down amidst the cheers of the Society.*)

*The Young M.D.*—Sir, I flatter myself that I have done some service to the cause of science, of physiological science in particular, by calling Mr. ——'s (*our Stranger*) attention to this subject, as I did at our meeting a month ago; and I beg to thank him (whilst I congratulate myself) for the luminous, though brief, view he has given us of this extraordinary discovery. It does not often happen that there is a new and most important organ, a new and most important system, to discover; yet such have fallen to the lot of the discoverer of the spinal system. On a former occasion, I commented severely on the conduct of the editor of the *British and Foreign Medical Review*,—some here thought too severely. But, Sir, no one thinks so now. And as the name of Gooch is for ever sullied by his unjust attack on a professional brother in that day, the late Dr. Burrows, so, I will say, is that of Professor Alison, not to mention others, for their attacks on our present author. Nothing but a frank and open reparation of the wrong *he* first committed on Dr. Marshall Hall in that Review, can save his name from an unenviable stigma.

*Mr. P*——. Mr. —— (*the Stranger*) has asserted that these new views of the nervous system assist us in the DIAGNOSIS of its diseases. May I ask him for an illustration of his meaning?

*Mr.* ——, (*the Stranger.*)—I gladly respond to the call upon me. I should have given this explanation before, but was afraid of occupying too much of the time of the Society. Let us suppose a case of hydrocephalus. The first symptoms (if well observed) are cerebral. We have only to think over the anatomy and physiology of this system to pursue our inquiries. The *second* symptoms belong to the spinal system: strabismus, spasm of the fingers and toes, affections of the respiratory function, convulsions, &c. The *third*, the condition of the pulse, the stomach, the intestines, the secretions, &c., belong to the ganglionic system. Now these distinctions are, being transferred to diseases, their kinds, their grades, diagnostic in themselves. As in hydrocephalus, so in severe hemiplegia, the question is, whether, with the cerebral functions, the spinal are affected; and whether this affection be transient or permanent; for in the ratio of these facts is the degree of the disease, and of the danger. So of epilepsy, and of the convulsive diseases of infants. The primary affection is one of the spinal system. In what degree are the cerebral and the ganglionic involved in the individual instance? These and a thousand other facts of the same kind, of immense value, show the importance of the detection of the spinal system, and its severance from the other two divisions of the nervous system, in diagnosis, in prognosis, and in practice generally. I now scarcely see a patient without gratefully calling to mind my obligations to *the discoverer of the spinal system.* Something of this sort, generously said Professor Sharpey, years ago; and so will the whole profession say, when the cloud of dust which has been raised is dissipated, and each one has become able and willing "to look through the telescope." I trust some good will have been achieved by this discussion. Nay, I have a further hope that the profession will not much longer delay some expression of its approval,—some act of tardy justice,—as some reparation of injury inflicted by the Royal Society, and a series of disgraceful articles in the *British and Foreign Medical Review*, begun, as I have said, by Professor Alison, and extending over a period of no less than ten successive years! These things have reached their climax. The profession will endure no more!

*Mr. P*——. May I be allowed, Sir, to ask Mr. —— (*the Stranger*) whether Dr. Marshall Hall fairly quoted Prochaska in his works?

*Mr.* ——, (*the Stranger.*)—*Every word* of the paragraph of Prochaska, so often alluded to, is twice given; once in English, in Dr. Marshall Hall's Lectures, in THE LANCET, in 1838, and once in Latin, in his "New Memoir."

*Mr. P*——. Then I cannot imagine why Dr. Forbes did

not leave the profession to form its own judgment. What more can an author do than quote what his predecessors have done and written?

*Mr.* ——, *(the Stranger.)*—Ay! what indeed? You may well make that remark. Therefore is this Review without excuse. It is absolutely impossible to get rid of the idea of a malus animus in this matter. I will quote the journal, to which allusion has so often been made, *often years ago.*—In one and the very same number,

One writer, Professor Alison, says—

"These are phenomena to which Dr. M. Hall has given the rather uncouth name of 'excito-motory,' and which he states as the effects of the 'reflex function of the spinal cord;' a power neglected or misunderstood, as he thinks, *by former physiologists*, &c.

"Dr. M. Hall cannot be ignorant of the statements and reasonings by which Dr. Whytt," &c.

"The only truly original observations which we have noticed in the work of Dr. Hall," &c.

"We cannot admit that we owe to him the knowledge of this principle," &c.

Whilst another, Dr. Forbes, asserts—

"*We* protest (!) in the strongest manner (!) against the introduction into this work (On the Nervous System, by F. Le Gros Clark) of certain physiological views, which are anything but well established" (!) by Dr. Marshall Hall. "Mr. Clark is almost the *only* anatomical writer who appears to have received these ingenious views without some distrust of their correctness," "unconfirmed as they are by *any other physiological authority.*" (!)

"Instead of rendering the knowledge of the nervous system more intelligible to the student, it will rather tend to confound and perplex him." (!)

There is no consistency in these statements, except their opposition to a meritorious individual. Of Whytt, and of his successor, Prochaska, I have already spoken.

The history even of physiology, and of the art of reviewing, which has become the art of detraction, does not present a more sickening picture.

*The Young M. D.*—There is, I believe, but one opinion amongst us. I have therefore refrained from saying much. But now I will add my feeble testimony to the merits of the author whose great discovery we have been discussing. I will do this in a few words. First, I believe him to be the most *laborious* member in our profession,—no mean praise in itself; and secondly, I believe that no one has laboured more successfully, whether scientific or practical results be considered. Long will the history of this discovery be quoted in the annals of physiology and medicine, with little credit to our scientific institutions and literature.

*Mr. P*——. I have been much struck with the illustrations of our subject afforded by recent events; the vapour of ether seems to single out the cerebrum, as strychnine does the spinal, and digitalis the ganglionic system. Everything, now that the discovery is made, seems to add to the evidence of its truth. The physician, the surgeon, and especially the accoucheur, meet with daily facts in practice, which demonstrate, by applying to practice, the value of the doctrine.

*The President.*—I am sorry to announce that our time is expired. I think I may say that it has not been unprofitably spent. I foresee that we shall have occasion repeatedly to recur to the subject. I congratulate the Society, and beg to appoint the evening of ——— for our next meeting.

## Operations Without Pain.

### ST. GEORGE'S HOSPITAL.

Feb. 11th.—Mr. Cutler performed lithotomy on a boy between four and five years of age. The staff was introduced without the administration of ether, and during this process and the sounding for the stone the child cried loudly. The ether having been inhaled for two or three minutes, the operation was commenced, and resulted in the extraction of a calculus, rather larger than a pigeon's egg, in a short space of time, during which the little patient had not shown the least sign of feeling. Dr. Snow, who gave the ether in this and the following operation, placed his apparatus in water at 70°; but as soon as the operation of lithotomy was commenced, he partly turned the two-way tap, mentioned in our last, so as to reduce the vapour in the air respired from fifty to about twenty per cent., and the child breathed it thus diluted during the three or four minutes the operation continued. As soon as the stone was extracted, the mouth-piece was withdrawn, and the child instantly opened its eyes, and seemed revived.

Mr. Cutler, in his address, after detailing this case, stated that in two amputations at the hospital, performed recently under the influence of the ether, the usual spasmodic twitchings of the stump, which followed amputations, requiring an extra nurse to hold the limb for hours,—often all night,—were entirely absent, and no such extra attention was required.

The other operation was the removal of the female breast for malignant disease, and was performed by Mr. H. Charles Johnson. The woman inhaled for four minutes, when it was ascertained by Dr. Snow that the cap which admits air to the ether was not removed, and, consequently, she got no ether, and but little air. This was remedied, and she had the disadvantage of beginning the inhalation of ether rather out of breath. It excited some coughing, and in three or four minutes the face was becoming purple, and the pulse feeble and quick, and the features rather distorted. The inhalation was accordingly discontinued, and the operation commenced. She struggled and moaned during the operation; but at the termination of it, having recovered her faculties, she said that she had felt no pain whatever, and seemed in very high spirits.

Mr. H. C. Johnson said that this patient laboured under bronchitis, and it had been a question whether the ether should be tried. He considered that it had somewhat disagreed with her, and that the bronchitis was the cause.

### MIDDLESEX HOSPITAL.

STRANGULATED HERNIA; OPERATION; INHALATION OF ETHER TO FACILITATE THE REDUCTION OF THE BOWEL.

The following case strikingly displays the benefit which may be derived from the application of the vapour of ether for the purpose of producing relaxation of the muscles, and thus facilitating the reduction of the intestines in the operation for hernia.

Adam C——, aged sixty-six, a tall, bulky man, with "fair round belly," came here about twelve o'clock on the night of February 7th, with an hernial tumour, about the size of an orange, but more cylindrical, descending into the right side of the scrotum: it was tender, not very hard, with no impulse in coughing. The account he gave of himself was, that he had been ruptured for forty years, had always worn a truss, and never experienced any difficulty in returning the rupture, if it chanced to come down. About five o'clock in the afternoon of the day he came here, he slipped as he was walking along the street, and in endeavouring to preserve his balance he strained himself, the rupture came down much larger than on any former occasion, and he was unable to return it as usual. He called in a surgeon, who, after employing the taxis about an hour without success, advised him to come to the hospital. As there was considerable tenderness of the tumour, the result, probably, of the previous manipulation, he was at once put into a hot bath, before attempting reduction. The taxis was then used during the time the patient was in the bath, and again after he was removed to bed, but without success. A large injection was thrown up, but it returned almost immediately. During these attempts at reduction, the patient complained, not only of pain in the swelling, but across the belly, but there was no vomiting. Mr. Tuson was sent for, and having examined the patient, determined to operate, the tumour being then extremely tender, any attempt at reduction producing great pain, both within the part and across the belly. The operation was commenced about four A.M., the hernia having been down eleven hours. The skin and the several layers of fascia covering the sac having been divided, the sac itself was opened, when a quantity of dark serum escaped, and a coil of intestine was seen, much congested, of a deep port-wine colour, still retaining its natural polish, but with a few flakes on its surface of slightly adherent recent lymph. The stricture having been pretty freely divided, Mr. Tuson proceeded to return the gut, but this he found that he could not accomplish. The incision

was then enlarged, still the bowel would not pass up; but during the loud groanings and exclamations which the patient had uttered during the whole of the operation, an additional coil of intestine slipped down. Thinking that the difficulty might be produced by some obstruction high up within the canal, the knife was again used, until an aperture was made sufficient to admit of the introduction of the points of the three middle fingers into the abdominal cavity. This, however, made matters much worse, additional folds of bowel kept escaping, in spite of all attempts to prevent them, until at one time there was a quantity out fully equal in bulk to half the size of the man's head. The attempts to return this mass of intestine were continued for upwards of three quarters of an hour. At times, when he was quiet, nearly the whole was reduced; but on his again beginning to complain and bellow, it rushed out again with great rapidity. At length, when it appeared almost useless to persevere any longer, the muscles of the chest and abdomen, the muscles of expression and respiration, being thrown into violent convulsive action every time the wound was touched, and forcing out the intestines, it was suggested, that if the patient could be got under the influence of ether, the sensibility of the wound would be destroyed, and the muscles become passive. The ether apparatus was accordingly brought, and the patient began to inhale. At first, the ether produced very considerable coughing, irritation, and excitement; fresh coils of intestine protruded through the wound, and it was feared that, in spite of the pressure kept up by the operator and his assistants, the whole of the moveable viscera would have been forced out. By forcibly retaining the mouth-piece, the man was compelled to continue the inhalation, the state of excitement passed away, and he soon sunk into a kind of stupor. The groaning ceased, the muscles of the face and limbs relaxed, and the intestines were returned without the slightest difficulty. The edges of the wound were then rapidly brought together, and secured by several stitches. The introduction of the needles occasioned no symptom of pain. During the time the compress and bandage were being adjusted, the patient gradually roused, and appeared, from his answers, to have been quite unconscious of what had been done to him during the time he was under the influence of the ether. His manner was that of a man partially intoxicated. Soon after he was placed in bed, he complained of considerable pain across the abdomen. He was ordered twenty minims of liq. opii Indiensis immediately.—One P.M.: considerable tenderness over the whole abdomen; tongue furred, brown, and dry; pulse quick and small; breathing hurried, with loud mucous rattles audible at a considerable distance, (this bronchial secretion is not to be attributed to the ether, as he had long been subject to cough and spitting.) Ordered, chloride of mercury, four grains; opium powder, half a grain, every four hours. He continued to complain of great pain during the remainder of the day, and passed a very bad night. On the morning of the 9th, the abdomen was very tender, with great pain in breathing and coughing; pulse very quick and feeble; no nausea or vomiting; bowels not acted. Castor oil, one ounce, immediately; increase opium to one grain; a fomentation to the belly of fresh-boiled hops. The castor oil did not return, but the bowels were not acted on. The patient continued throughout the day to become gradually weaker; towards the evening, the mucus accumulated in the trachea so as to produce loud rattles, heard over the whole ward, and at a few minutes past ten P.M., he expired, forty hours after the operation.

The body was examined the following day, fifteen hours after death. On removing the stitches which united the edges of the wound, and opening the sac, four or five folds of small intestine, with the appendix cæci vermiformis, were found in it, all closely united to each other, and to the sac, by recently effused lymph. These portions of the intestinal canal were not strangulated, there being free communication between the sac and the cavity of the abdomen, through the wound made in the abdominal parietes. The incision made for the purpose of dividing the stricture, and removing any obstruction to the return of the intestines, was full two inches in length, and had divided the tendon of the external oblique, the lower border of the internal oblique and transversalis muscles, and a layer of fat and peritonæum. The epigastric artery passed on the inner side of the incision; the peritonæum was inflamed throughout its entire extent; the small intestines, extremely vascular, were covered and glued to each other by recent lymph; they were also remarkably distended with air. One portion of the intestine appeared to have been the part that had been strangulated, was small in calibre, and rather livid. The omentum was natural in appearance, but rather short; the cæcum was loose in the iliac fossa, and hung towards the ring; the appendix vermiformis was somewhat larger than usual; the kidneys, small and granular, contained much fat around the pelvis; the spleen was united by old adhesions to the diaphragm; the heart was healthy; the lungs the same, with the exception of a little œdema and congestion of their posterior surfaces; the trachea and bronchi contained some mucus, but there was no unusual vascularity of their lining membrane; the other viscera appeared healthy.

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DISLOCATION OF THE SHOULDER, BENEATH THE PECTORAL MUSCLE; REDUCTION, AFTER THREE WEEKS, UNDER THE INFLUENCE OF ETHER.

A tall, stout, healthy-looking farmer, about fifty, came here with a dislocation of the right shoulder, which had existed for three weeks. He had been attended by some practitioner in the country, who had treated it as a bruise. The nature of the accident was afterwards detected by another surgeon; but as he could not succeed in reducing it, he came to London, and was advised to come here. As the patient complained greatly of the pain he had experienced in the previous attempts at reduction, it was determined to put him under the influence of the ether, not only with the view of preventing pain, but of facilitating the reduction of the bone, by causing muscular relaxation. The patient was seated on the ground, against a wall, to which he was fastened by a round towel, attached to a staple. The pulleys were then fastened to the arm, and the inhalation was commenced. He coughed a good deal at first, and began to be affected after breathing for about five minutes; but it was considered advisable to get him fully under the influence of the ether, to continue for some minutes longer. Extension was then made, and the bone was found rapidly to be drawn down, much more so than could have been expected under ordinary circumstances. Considerable difficulty was experienced in getting the head of the bone over the edge of the glenoid cavity; but after repeated attempts, it was felt to slip into its socket, about five minutes after the extension had commenced. When the extension was begun, and for some time afterwards, the patient made no complaint of pain; but just before the bone slipped in, he uttered loud groans, and said afterwards that he had experienced considerable pain at that time, but during the first part of the operation he had felt none, but merely a "numbing" sensation, very different from the suffering he had experienced during the former abortive attempts at reduction. It should be stated that the patient ceased to inhale some time before the bone was reduced, as the apparatus was found to be in the way of the surgeon. No inconvenience was experienced from the prolonged inhalation of the ether, beyond a slight feeling of intoxication.

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REMOVAL OF THE TOE-NAILS UNDER THE INFLUENCE OF ETHER.

A youth, aged seventeen, was admitted with painful ulceration of the skin along the inner border of the great toe-nails on each foot. On being told that the nails could be removed under the influence of ether, without giving him pain, he consented readily to the operation; but as soon as he began to inhale the ether, he altered his mind, declaring that it was so disagreeable that he would rather leave the hospital. As it was found impossible to reason with him, he was allowed to go. He soon, however, returned, and begged to be again taken in. This was agreed to, and the operation was performed the following day. The patient being seated in a chair, the mouth-piece was adjusted; but after taking a few whiffs he again seemed disposed to start off; partly by force, and partly by persuasion, he was induced to continue. After inhaling for about four minutes—during the first part of the time very imperfectly—he appeared fully under its influence, and the operation was rapidly performed by Mr. Shaw on both feet, by slitting up the nail with a pair of pointed scissors, and tearing off each lateral half. During this most painful of operations, the patient did not evince the slightest symptom of suffering, the muscles of the face and limbs were in perfect repose, and not the slightest cry was uttered. Almost immediately after the operation was completed, and the mouth-piece removed, the lad started up, looking round with a merry, animated expression, his face being flushed, and his manner much excited. He began talking with the utmost volubility about the operation, declaring that he knew what had been done, but had felt no pain. He repeated, also, some observations which were made during the time he was inhaling. Suddenly his manner changed, his countenance and action

expressed extreme suffering, and he complained loudly of great pain. An opiate was offered, but this he refused to take on account of the taste. In a short time his manner again altered, he declared that he felt no pain in his feet, and wished to prove this by dancing the polka. As this was not allowed, he was obliged to content himself with whistling the tune, which he did most lustily, as he was being carried along the passages to his ward, gesticulating at the same time with his arms and legs. In a short time this state of excitement passed off, and he resumed his usual quiet, respectful manner. There was no return of pain, merely a feeling of soreness.

### AMPUTATION OF A FINGER UNDER THE COMBINED EFFECTS OF ETHER AND OF INTOXICATION.

A hale, hearty-looking countryman came to the hospital on the evening of Feb. 3rd, with the whole of the skin and tendons on the back of the forefinger of the right hand shaved off by a chaffcutting machine down to the bones, along the whole extent of the phalanges, to the root of the nail; a portion of the upper surface of the bones was also sliced off. As it was considered that the finger would always be useless, its removal was suggested to the patient. He consented, on being told that it could be done without giving him pain. He had evidently been drinking, but could not be said to be absolutely drunk. The ether apparatus was adjusted, and he began to inhale, but in a short time he became sick, and threw up some stuff smelling strongly of rum. The mouth-piece was readjusted, but he was again sick. Still the inhalation was persevered with. The patient was for some time rather boisterous and difficult to manage, but the apparatus was kept closely applied to the mouth. After continuing the inhalation for some time, the sickness having ceased, he appeared fully under the influence of the ether; the eyes were fixed, and the pupils dilated, but the fingers were rigidly contracted. At this time, the sensation of pain was almost, if not entirely, abolished, as there was scarcely an attempt to withdraw the hand when the point of the scalpel was thrust into the finger. The inhalation being continued, the muscles in a short time became relaxed, and the operation was commenced. Before the first incision was half completed, the patient began to bellow loudly, to kick out with his legs, and to toss his hands about in a most violent manner, so that it was with great difficulty the finger was removed at the metacarpal articulation. He became much quieter during the time the head of the metacarpal bone was being cut off; and by the time the arteries were secured, he was perfectly tranquil. When he had somewhat recovered from the kind of stupor in which he appeared to be after the violent stage was over, he was asked if he would consent to the operation being performed, to which, after a little blubbering, he consented. When told that it had been done, he would not believe it until the finger was shown to him, declaring that he had felt no pain. No ill effects resulted from the double intoxication. The man appeared quite well the next day; and on dressing the wound on the third day after the operation, it was found almost entirely healed by the first intention.

## BLOOMSBURY DISPENSARY.

### REMOVAL OF THE TOE-NAIL.

By G. L. Cooper, Esq., F.R.C.S.E.

Frederick L——, aged twenty-three, an attendant at the British Museum, was admitted Feb. 5th, under my care, as a patient at the Bloomsbury Dispensary, with a fungoid swelling of the tissues adjoining the nail of the great toe of the right foot. Its appearance was irritable, discharge sanguino-purulent, and general character unhealthy; the toe was much swollen, and pain intense. Considering the case to be one of irritation, occasioned in the first instance by the pressure of a shoe, and secondly, by the sharp edge of the nail extending into this angry tissue, I recommended a soothing treatment, with constant rest, and determined in the course of a few days to submit my patient to the inhalation of sulphuric ether, and to extract the nail from its attachments. Having requested the presence of my colleagues, Dr. Rowland and Mr. W. Lloyd, we met by appointment at the patient's residence this afternoon; and under the administration of Mr. Ghrimes, dentist, of Baker-street, whose compact and excellent apparatus was used, in the course of six minutes its influence was duly proved, when the operation was performed without delay. He remained in this state during five minutes, at the expiration of which, on awaking, he expressed much astonishment on hearing that the operation and dressing of the wound were completed. He was happy, and told us he had not experienced the slightest pain. The pulse, during the inhalation, was at 96, and fell, on restoration to his senses, to 74.

I need only add, there were two gentlemen, strangers to me, in the room during the operation, both of whom fully coincided in our opinions that the desired effects were produced, and results most satisfactory.

# Correspondence.

## THE CORONERSHIP.

### MEDICINE *versus* THE LAW.

*To the Editor of* The Lancet.

There are two professions, which the natural tendency of man to sin, and his destination to endure more or less of corporeal suffering on this earth, have called into existence—those of law and medicine; both indispensably necessary, both far, very far, from having attained that degree of excellence and immunity from error to which by this time they should have reached, and both alike requiring to aid in their advancement an intimate acquaintance with a wide range of collateral sciences. One would suppose that these honourable and useful vocations were sufficiently distinct, that there should be no debateable ground on which their respective disciples should assume an hostile position towards each other, in lieu of being unitedly engaged in advancing the great objects of human comfort, security, and improvement. Yet, unhappily, such an arena is found in the coroner's court, the presidency of which is challenged by either profession with a degree of confidence and pertinacity which renders the inquiry, as to which is the better qualified to provide magistrates of this grade, both interesting and important. The lawyers say, with truth, that it is only within these few years, that this invasion on what time-honoured custom had apparently constituted privileges peculiar to their order, has been projected by medical practitioners. This we readily admit; for it is only within the last few years that the rapid progress of medical science has contributed to the placing in a more prominent position the glaring incompetency of legal coroners to fulfil the duties of this important office. To legal candidates for this appointment I would say—Examine honestly and minutely the duties of a coroner; observe the sciences which are principally in requisition during the inquiry; and then if it can indeed be shown that the ends of justice would be any degree advanced, or her sword directed with a surer aim on the neck of the guilty, by the resignation of this office to a class of men whose professional studies qualify them in a particular and eminent degree for the adequate performance of medico-legal investigation; if that neglected branch of our national law, to which the hybrid term of medical jurisprudence has been assigned, could be advanced, and made somewhat less of a reproach than it at present is to both professions; if, I say, these great ends would be the fruit of relinquishing the office of coroner to the medical candidate, would the honourable legal aspirant for a single instant think of frustrating them merely for the sake of the honour and slight emolument which may be attached to the appointment! Certainly not.

But let us examine a little more minutely into the nature of the acquirements indispensable to a due performance of its functions. Undoubtedly, men should be expressly educated effectually to fill this position in life, and of this education I confidently assert that nine-tenths, at least, of the instruction required must be sought in schools of medicine; the slight remaining legal portion might be, with the greatest ease, at the same time acquired. Such an education would require an intimate acquaintance with natural and pathological anatomy, physiology, chemistry, animal and toxicological, surgery, obstetric medicine, natural physiology as applied to the detection of infanticide, and, in short, the whole circle of medical science. All the legal lore requisite would consist in the ability to swear a jury, examine the witnesses, draw the line between the guilt or innocence of the prisoner, define the degree of the former, and to be careful that the jury return just such a verdict as the subsequent investigation (should any take place) may confirm. And in these last duties, common sense, and a mind possessed by principles of equity, will be safer guides than the most subtle knowledge of the labyrinths of the law can ever prove. Until, however, men are expressly educated to this end, coroners must be chosen from one of the professions. Let us inquire which curriculum of study approximates most closely to the imaginary standard we have erected of a coroner's education. Suppose two young

men are entering, the one, the surgery of a medical practitioner, the other, the office of an attorney; during the five years it was customary for them to pass there, what opportunity had the latter of touching on any of the subjects we have enumerated? The other, on the contrary, falls at once to work on the dead body, either actually or through the media of engravings and books—poisons and their effects come daily under his cognizance—wounds are almost constantly under his observation and treatment—death, in all its various forms, natural or violent, becomes familiar to him—he is taught to investigate, with conscientious accuracy, symptoms on whose judicious treatment life may almost daily depend—and his whole education, in short, is just such as, at its close, would enable him to approach a body, the subject of a judicial inquiry, and by his own unassisted skill and judgment declare and demonstrate the cause of death. Is not this, then, a proper man to preside over such an inquiry? Turn we now to the law student. His profession is notoriously, at the outset, dry, mechanical, and, to many minds, still more disgusting than the more palpable offences to which the medical student has to accustom his senses. The legal profession, moreover, from the perpetual changes to which it is liable by the renewed enactment of some, and the repeal of other statutes, requires every hour of the time allotted to probationary studies, so much so, that lawyers who have not to accuse themselves of any waste of this period, are still constrained to admit that they commence practice under a deep sense of their inadequacy to advise on many cases respecting which they may possibly be consulted. Their peculiar studies are, indeed, most abstruse, and though the law passed in 1733, enacting that the English tongue should henceforward be employed in legal pleadings, materially reduced the amount of labour required of them; still it appears to me an acquaintance with the Latin and Roman dialects formerly in use, is still essentially one of the accomplishments we should expect to be possessed by a thoroughly educated lawyer. That this, which may be considered peculiarly the classical department of their studies, was neglected, to the greatest extent, is proved by the barbarous Latinity which is to be met with in legal documents, such as—

"Totos meos barnos, stabulos, et outhousas,"

uncouth expressions, which were happily ridiculed in a play which, with the audiences it once delighted, has long since been forgotten:

"Commensabo actionem contra omnes et singulos. Et habebo pinguia damagia: Et trounsabo vos, ut homo nunquam fuit trounsatus in toto mundo. Debit enim surgere per tempus, qui me decipit!"

Jesting apart, I should have but a poor opinion of the lawyer who could not decipher and translate at sight any legal instrument, sufficiently legible, written in these languages, and in which the titles to most of the old hereditary estates are drawn.

Again: there is an art, (for, in deference to the spirit of the times, I will not call it a science,) termed Heraldry, of vast importance some two centuries since, and occasionally not to be despised even in the present day; for on the few faint, time-worn lines, emblematic of its quaint devices, traced dimly on the crumbling wax of some mouldering deed, have depended ere now many a heavy coffer, broad acre, and lordly hall. Moreover, is the study of architectural or monumental antiquities not necessary to a good lawyer? Have we not read of the fame and fortune which attended one who, having fortunately cultivated such inquiries as these, had his attention attracted to a nearly obliterated sepulchral inscription, of which the

"Orate pro anima"

was all that apparently remained to indicate the resting-place of a body long since mouldered to its native earth. Stimulated by curiosity at first, and subsequently by a more interested motive, he pursued his investigations, removed the moss with which time had choked up the former portion of the inscription, and supplied the one link wanting to complete a chain of testimony which transferred a coronet, and its accompanying ancestral wealth, from an usurper to its legitimate claimant.

Such, I humbly submit, are a few of the inquiries with which every lawyer should be familiar; and when he has become so, and mastered thoroughly his own profession, let him ask himself whether he is prepared to sacrifice the ten years it would be necessary for him to devote to the acquirement of such an amount of medical knowledge as would justify him in venturing on the adjudication of such cases as infanticide or criminal poisoning.

No man honours the profession of the law more, or has less prospect of ever becoming a coroner, than myself; therefore, Mr. Editor, pray let me be acquitted of anything like an invidious or interested motive in taking up this subject. The coroner's inquest is one of the earliest, most effectual, and sacred bulwarks of the personal safety of an Englishman, and it is a pleasing, holy—ay, and a proud reflection, that none of us, however poor and humble, can be destined to a suspicious form of death without twelve good men and true being summoned from the ranks of our neighbours to inquire for the mother of her subjects, how and by what means that death was caused. Sad—sad it is to feel, that this ancient and most important inquiry is too often conducted in an unseemly and inefficient manner.

During my career as a medical man, I have, of course, witnessed many inquests, and too often have I returned from them with the painful conviction, that with the dead bodies would be buried doubts of a dark character, which a proper scientific inquiry would in one way or the other have set at rest for ever. I have actually more than once been present before, ay, and examined by, the footman of a legal coroner, now lately deceased, and who deputed this worthy substitute to preside over a ceremony which, like the profane Feast of Fools, became an impious mockery. Should this paper suit you, I may probably continue the subject on a future occasion.—I remain, Sir, your humble servant,

AMATOR JUSTITIÆ.

## ON THE COMPARATIVE MERITS OF LONDON AND PROVINCIAL SCHOOLS.

*To the Editor of* THE LANCET.

SIR,—Invidious comparisons are so constantly being drawn, by interested or prejudiced persons, between London and Provincial Schools, that at last the world seems to take it for granted, that the medical education of the latter must necessarily be very inferior and incomplete in all its branches. That such a conclusion, however, is not based upon facts, may be shown by a reference to the examinations of the University of London since the year 1839. Now these examinations afford a very fair test of merit, for they are open to all classes of students, and are as comprehensive and searching as any in the United Kingdom.

In the examinations for honours, the candidates are placed in the order of merit, and there is always abundant competition for the prizes, for we shall find amongst those who have at different times gained exhibitions or gold medals, the names of Taylor, Quain, Parkes, Potter, Ballard, Johnson, Garrod, Gull, Williams, &c., all of whom have stood very high at their respective hospitals in London. The candidates at the University of London are wholly unknown to most of the examiners, so that there must be a complete absence of any of that jobbing and favouritism, which there is reason to fear too often characterize the contests for prizes at many medical schools. Moreover, no candidate can obtain honours, or even pass, who is not efficient in every subject of examination. Thus the University offers the best possible arena for a contest between the alumni of London and Provincial schools, fulfilling all the conditions of "fair play, a clear stage, and no favour."

Let us see, then, how the provincial students have passed through the ordeal. It was only at the late examination for the degree of M.B. that a Leeds student (Dr. Elam) obtained two exhibitions and three gold medals, thus carrying nearly all the honours before him, in the face of his London competitors. And a reference to the examinations of past years will show that provincial students, as a body, have shown themselves to be in no wise inferior in attainments. The three provincial schools from which students have graduated at the University are, Birmingham, Bristol, and Leeds. The students from each of these, which have passed from the year 1839 up to the present time, stand as follows (with the date of their diplomas):—

From *Birmingham*, three undergraduates who have passed the first examination for the degree of M.B. only: C. Fulford, (1840,) F. Field, (1842,) J. H. Stallard, (1845;) one who has graduated as M.B.,—viz., J. Johnston, (1846;) one as M.D., E. Smith, (1843;) in all, five.

From *Bristol*, three undergraduates, R. T. H. Bartley, (1840,) R. Bunce, (1841,) T. B. E. Maynard, (1841;) three as M.B., E. Goodeve, (1840,) W. Tyler Smith, (1840,) W. B. Herapath, (1844;) one M.D., J. G. Swayne, (1845;) in all, seven.

From *Leeds*, two as M.B., C. B. Radcliffe, (1845,) and C. Elam, (1846.)

Those provincial students who have gained honours at the M.B. examination are:—

From *Leeds*, C. B. Radcliffe, who was placed second in medicine, (obtaining a gold medal,) second in surgery, (gold medal,) and third in physiology, in 1845. Also C. Elam, who was placed first in physiology, (exhibition and gold medal,) first in surgery, (exhibition and medal,) first in medicine, (medal,) and first in midwifery.

From *Bristol*, in 1842, J. G. Swayne, first in medicine, (gold medal,) first in midwifery, (medal,) and second in surgery. In 1844, W. B. Herapath, sixth in physiology, sixth in surgery, sixth in medicine, second in midwifery, and second in structural and physiological botany.

So that from Leeds both students who have passed have gained high honours, and from Bristol, out of the seven who have passed, two have obtained honours. We shall next inquire, how do these schools stand in comparison with the London schools? Of the London schools, three are preëminent both for the number and for the merit of the students from each who have graduated; and these schools are, (in the order of merit,) University College, King's College, and Guy's Hospital. With these, provincial schools certainly cannot vie in the actual number of students who have both passed and distinguished themselves. Such is not to be expected when we consider the vast disparity as to the number of students attending each. But with all the other London schools, the provincial schools above mentioned will bear comparison, and will even be found superior to many. Since the year 1839, there have been the following graduates from the following London schools:—From St. Bartholomew's, three M.D.s, one M.B., and four undergraduates; from the London Hospital, three M.D.s, five M.B.s, and three undergraduates; from St. Thomas's, one M.D., two M.B.s, and two undergraduates; from Westminster, one M.D., and one M.B.; from St. George's, four M.B.s, and two undergraduates; from Middlesex, two M.B.s, and one undergraduate; from Aldersgate, two M.B.s, and one undergraduate; from Charing-cross, two undergraduates; and from Webb-street, one undergraduate.

From all these schools, the following students have gained honours:—From St. Bartholomew's, G. M. Humphry obtained a gold medal in anatomy in 1840; from the London Hospital, in 1846, J. C. Day, gold medal in physiology and comparative anatomy, and gold medal in surgery. In 1841, J. J. Davies, gold medal in materia medica. From Charing-cross, T. H. Huxley, gold medal in anatomy in 1845; from St. Thomas's, R. Haines, exhibition and gold medal in chemistry.

So that, on the whole, two provincial schools (viz., Leeds and Bristol) may be said to be at least on a par, as regards the honours gained by their students, with St. Bartholomew's, Charing-cross, the London Hospital, and St. Thomas's; superior to Westminster, St. George's, the Middlesex Hospital, and Aldersgate School; but inferior to University College, King's College, and Guy's Hospital.

This statement, then, will tend to prove that sound medical education is not necessarily limited to a magic circle extending five miles around the General Post-office; and I think, also, that it will be found, upon examination, that although metropolitan schools present peculiar advantages of their own, yet that provincial schools have also their advantages which fully counterbalance these. Thus, from the great influx of skill and genius of every kind into the metropolis, it naturally follows, that in London the student can hear more eloquent lectures, see more brilliant operations, and inspect more complete museums. But it is not from such sources that the groundwork of sound medical education is constructed, so much as from daily observation and practice in the wards of an hospital, the dissecting-room, and the dead-house; and these can be prosecuted with greater facility in the provinces than in London; for, from the large size of the principal provincial hospitals, and from the less-crowded state of provincial schools, the supply of subjects for dissection is generally much better than in London; and for the same reason the hospitals are less thronged, so that each case can be witnessed with much greater ease. In provincial hospitals, also, much more is intrusted to the dressers than in London, where the most instructive cases are usually taken by the house-surgeons. For such reasons, then, I believe that the rough, but firm basis of a sound medical education can be better laid at a provincial than a metropolitan school; but that the more elegant superstructure, which is afterwards to be reared upon it, should be the work of the more complete course of tuition pursued at the latter; and, in fine, that the best education consists of a judicious combination of the two.—I am, Sir, your obedient servant, Αληθης.

## ETHERIZATION CONFINED TO THE CEREBRAL SYSTEM, EXCLUSIVE OF THE SPINAL AND GANGLIONIC.

*To the Editor of* The Lancet.

Sir,—It is worthy of remark, that etherization, where duly limited, affects the cerebral system only, and exclusively of the spinal, and of the ganglionic,—thus affording a collateral proof of the correctness of the distinction discovered and promulgated by Dr. Marshall Hall. When kept within its just limits, which this distinction teaches us, the inspiration is unimpaired, and, as Dr. Simpson has shown, parturition proceeds without interruption; whilst Dr. Ranking has illustrated its inapplicability to the treatment of tetanus. So of the ganglionic functions.

Thus we see the mutual aid afforded by physiology and practice.—Your obedient servant,

Feb. 1847. Spectator.

## ETIQUETTE AT THE HULL INFIRMARY.

*To the Editor of* The Lancet.

Sir,—As you are ever ready to listen to the complaints of medical students, I send you a specimen of the illiberality of the surgical staff at the Hull Infirmary, which I could not have believed had I not been myself a witness. I have resided for some months at Hull, and entered to the lectures and demonstrations on anatomy, delivered at the school, in connexion with the infirmary here. Hearing accidentally from the students that an operation was to be performed yesterday, I went there with them for the purpose of witnessing it. After waiting some time, while the patient was undergoing the necessary preparation for the operation, one of the surgeons (Mr. Craven, lecturer on surgery at the school) came and addressed the students to the effect, "that they would be allowed to witness the operation; but he wished it to be understood that only those who attended the practice of the infirmary would be admitted;" whereupon I, with another student, who, like myself, was only a pupil of the school, withdrew. Now, Sir, I ask you, is such conduct becoming a member of a liberal and enlightened profession? Is it customary for the surgeons of the London hospitals to act in such an illiberal and uncourteous manner, and to close their doors, as in the present instance, from mean and paltry considerations. The operation to which I allude was one for the removal of a calculus from the female bladder—an operation which rarely occurs, or I should not have intruded myself before their notice. I may also add that the same spirit of illiberality is exhibited towards the medical practitioners residing in the town, who are seldom if ever asked to be present at the operations. I authenticate this by privately sending you my name and address; and am, Sir, your obedient servant,

Hull, Jan. 1847. A Metropolitan Student.

## THE SYDENHAM SOCIETY.

*To the Editor of* The Lancet.

Sir,—A correspondent, in your number for January 23, inquires after Harvey's works, promised in 1845, and stated, in May, 1846, to be "so nearly completed, that there can be little doubt it will shortly be in the hands of members."

Permit me to ask, also, what has become of Schwann, which was "*in the press*" in May, 1845, and of the translations of Sydenham, and of Rhazes on the Small-pox, promised us in the same year?

Many of your readers will also be glad to hear when the *fourth* volume may be expected, which the Committee "hoped," in May last, to give for the subscription of the year 1846, for which "hope" we gave them a cheer on the 1st of May. You have yourself, Sir, in the review of the Sydenham report, shown that we ought to have a fourth volume. Seeing that though the number of members is increasing, and, it may be presumed, the expenses diminishing, the quantity of matter returned for the subscription *has become less each year*.

These facts, Sir,—the detention of one work for two years after it is reported "in the press,"—the delay of another for ten months after it is nearly ready,—the oblivion attached to two other works long ago announced; and, lastly, the non-appearance of the half-promised fourth volume,—suggest some ugly questions.

1. Do the council allow works to go to press before the MSS. are complete?

2. Are the editors paid before the completion of their tasks?

3. Have any works been abandoned after editorial or other expenses have been incurred upon them?

4. Is any considerable portion of the Society's general funds locked up in the reprinting of the earlier volumes?

I suspect that some of these questions would not be very agreeable to the council, if asked, as possibly they may be, on the 1st of May next. I feel little doubt, from what I have heard, that some good intentions have been frustrated, because funds must be employed in getting out other works in place of Harvey, Schwann, &c.

It is very difficult for the subscribers in such societies to get at the real truth. Councils and secretaries are very touchy things, and do not like to be cross-questioned; but unless some good account be offered in May, I fear matters will not go on so smoothly as heretofore.

I remain, your obedient servant,
A SYDENHAM SUBSCRIBER.

## THE HUNTERIAN ORATION.

*To the Editor of* THE LANCET.

SIR,—Permit me to give you a condensed report of Orator Green's Hunterian Address to the members of the Royal College of Surgeons of England, Feb. 14th, 1847.

ONE OF LAWRENCE'S GEESE.

GENTLEMEN,—John Hunter was a genius, so its no use attempting to follow him, or do anything in his way, as none of you are geniuses.

You don't know the first principles of grammar, so I will enlighten your ignorance by instructing you in the verbs and nouns, and beg you will remember "I am."

John Taylor Coleridge was my tutor, and a great man, so we will pass John Hunter until another time.

No man can become a good surgeon unless he studies metaphysics, and Hebrew; and I have.

You can know nothing about science unless you know Latin and Greek, as I do.

To be considered a gentleman, you must belong to a University, quote Hudibras, Milton, Shakspeare, Cicero, and Coleridge, as I can.

The Councils of this College are the perfection of human wisdom, therefore they have had a new Charter for your admiration. Our constitution is a glorious constitution, and no man can be a good surgeon who does not subscribe to that and the church of England as by law established. Amen.

Gentlemen, Members of the College, are you not yet snubbed enough? if not, do as the costermonger told his friend to do, when he had not courage to resent an insult—"Put it in your pipe and smoke it!" Or perhaps you will prefer Liston's philosophy in The Hypocrite—"I likes to be despised." But more anon.

Hackney, Feb. 1847.

## STUDENTS' MEMORIAL.

*"To the Senate of the University of London.*

"The Memorial of the Undersigned Students in the Faculty of Medicine of University and King's Colleges.

"Your Memorialists beg leave most respectfully to address you, in the hope of obtaining relief from impediments to which they are subjected by some of your regulations respecting degrees in medicine.

"Your Memorialists are desirous of obtaining your degrees in medicine and of passing ALL the examinations required of candidates; but they are apprehensive that although they may have gone through the prescribed course of study, and may possess all due qualifications, they will be prevented seeking the desired distinctions by certain points in your rules, (of minor importance as it appears to your Memorialists,) compliance with which would impose on them a greater sacrifice of time and expense than they would be able to make.

"Your Memorialists beg leave to particularize as regulations having the injurious tendency of which they complain,—

"1st. Under the head of the First Examination:

"The third rule, which requires 'that the student shall have studied two years SUBSEQUENTLY to having taken a degree in Arts, or passed the matriculation examination.

"2nd. Under the head of the Second Examination.

"The regulation that no candidate shall be admitted to the examination within two academical years of the passing his first examination.

"3rd. The regulation limiting the number of the examinations to one annually.

"Your Memorialists respectfully submit that the first and second rules above mentioned appear to them open to the objection, that by requiring so long intervals of time to elapse between the respective examinations, they tend to exclude from degrees those students who have not from the commencement of their professional studies entertained the intention of taking them.

"Your Memorialists believe that the number excluded annually by this operation of your rules is, and for *some time* to come will be, CONSIDERABLE, because parents and guardians are generally unacquainted with the fact, that the University affords an opportunity for taking such degrees. Except in a few cases, the students themselves are not sensible of such advantages until after they have made considerable progress in their studies, their attention having been called by the example of fellow-students: because, however strong their desires may be to obtain them, circumstances will rarely permit its indulgence under rules which allow no account to be taken of the TIME ALREADY SPENT, and the lectures previously attended: because many students, when they have passed the first examination, have already devoted THE four years to the study of their profession, are qualified for, and frequently commence, practice, often obtaining appointments at home or abroad, which prevent their taking the degrees, as the University Calendar sufficiently testifies.

"The objection which your Memorialists would urge against the regulation 3rd above mentioned, is, that each examination happening but annually, the loss of *one or two years* may be involved by the most trifling occurrence during the week in which it takes place.

"Your Petitioners therefore respectfully, but earnestly, solicit your consideration of these circumstances, and pray you to expunge from the regulations above mentioned,—

"1st. The passage '*subsequently* to taking the degree of B.A., or passing the matriculation examination.'

"2nd. To abolish the limitation as to time between the passing the two examinations for degrees in cases where the candidates have devoted *four years* to medical studies at a medical school.

"3rd. To double the frequency of the PASS examinations in each year, or to give your Memorialists such other relief in the matter as you may deem fit."

The above Memorial was signed by forty-four students of University College, and thirty-nine students of King's College. It will be remembered, that a short time since some excellent letters appeared in THE LANCET on the same subjects. We are glad to say, that the Memorial has been taken into consideration by the Senate.

## RELIGION AND QUACKERY.

*To the Editor of* THE LANCET.

SIR,—You have deserved well, both of the medical and of the general world, by your unflinching exposure of quackery. I was much pleased with your recent remarks on the disgusting advertisements inserted in the papers, even often in what are called the religious journals. The following extract from a magazine of great circulation will perhaps show that editors only need to have the case fairly put before them, to induce them to discontinue the practice:—

"But it ought to be stated that there is another circumstance which will seriously affect the advertising department: the editor and the confidential committee appointed to communicate and coöperate with him have unanimously recommended to the general committee the exclusion of all quack advertisements, and all advertisements of wines and spirits; and this recommendation has by that body been framed into a resolution, and transmitted to the publisher for his guidance, on and after January, 1845. This measure will considerably affect the profit of advertisements, for quacks are among the best supporters of the stamp office. But we have an unalterable conviction that the step is right and proper—an act of homage to religion and decency; for the bulk of quack advertisements are not meet accompaniments of a family magazine which is the hand-book of youth, and forms to a large extent the subject of sabbath reading. We fell into the current, and followed the bad example of the preëxisting religious periodicals," (the journal is a new one;) "but reflection has led us to see our mistake, and we hasten to repair it, assured that we shall give satisfaction to all our readers who properly estimate the true character of modern quackery, which is one of the vilest and foulest of all vile and foul vocations, sustained to an incredible extent by fraud, forgery, and falsehood, and

fraught with delusion, disease, and death. To publish their nostrums is to partake of their deeds; to receive their money is to share their spoils, and aid them in making war on mankind. No vehicle renders them such assistance in the work of rapine as the religious magazines, which, among the thoughtless masses, powerfully and naturally tend to dignify the hateful system, and to sanctify the ruthless imposture. On this point, the communications of some of our correspondents are both startling and grievous, and such as show the necessity of religious men and religious magazines cutting all connexion with quacks and quackery."—*Christian Witness*, 1844, p. 515.

This journal has a circulation of about 30,000 monthly. The remarks seem to me to be marked by great good sense, but are unfortunately too true as regards the great sanction given to quackery by religious men. I have a strong conviction that the clergy have much to account for in this matter. Visiting often the abodes of sickness, they are sadly too fond of giving medical advice as well as spiritual, and often in lieu of it. The loss sustained by this journal amounts, I am told, to between £60 and £70 annually.—I remain, yours obediently,

ANTI-QUACKERY.

## Medical News.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, February 11th, 1847:—William Cadge, Hoveton St. John, Norfolk; Richard Charles Shettle, Mapperton, Dorset; John William Abell, Mitchel Dean, Gloucestershire; Henry Ashton, Ramsbotton; William Weston, Ellastone, Staffordshire; Samuel Lawrence Gill.

THE ARMY SURGEONS AND THE LATE WARRANT.—It will be remembered that, in the session of 1845, a motion was brought forward in parliament for an improved retirement for the whole regimental staff officers, and referring particularly to that of the surgeons and paymasters. The motion, fully acquiesced in by the whole House of Commons, was ultimately withdrawn, on the express understanding from Mr. Sidney Herbert (the then secretary-at-war) that the matter would be favourably considered during the recess. The result was, however, merely the issuing of a new warrant, giving to quartermasters and veterinary surgeons, as nearly as possible, ten-twelfths of their full pay after thirty years' service, and leaving surgeons and paymasters just as they were before—a most shameful act of injustice towards the latter officers, and totally at variance with the unanimous wish of the House of Commons! * * * Mr. Herbert proposed to give to these officers ten-twelfths of their full pay after thirty years' service, which the Treasury agreed to in the cases of veterinary surgeons and quartermasters, but refused it to paymasters and surgeons. "We are anxious (says the *Naval and Military Gazette*) to know on what grounds the latter officers were denied this act of justice. Are not their duties at least equal in importance to the others'? Indeed, there is no comparison between them, every military man well knowing that the surgeons and paymasters are the mainstay of the British army. And then, look at their relative position in other respects. Surgeons, for instance, before they can become such, are under the necessity of having a very expensive education; and on entering the service, they give up the chances of a lucrative private practice for one of danger, much hardship, and great vicissitudes, in a long and arduous career in the worst of climates, which generally, if not always, brings on premature decrepitude and old age. And how can it be otherwise? as they must, of necessity, be always present at the head-quarters of their regiments; and let it be considered that these regiments remain upwards of twenty years in the East Indies, and return to home service for only four to five years, and then are obliged to go to the West for fifteen; so that, in a space of forty years' service, these unfortunate officers spend thirty-five in tropical climates, and, at the most, five at home!" The *Gazette* adds—"During the present session of Parliament, we shall be found at our post; and the surgeons and paymasters may depend upon it that we never shall relax our exertions in their behalf until full justice is done to them, which sooner or later must be the case."

NEWSPAPER REPUTATION.—Hooping-cough.—*To the Editor of the Lady's Newspaper:* "SIR,—That distressing complaint, 'hooping-cough,' has been very prevalent in many parts of England during the last six months, and, owing to the late inclement weather, has in many cases proved fatal.

"The following brief observations, which I have had the honour of submitting to an august personage, will, I trust, be considered valuable, more particularly as they relate to a remedy very little known, easy of adoption by all classes, and which can do no harm, if it do not effect a cure.

"I was much gratified by the notice taken in your valuable periodical (No. 3) of my 'Nursery Treatment of Infants.' After a long and extensive practice as a surgeon-accoucheur, I believe that at least half of the infants who die within a year after weaning might be saved by giving them the milk of one cow, and one only.—I remain, Sir, &c.,

"JOSHUA WADDINGTON,
"Marine-terrace, Margate, Jan. 25th, 1847." F.R.C.S.E., and Consulting Surgeon to the Royal Sea-bathing Infirmary.

There are three stages of hooping-cough. In the first stage, the patient should be taken into the open air as usual, if the weather will permit, live sparingly, and take every now and then a gentle emetic. In the second stage, confine the patient to a bed-room and sitting-room upon the same floor, communicating with each other. In these rooms Swedish tar should be kept boiling night and day, over a small lamp; thus the vapour of tar will pervade both rooms. When the symptoms run high, the effect of this simple remedy is almost miraculous. In the third stage, change of air will be found most beneficial.

CREDULITY.—A person in humble circumstances, residing in the neighbourhood of Bradford, has a daughter grown up, who is terribly afflicted with epilepsy, the fits of which have grievously affected her, both mentally and bodily. The father went to one of those half quacks, half "wise men," as they are termed, which, to the disgrace of the age, still infest this neighbourhood, for advice respecting the young woman. The quack seriously advised him to get the skull of a young woman, not decayed, and to pound it small, mix it with treacle, and give it in small doses to the young woman, asserting that it would be a sure remedy for the disorder. After some trouble the father obtained the nauseous compound, all of which was scrupulously administered, of course without effect, the young woman remaining in the same deplorable state. Our correspondent vouches for the accuracy of this statement, so extraordinary and disgraceful to the age.—*Leeds Mercury.*

ETHERIZATION.—From experiments made by Baron Flourens and MM. Majendie and Serres, it appears that not only the cerebral, but the spinal system is affected by the influence of ether. In their experiments, not only were the nerves of sensation rendered insensible, but irritation of the spinal marrow produced no convulsive action. On the subsidence of the influence of the ether, the spinal marrow again resumed its excitability.

ANTI-QUACKERY.—The *Fifeshire Journal* is another Scotch paper from which all quack advertisements have long been rigidly excluded. In many instances, the conductor has had to return bank cheques, which were sent in pre-payment, (by way of bribe, we suppose,) to induce insertion of the P——y and other pill pollution. What renders this instance especially noticeable to the profession is, that one of the proprietors is a surgeon in extensive practice in the county in which the paper is published.

SPECIMEN OF FRENCH QUACKERY. — Authorization. — I authorize, I even require, Sieur Gervais, surgeon-pedicure of the King of the Belgians, actually resident at Paris, to publish, that through the effects of his new remedy, I have become perfectly cured of a corn, which forced me (the expression is just) to walk in a carriage!!—Signed, Decklow, jeweller, goldsmith, &c. Nota.—More than 1200 persons, and principally Madame la Comtesse de Léoville, were lately in the same position.

## CORRESPONDENTS.

*Dubius.*—The qualifications are quite sufficient.

*Mr. Jolliffe Tufnell.*—Our correspondent is in India.

*M. J. S.* should address his inquiry to Mr. Blatch, the secretary of the Apothecaries' Society, Blackfriars, who would furnish him with the requisite information.

*L. P.*—We never recommend particular physicians or surgeons in the pages of THE LANCET. Our correspondent might confidently apply to any qualified professional man.

*A Student* should apply to Mr. Belfour, or memorialize the College.

*Inquirer.*—The stamped LANCET reaches India free; it should be marked, "*via* Southampton."

Communications have been received from—Mr. Erichsen; Dr. Dick; Mr. Tarrant; Dubius; Mr. Rayner, (Stockport;) An Admirer of the Registration Bill; Mr. Stokes, (Nailsworth;) Dr. J. A. Wilson; Mr. Jolliffe Tufnell; Mr. F. S. Garlicke; Mr. Goldsmith; Mr. R. F. Foote; Amator Justiciæ; M. J. S.; L. P.; An Inquirer; Mr. E. D. L. Gillott, (Sheffield;) Dr. Elliot; Dr. J. M. Macdonnell; R. H. Collyer, M.D.; Dr. Smith, (Cheltenham;) Mr. W. H. Hewett; Mr. Adams; Anti-gammon; A Student, &c.

FOR DISPOSAL, a genteel PRIVATE PRACTICE, in a good situation in town; receipts £400; introduction of three or six months. Premium £400. The house is good, at a moderate rent, and lets well. Reasons for relinquishing the above satisfactory.—For further particulars, apply to Messrs. Lane and Rathbone, 13, John-street, Adelphi, London; if personally, between Twelve and Four.

TO BE DISPOSED OF immediately, an increasing Medical Practice in the county of Norfolk, of about £250 per annum, which is capable of great extension. A Union is attached. Premium, £150. Stock and Fixtures to be taken.—Apply, if by letter, post-paid, to Mr. Pitt's, Chemist, 8, St. Giles-street, Norwich.

TO SURGEONS, CHEMISTS, &c.

A DRUGGIST, having materially increased the returns of a late surgeon's retail to nearly £400 cash receipts the first twelve months, and being about to leave the trade, wishes to meet with a General Practitioner or Chemist to succeed him, to whom he would give most full introduction by remaining any reasonable time, and use all endeavours to render success beyond a matter of doubt. Situation in the southern suburbs of London; shop large, handsome, and well-stocked. Purchase, £400.—Apply, in first instance, by letter only, to E. A., in care of A. S. Hill, Esq., Wholesale Druggist, Little Britain, London.

MEDICAL PARTNERSHIPS—COUNTRY.

A GENTLEMAN, who is prepared with the most satisfactory references, wishes to PURCHASE a SHARE of about £500 per annum, in a good PROVINCIAL PRACTICE. He would prefer a town with not less than 5000 inhabitants, and the prospect of being ultimately at liberty to purchase the whole Practice.—Communications addressed to M. E. F., 32, St. Martin's le-grand, with particulars as to the amount required, &c., will be promptly attended to, and treated confidentially.

MEDICAL TRANSFER AND PARTNERSHIP.

MR. ORRIDGE, MEDICAL TRANSFER AGENT, 30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the honour of being allowed to refer TO THE WRITTEN TESTIMONY of upwards of forty gentlemen of the highest respectability, (between many of whom he has been professionally engaged in matters of transfer,) as a guarantee of the sincerity of his endeavours to conduct business in an honourable and straightforward manner.

Mr. Orridge takes leave to point out that his Agency offers particular advantages to gentlemen ABOUT TO RELINQUISH PRACTICE, EITHER WHOLLY OR IN PART, by placing them in direct communication with applicants for purchase of suitable professional standing and pecuniary resources, an INDISCRIMINATE publicity being carefully avoided.

Gentlemen ABOUT TO COMMENCE, who favour Mr. Orridge with the nature and extent of their wishes regarding purchase, may depend on being informed of appropriate opportunities as they occur.

Assistants provided on the plan formerly observed at Apothecaries' Hall.

GENERAL HOSPITAL, BIRMINGHAM.—There will be a VACANCY at Lady Day next, for a RESIDENT PUPIL in this Hospital, who will have the opportunity of seeing the whole of the Medical and Surgical Practice of the Institution, and facilities will be granted for attendance upon professional Lectures.

Terms and particulars may be known by application to the Secretary at the Hospital.

16th Feb. 1847.

UNIVERSITY & KING'S COLLEGE, ABERDEEN.—The EXAMINATION of Candidates for the Degree of M.D. will be commenced on TUESDAY, the 6th of APRIL, and continued daily, till finished; immediately after which the Graduation will take place. Those intending to become candidates are requested to forward the necessary documents on or before Thursday, the 18th of March.

REGULATIONS.

I.—Those who possess a diploma from a Royal College, or from the Apothecaries' Company, and who have been engaged for five years in the practice of medicine, will be admitted to examination, on producing their diploma, along with satisfactory evidence of sufficient preliminary education, and of good moral character.

II.—Those who commenced their medical studies before October, 1840, and who have not been in practice for five years, will be admitted to examination, on producing evidence that they have attended the classics, mathematics, natural philosophy, and moral philosophy; and of having been engaged in the study of medicine for four years, during which they must have attended, in some recognised school of medicine, the following courses of lectures:—

SIX MONTHS' COURSES.

| | |
|---|---|
| Anatomy | Two courses. |
| Chemistry | One course. |
| Materia Medica | One course. |
| Surgery | One course. |
| Institutes of Medicine, and Physiology | One course. |
| Practice of Medicine | One course. |
| Midwifery | One course. |

THREE MONTHS' COURSES.

| | |
|---|---|
| Dissections | Two courses. |
| Practical Chemistry | One course. |
| Medical Jurisprudence | One course. |
| Clinical Surgery | One course. |
| Botany | One course. |
| Clinical Medicine | Two courses. |

In addition to the above, the candidate must have attended for two years the wards of an hospital containing one hundred beds; and during three months a shop or dispensary for the compounding of medicines.

III.—Those who commenced their medical studies after October, 1840, must have attended the above prescribed courses, and must have studied during at least one of the four sessions at King's College.

Fees, £26 5s. 6d.

ANDREW FYFE, M.D.,
Professor of Medicine.

University and King's College, Aberdeen.
February, 1847.

## SOVEREIGN LIFE ASSURANCE COMPANY,

No. 5, ST. JAMES'S STREET, LONDON.

TRUSTEES.

Sir A. Brydges Henniker, Bart. | Henry Pownall, Esq.
B. Bond Cabbell, Esq., M.P. | Claude Edward Scott, Esq.

Assurances on Lives, and Annuities, both immediate and deferred, granted on favourable terms.

A new plan of Accumulative Assurance, by depositing, instead of paying, Premiums.

H. D. DAVENPORT, Secretary.

UNITED KINGDOM LIFE ASSURANCE COMPANY.—8, Waterloo-place, Pall-mall, London; 97, George-street, Edinburgh; 12, St. Vincent-place, Glasgow; 4, College-green, Dublin. Established by Act of Parliament in 1834.

In 1841, the Company added a bonus of 2 per cent. per annum on the sum assured to all policies of the participating class, from the time they were effected. Parties wishing to secure the benefit of the next division of profits in 1848 should make immediate application.

When the Insurance is for life, only one half the Annual Premium need be paid for the first 5 years.

Every information will be afforded on application to the Resident Director, E. Lennox Boyd, Esq., No. 8, Waterloo-place, Pall-mall, London, where Prospectuses &c. may be had.

**Special Notice.**

*To secure the Advantage of this year's Entry, Proposals must be lodged at the Head Office, or with the Society's Agents, on or before 1st March.*

SCOTTISH EQUITABLE LIFE ASSURANCE SOCIETY.—Incorporated by Royal Charter.

EDINBURGH—26, ST. ANDREW-SQUARE.
LONDON—61, MOORGATE-STREET.

This is a MUTUAL ASSURANCE SOCIETY, in which the WHOLE PROFITS are divisible amongst the Policy Holders every THREE YEARS.

The EXISTING ASSURANCES exceed TWO MILLIONS FOUR HUNDRED THOUSAND POUNDS.

The ACCUMULATED FUND exceeds THREE HUNDRED AND FIFTY THOUSAND POUNDS.

The ANNUAL REVENUE exceeds NINETY THOUSAND POUNDS.

*Additions to Policies.*

A Policy effected before 1st March, 1832, for £2000, is now increased to TWO THOUSAND SIX HUNDRED AND NINETY-SIX POUNDS, being an addition of THIRTY-FIVE PER CENT. on the sum Assured.

Other Policies have received additions in proportion.

ROBERT CHRISTIE, Manager.

Prospectuses and Forms of Proposal may be had by application at the London Office, 61, Moorgate-street, WILLIAM COOK, Agent.

MEDICAL, LEGAL, and GENERAL MUTUAL LIFE ASSURANCE SOCIETY, 126, Strand, London.

TRUSTEES.

James Copland, M.D., F.R.S. | J. Romilly, Esq., Q.C., M.P.
Vere Fane, Esq. | James Russell, Esq., Q.C.
J. Billingsley Parry, Esq., Q.C.

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Thomas Webb Greene, Esq. | Robert Smith, Esq.
Richard Jebb, Esq. | Frederick Thos. White, Esq.
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Wm. John Little, M.D.

The principle of mutual assurance is the most beneficial to the assured, amongst whom the whole net profits are divisible.

This Society is the only one connected with the medical or legal professions founded on the mutual principle.

The business of this Society embraces assurances, annuities, and endowments of every description.

Prospectuses, forms of proposal, and every further information, will be readily supplied on application, either personally or by letter, to

R. WILSDON MORRIS, Actuary.

*** Agents required where none are appointed.—Application, accompanied by a reference, must be made to the Actuary.

SPONGE & SURGICAL BOTTLES.—CHARLES ROBINS begs to inform Chemists and Druggists that he can supply them with the above articles on unusually advantageous terms.

CHARLES ROBINS, 16, Little St. Thomas Apostle, Queen-street, Cheapside, London.

INSTITUTE OF MEDICINE AND ARTS.

DEPARTMENT OF ARTS.—Gentlemen engaged in Literary or Scientific Pursuits, and desirous of obtaining the degree of A.M. or Ph. D., may receive Assistance and Instruction, privately or in classes.

The classes for MATRICULATION at the University of London meet every evening from Seven to Nine o'clock.

For prospectuses &c. apply at the Institute, 1, Whitefriars-street, Fleet-street; to Dr. COOKE, F.L.S., 4, Caroline-street, Bedford-square; or to Mr. Hoblyn, A.M., Oxon, 2, Sussex-place, Regent's-park.

DRUG PRICE CURRENTS forwarded, free of Postage, on application, by Messrs. HEWLETT and GODDARD, Wholesale Druggists, 6, Arthur-street West, Upper Thames-street, near London Bridge, Removed from Hatton-garden; containing the Ready Cash Prices for Drugs and Pharmaceutical Preparations of the purest quality. Messrs. H. and G. solicit the attention of the Medical Profession resident in the Provinces, Infirmary Committees, Dispensaries, &c., &c., to the advantages attendant upon the above Price Current.

## Diseased and Healthy Lives Assured.

MEDICAL, INVALID and GENERAL LIFE OFFICE,
25, PALL MALL, LONDON; and 22, NASSAU STREET, DUBLIN.
SUBSCRIBED CAPITAL, £500,000.

Nov. 1846.

AT a numerous Meeting of the Proprietors, held at the Company's Offices, 25, Pall Mall, on the 26th inst., it was shown, by the Report of the Auditors and Directors—

That this Company was the first to Assure DISEASED AND INVALID LIVES in a systematic manner, and on the same safe and defined principles as those on which ordinary Offices assure Healthy Lives; and that at the present time it is the only Company furnished with scientific and well constructed Tables showing the duration of life in the different classes and various stages of disease.

That the Public have felt the urgent necessity for a Company established on such principles, was rendered manifest by the fact, that during the period of five years in which the Society had been in business, no less than 2051 *proposals had been made to it, covering Assurances to upwards of One Million of money.* The number of Policies issued far exceeds the average of that of most of the old and successful Offices in a similar period; and the business has been gradually progressive, the number of Policies issued during the last year *being nearly triple* that in the first year of the Society's existence; showing that as the establishment of the Company has become more generally known, the Public has more freely embraced the peculiar advantages which it offers, thus affording every reason to believe that the business of the Company will still go on rapidly increasing.

That the number of deaths that have taken place has been under the number estimated by the Tables of the Society *by nearly ten per cent.*; a strong proof of the safety and correctness of the data and principles on which they are founded; and that these facts conclusively show, that business in INVALID LIVES can be transacted with as much safety as that in HEALTHY LIVES; that the prejudice which once prevailed against this class of business is rapidly disappearing; and that there are few Companies which are not satisfied that this kind of Assurance may be done with security and profit, so much so, that several have now become anxious for it. That it is also gratifying to be able to state, that a very large proportion of old established Offices have latterly co-operated with this Society by sending it a considerable amount of business.

That the Public have derived a great benefit from the establishment of this Company is shown by the fact, that 66 per cent. of the lives assured had been rejected by other offices; thus extending the highly valuable benefits of Life Assurance to a large section of the community not embraced by other companies. This result will be the better understood when it is stated, that in the mature period of life the deaths from one disease only, Consumption, in the principal towns of England, are more than one-third of the total deaths in the same period of life. And if an inquiry be instituted into the prevalence of other diseases also, such as Asthma, Dropsy, Diseases of the Head, Heart, &c. &c. &c., it will be found *that more than one-half of the whole population would*, on medical examination, be refused admission into ordinary assurance offices.

The Diseases here alluded to are such as exist in general in a chronic form, frequently for many years prior to death, but which, on a strict medical examination, would effectually exclude the persons so affected from the benefits of Life Assurance; and since it thus appears that a majority of the population is included in this class, the value and importance of the new feature of this Society cannot fail to be justly appreciated.

That the published document by this Society shows—

In the first place, That the peculiar features of this Society *open a larger field for business* than all other Offices can have unitedly; and,

In the second place, That the risk of Assuring Diseased Lives must, from its own nature, be less, and its *principles be found to rest on a more satisfactory basis*, than those which regulate ordinary assurances.

That premiums have been determined for the assurance of persons at every age, among those afflicted with consumption, asthma, bronchitis pneumonia, disease of the heart, apoplexy, paralysis, epilepsy, insanity, disease of the liver, dropsy, scrofula, gout, rheumatism, &c.

That in all cases where satisfactory proof is given that the causes for an increased rate of premium have ceased, a reduction in the premium is made.

Increased Annuities are granted on Unsound Lives.

*No extra Premium required on Healthy Lives*, in the Army or Navy, unless in actual service.

HEALTHY LIVES, both at Home and in Foreign Climates, are Assured with as much facility and at lower rates than at most other offices; and a capital of Half-a-Million sterling fully subscribed affords a complete guarantee for the fulfilment of the Company's engagements.

FRANCIS G. P. NEISON, Actuary.

*N.B.—Applications for Agencies to be made to the Actuary.*

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PROTECTION OF LIFE AND PROPERTY.

J. READ begs leave to inform the Public, that he has taken out a NEW PATENT for improvements in the Valves of his FIRE-ENGINES, which are now so perfect that if standing by for months, are ready to act in an instant; and he will warrant to keep them in repair (gratis) during the term of the patent. Engines that will discharge from twenty-five to eighty gallons of water per minute, will pass through any common door-way, and may be worked with two-thirds the labour of any other Engines of the same power. These valves are also applied to his Garden Engines, and small Pneumatic Instruments, with the same effect. Manufactured ONLY by the Patentee, 35, Regent Circus, Piccadilly.

N.B.—None are genuine except stamped "READ'S PATENT."

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FALKNER'S LIQUOR OPII SEDATIVUS.—This Concentrated Solution of Opium is one of the most powerfully sedative, anodyne, and hypnotic preparations ever offered to the medical profession, in which the whole of the codea, together with the morphia, are retained in combination with the meconic acid of the drug; whilst, by its freedom from narcotine, and the noxious properties of opium, it will be found available in cases where other preparations are inadmissible. From its powerful sedative property, it is capable in a high degree of allaying preternatural irritability of the nervous system, whilst its anodyne and hypnotic qualities are no less remarkable in all cases where these effects are required, without its producing any of the distressing effects which so frequently follow the use of the crude drug or the tincture.

Sole wholesale agents, Lea and Perrins, Chemists, 68, Broad-street, Worcester; and 6, Vere-street, Oxford-street, London.

In Bottles, 5s. 10s. and 20s. each.

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## HOOPER'S PREPARATIONS.

EXTRACT (Inspissated Juice) OF TARAXACUM,
Dose 1 to 2 drachms.

LIQUOR, or FLUID EXTRACT OF DITTO, prepared without head, and not impaired by climate.
LIQUOR, or FLUID EXT. OF SARZÆ, dose, a dessert spoonful.
INSPISSATED OX-GALL.
PURE COD-LIVER OIL.
SULPHATE OF MANGANESE.
OXIDE OF SILVER.
PURE TANNIN and GALLIC ACID.
MATICO, the preparations of.
CITRATE (Ammonio Citrate) OF IRON.
CITRATE OF QUININE AND IRON.
SYRUP OF DITTO, dose, a teaspoonful.
IODIDE OF IRON.
SYRUP OF DITTO, dose, a teaspoonful.
ALKALOIDS.

**HOOPER, Operative Chemist,**
7, PALL MALL EAST, (Opposite the College of Physicians,)
IMPORTER of GERMAN and other MINERAL WATERS.

---

MINERAL SPA of BATH.—The celebrated Hot Mineral Waters of Bath possess all the curative properties of the most esteemed Mineral Waters of Germany, and present a most valuable remedy in all rheumatic, gouty, paralytic, and chronic affections; in contractions and lameness arising from the above disorders; in sprains, or other local injuries; in all cutaneous diseases; biliary and glandular obstructions, and uterine affections, as well as in complaints referable to the female constitution: they are also most beneficial in hypochondriacal and hysterical affections, and in general disordered health, with impaired digestive powers. The most eminent physicians and surgeons, including Sir James Clark, Dr. Locock, Sir Alexander Crichton, Sir James Johnstone, Dr. Granville, Dr. Chambers, Dr. Barlow, Sir Astley Cooper, Sir Benjamin Brodie, Mr. Guthrie, &c. &c., have testified to the highly valuable curative properties of these mineral waters, which is further evidenced by the large and increasing number of invalids who annually resort with such signal benefit to these mineral springs.

The Baths and Pump-Rooms are unquestionably the most elegant and complete in Europe, and have been recently fitted-up and refurnished with every possible comfort and accommodation.

Bath is now reached from London (by the Great Western Railway) in two hours and a half, from Exeter in one hour and a half, and is admirably suited for the residence of the invalid, combining all the refined amusements and recreations of the metropolis with the pure air and invigorating breezes of the country.

Messrs. Green and Simms, Lessees of the Establishment of Pump-Rooms and Baths, of whom every information may be obtained.

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TO THE MEDICAL PROFESSION.—The Guardians of the Poor-law Union of WILTON, near Salisbury, are desirous to contract with a Medical Gentleman (duly qualified, in accordance with the General Medical Order of the Poor-law Commissioners) to undertake the duties of a Medical Officer of the District, comprising the undermentioned parishes, at a salary of £100 per annum. Surgical, Midwifery, and Vaccination Fees to be paid for in addition:—

| | Population in 1841. |
|---|---|
| The Parishes of Bishopston .. .. .. .. | 569 |
| ,, Broad Chalke .. .. .. .. | 775 |
| ,, Bower Chalke .. .. .. .. | 447 |
| ,, Fifield Bavant .. .. .. .. | 45 |
| ,, Ebbesborne Wake .. .. .. | 306 |
| | 2142 |

Residence in the District will be required.

As there is no Medical Practitioner living in the District, nor within several miles of it, it is considered that a favourable opportunity offers to a medical gentleman of establishing himself in a Practice.

Testimonials to be sent to me on or before the 25th February instant. Personal attendance not requisite on that day.

Wilton, near Salisbury, Feb. 4th, 1847. THOMAS THRING, Clerk.

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H. J. & D. NICOLL, REGISTERED PALETOT MANUFACTURERS and TAILORS to their Royal Highnesses Prince Albert, Prince George of Cambridge, his Grace the Duke of Wellington, &c., beg respectfully to announce that the celebrated Llama Cloth is made by them also in warmer substances to suit the present season. The above Firm with confidence anticipate that this introduction will receive from the public an equal approval with the well-known gentlemanly light overcoat, called the Registered Paletot, for summer wear, which is already honoured with the constant patronage of all that seek an unaffected gentlemanly appearance.

It is respectfully suggested, that moderate prices are strictly maintained for every article of dress supplied at either of their London establishments —viz., 114, Regent-street, and 22, Cornhill.

The Registered Paletots, 6th and 7th Vic., cap. 65, of both the winter and summer substances, are kept ready, in every colour, for immediate wear. These can only be obtained in the Metropolis as above, and of their recognised Agents in the chief provincial cities of the United Kingdom. Also of the principal Stores in the United States, British India, and America; but in Bombay only of Messrs. Waghorn and Co.

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COXETER'S ROTO-LEVER SCARIFICATOR.
Registered July 3rd, 1845. No. 484.

Pronounced by many of the most scientific gentlemen in the profession who have used it as the best and most ingenious instrument they have seen. It has very strong springs, yet the lancets can be raised by a child six years of age. The flying-back of the trigger is prevented, the discharge rendered easy, and the noise much lessened.

It is highly finished, and price the same as the old instrument, £2 2s.

The Editors of THE LANCET, after examining it, with other inventions, were pleased to express the following, page 538, Nov. 15th, 1845:—

"We have examined the instruments described by Mr. Coxeter, and think them ingenious modifications of those in use, and worthy the attention of the profession."

Used and recommended by Messrs. Betts, Cuppers to University College and Middlesex Hospitals.

J. Coxeter, Surgeon's Instrument-maker to University College Hospital, 23, Grafton-street East, London.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

In the case last detailed, death resulted from an accident connected apparently with some morbid condition of the blood. The following case is added, perhaps rather at the risk of giving too unfavourable an impression of the results of cases of fever generally, to illustrate what may be considered as the more natural effect of such a state of things.

### FEVER FATAL BY EXHAUSTION FROM HÆMORRHAGE ON THE TWENTY-FOURTH DAY; ULCERATION OF THE BOWELS.

Case 42.—Thomas G——, aged sixteen, admitted Nov. 1st, 1846, into Luke front ward. Slightly made; face generally pale, with flushed cheeks; tongue inclined to dry, tip and edges red; skin warm and perspiring; pulse 108, soft, and full; bowels relaxed, the evacuations of a brownish-black colour; seven of them this morning. The lips, which are dry and chapped, are constantly bleeding, and blood is oozing from the nostrils. He has weakness, chilliness, and pain in the abdomen, with occasional delirium, of about twenty days' duration.

*History.*—He is a baker; three weeks ago he was laid up for a day, feeling weak and chilly, but the next day was able to resume his work. He continued extremely weak, and ten days ago, was compelled again to give up his work in part on this account; but he had nothing else to complain of till three days back, when he was seized with diarrhœa; he was delirious at night; and this morning his nose began to bleed, to which last he has been particularly liable during the last three years. He was ordered four ounces of wine and a pound of beef, for tea, daily; to have an opium enema at once, and to take two grains and a half of compound ipecacuanha powder thrice a day.

Twenty-second day.—He was restless during the first part of the night; now he is dull; pulse 120, small, and soft; bowels less relaxed, evacuations dark-coloured; abdomen tense and tender; skin warm and perspiring. There is a constant oozing of blood from the lips. A considerable quantity of dark-coloured urine was drawn off from his bladder by the catheter. Ordered, wine, six ounces; to take six grains of compound ipecacuanha powder to-night, and to have a blister plaster applied to the abdomen.

Twenty-third day.—He slept better, but was delirious towards morning; now, he has a hurried manner, and is incoherent; his face is anxious, and he has occasional muscular subsultus; skin hot and dry; pulse 128, very small and soft. He has passed two solid evacuations, of a very dark colour, unconsciously, as he does likewise his urine. Tongue dry and trembling; nose and mouth still oozing; no distinct source of the hæmorrhage is detectible on examination. The heart's sounds are very feeble, almost inaudible. Ordered to continue the other treatment; to take five minims of tincture of opium, with ten minims of dilute hydrochloric acid, every four hours.

His pulse became almost imperceptible, and he sunk gradually at seven on the following morning, having passed unconsciously two evacuations, containing much blood, a few hours before death.

*Body examined, twenty-nine hours after death.*—Neck relaxed; the rest of the body still rigid; the blood generally very imperfectly coagulated. The brain was, externally, healthy. The left pleura was free; the right extensively adherent by old tough membrane. Both lungs, especially the left, presented dark purple spots on their pale front surface. Behind, they were congested. Within, they were generally pale and œdematous, with darker spots, corresponding to those already noticed on the surface, evidently the result of extreme local congestion or extravasation. The right bronchi were healthy; the left loaded with blood and mucus, so that the lung could not collapse, but remained, as it were, emphysematous. The bronchial glands were large and dark, with some earthy deposit, but there was no tubercle anywhere in the lungs. The heart was in all respects healthy. The stomach was full of a dark olive-green, almost black, fluid; the mucous membrane was of a pale pink colour, arising from a pretty general capillary injection. The small intestines were healthy, except the lower part of the ileum: here, corresponding to dull red patches on the surface of the peritonæum; Peyer's glands were found corrugated and highly injected, with an adherent mucous crust. In some, a few small ulcers or abrasions were to be noticed; but the most striking characteristic was the swelling of the mucous membrane, which, just about the ileo-cæcal valve, was thrown into pendulous, dusky folds. A few sloughy ulcers were visible hereabouts, and the solitary were generally in the same condition as, though in a less degree than, the aggregated glands. The large intestine, as far as the beginning of the descending colon, was spotted here and there with small round ulcers, some of which, near the cæcum, had a sloughy surface; but further on, they appeared as little more than abrasions of the mucous membrane. The mucous follicles of the rectum were marked with black dots. The mesenteric glands were large, dark, and mottled; one of them had in part suppurated. The spleen was large, dark, and soft. There was considerable ecchymosis beneath the mucous membrane of the pelvis of the right kidney; and the urinary bladder, on close examination, appeared dusted over with minute bloody points; presenting, besides, about the fundus, several ecchymosed patches of about two lines in diameter. The liver was healthy.

The treatment of fever consists so entirely in the attempt to resist the tendency to death during its continuance, not to cure it, that it becomes, in this form of disease more than any other, important to consider the treatment in relation to the morbid anatomy in fatal cases, so that the knowledge of the way in which one patient died may enable us to resist, as far as may be, such a tendency in any other cases, especially in those happening about the same time. And this investigation is always as interesting as important, for on it may turn the lives of those who are at the time suffering from the same disease. This boy died of diarrhœa, accompanied by hæmorrhage from the various mucous surfaces, coming on late in a fever whose characteristic had been great muscular debility. The treatment was directed to support him, to check the diarrhœa, and to alter the condition of his blood by the action of the mineral acids. The morbid anatomy fully explained the diarrhœa, by ulceration; the occurrence of hæmorrhage, by the condition of the mucous membranes. What does it say with regard to the treatment adopted?

The first indications of treatment were to check the hæmorrhage and the diarrhœa, and to support life. Then, what was the source of the hæmorrhage? There were no petechiæ, the blood visibly issued from some cracks in his lips, and his nose was bleeding, to which, indeed, he had been for some time liable. Was, then, the hæmorrhage into the alimentary canal passive? such as might arise from that condition of blood which manifests itself by petechiæ, or was it active, from ulcers in the intestines, the apparent amount being increased by the blood passing down the pharynx from the nose? The coincidence of diarrhœa favoured the latter supposition, and the diarrhœa, moreover, urgently required special treatment. This indication was acted on first.

Next, the diarrhœa is checked in some degree, still the evacuations are dark, as if mixed with blood; but this may only be the sweepings of the intestines. The sooty colour of the urine throws little light on the matter; for obviously hæmorrhage might take place in a healthy person from an over-distended bladder; but the diarrhœa being under control, and the continual oozing of blood being against the probability of the hæmorrhage from the mouth depending on the occasional opening of the fissures in the lips while he was taking nourishment, there was another indication available, and in this view a small quantity of dilute hydrochloric acid was ventured on, with how little success the sequel tells: yet, as far as can be judged from the examination of the body, this was the correct indication, the condition of the stomach and the vascular folds of the lower end of the ileum well representing the possible source of abundant hæmorrhage.

It would be exceeding the proper limits of these reports to dwell on the danger of at once violently suppressing a hæmorrhage, without having regard to its cause; perhaps it is even more than the comparative frequency of the occurrence has latterly merited, to have dwelt thus far on hæmorrhage from the bowels, in fever, independent, in any considerable degree, of ulceration. But its importance is a sufficient reason to draw attention to a source of hæmorrhage, which, in the absence of petechiæ, would not be so likely to suggest itself to the practitioner as ulceration of the bowels. The organic lesions will be considered in connexion with the following cases:—

SLIGHT FEVER, WITH PAPULAR RASH, NOT MARKED BY ANY PROMINENT SYMPTOMS; CONVALESCENCE.

Case 43.—Elizabeth B——, aged fourteen, admitted Oct. 20th, 1846, Faith back ward; a girl, tall for her age, of a dark complexion; face flushed; skin hot and moist, with scanty papular rash on the abdomen; tongue moist, with a thick yellow fur, tip and edges red with elevated papillæ; bowels relaxed from medicine; abdomen full, hard, tolerant of pressure; pulse 96, full; respiration 36; has pain in the head and limbs, and vomiting, thirst, and watchfulness, of nine days' duration.

*History.*—A servant; nine days ago was seized with giddiness, headach, and vomiting. She went out and got wet that day, and the next had a rigor, followed by heat; she was drowsy during the day, but at night became delirious, and she has gradually assumed her present condition, the history of the case being marked by no prominent symptoms throughout. Ordered a saline draught, with camphor mixture, and half a drachm of antimonial wine, every four hours.

Eleventh day.—Sleep disturbed, delirious at night; face flushed, but soon turning pale when she sits up; tongue with a thick fur, the tip red with prominent papillæ; three relaxed, ochry motions; abdomen tender in the right hypochondrium; pulse 90, small, soft, and thrilling. She complains of headach and general pains. Ordered, to continue the draught, to have leeches applied to the epigastrium.

Twelfth day.—She slept well; her face is less flushed, but her eyes remain injected; tongue moist, with a thick fur; pulse 102, small and soft; bowels not open; there was free bleeding from the leech bites, but she still has pain in the right hypochondrium. Ordered, to continue the draught; to have eight more leeches applied to the seat of pain; to take five grains of mercury and chalk, at once, and half an ounce of castor oil to-morrow morning.

Thirteenth day.—She slept well, and now looks and speaks of herself as much better than yesterday. She vomited two or three times this morning; tongue still furred, but cleaner, pale; pulse 108, small, soft; skin warm and soft; bowels once open. Ordered a saline draught, without antimony, every four hours; five grains of mercury and chalk to-night.

Fourteenth day.—Slept well; face flushed at times; tongue still much furred; a few mucous patches are to be seen on the gums; bowels not open; no pain on pressure of the abdomen; pulse 108, small and soft. Ordered, to continue; to take half an ounce of castor oil at once.

Till the eighteenth day, the notes chiefly speak of the repeated use of mild purgatives, and their effects; they notice the continuance of the rash; and on the seventeenth day, for the first time, the occasional intermission of the pulse. On the eighteenth, her face, which had become pale and listless, was now again flushed; she lay dull and drowsy, but had been noisy during the night; pulse 108, small, soft, jerking; tongue cleaner, and moist; bowels not open since the previous day; abdomen tolerant; she had some cough, with an adhesive mucous expectoration; no morbid sound was audible on auscultation, only the air did not seem to go quite freely down to the base of the lungs. Ordered, a saline draught, with twenty minims of antimonial wine, every six hours; to continue two grains and a half of mercury and chalk thrice a day, as ordered on the fifteenth day, and half an ounce of castor oil to-morrow morning.

Nineteenth day.—She is very dull and drowsy; tongue moist, still furred; pulse 96, occasionally intermitting; one light, ochry motion from the bowels; abdomen tolerant; she vomited twice this morning. Ordered, to continue the pill; to leave off the draught.

Twentieth day.—Drowsy; tongue with a moist, white fur; pulse 96, small, soft; skin warm and moist; two light-yellow evacuations from the bowels. Ordered to continue.

The remaining notes merely relate how the tongue gradually became clean, and all the bodily functions resumed their natural condition. But so weakened had she been, that it was not till three weeks after the date of the last note that she was able to leave her bed, though nothing had occurred to interrupt the progress of her convalescence during this period.

In Case 42, an instance was given of a lad struggling against the early symptoms of fever, but destroyed by a rather unusual result of that fever at a later period. This girl might have been pronounced out of danger at a period when the boy's more severe symptoms had not yet commenced. It cannot of course be inferred, that if she had, in like manner, neglected the earlier symptoms, the disease would have proved fatal in her case, nor is it to favour such an inference that the case is here detailed. There were few prominent symptoms in her: she had a flushed face, and just symptoms of vascular action enough to encourage a trial of antimony in a young, strong-looking subject; but she appeared better when this medicine was discontinued, and certainly, when it was repeated on the occurrence of a slight exacerbation on the eighteenth day, it irritated the bowels. Her tongue became gradually cleaner as the disease disappeared, though it cannot be said that its condition bore any exact relation to the state of the alimentary canal, as tested by the alvine secretions, or the pain in the abdomen on pressure, save that the redness of the apex disappeared after the application of leeches on the eleventh day. But yet the protracted convalescence, and her extreme debility, would argue, had she even had none of these symptoms, that she had been very ill. Does the last case give any clue to tell us what had been exactly the matter with her?

The subject of lingering convalescence, in illustration of the principle, that fevers cannot be forced to get well against time, will give interest to the abstract of a case, which in some points resembles the early part of Case 42.

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LINGERING CONVALESCENCE FROM FEVER.

Thomas T——, aged twelve; admitted Oct. 14, 1846; John front ward; a thin, pale-looking child; was taken ill, three weeks before admission, with cough, headach, and pains in the limbs; but not so severely as to compel him to lay up. After a fortnight he took to his bed, with giddiness and diarrhœa, and during the two last nights he has been delirious. Now his tongue is clean, dry, and glazed; bowels relaxed, with pain on pressure in the descending colon; pulse 100, soft. His chest being examined, on suspicion of latent pulmonary disease, some scattered crepitation was discovered behind, with slightly impaired resonance on percussion.

Calling this the twenty-second day of the fever, we will select from the notes of the case merely the dates of the subsidence of the above symptoms. The last note of the occurrence of delirium occurs on the thirty-seventh day, and by the forty-first his heavy listless condition was changed for a more animated and cheerful state. The cough had disappeared, and the auscultation gave no morbid signs on the fifty-first. By the forty-fifth, his pulse had sunk, after having risen to 136; on the thirty-fourth day, to 82, full, and soft. The tongue was still glazy on the forty-first day; but no abdominal symptoms called for any notice after the twenty-seventh day.

And the treatment during this time. A blister was applied to the chest shortly after his admission; but this was all that could be called active treatment that was employed; but the child lay in bed unheeded, till he should get well of himself; for the state of his symptoms was most carefully examined every day; but no indications for treatment could be detected on any such examinations. All his symptoms remained within certain limits, never rising so far as to become objects of special treatment, yet always such, till they finally disappeared, as to cause anxiety lest they should be very prominent the next day. Would it have been advisable to hasten his convalescence by active tonics or stimulants? The state of his lungs gave great reason to fear the ill success of such a method, while there was no strength to undergo any active depleting treatment for the pulmonary lesion on which his cough depended.

Looking now to what these three cases present in common, we have the first attack of fever marked by no particular symptoms in any; two of the patients able in some sort to continue their ordinary occupations; the second, while under observation, but little influenced by the treatment adopted, in all but one respect, however important that might be. Perhaps this neglect of himself during the early period, and the nature of his occupation,—such a life as is that of a baker,—may have had something to do with the mode of termination of the first case. The case shows us at least what may be found in connexion with the symptoms of mere debility. Perhaps again,—for it is only probability, though of the deepest interest,—on such a lesion hung the cause of the tardy convalescence of the second and third patients. In the second, all action seemed to have been subdued; she had merely a very slow convalescence: in the third, convalescence can hardly be said to have been proceeding on his admission; he seemed then still to be suffering under protracted fever. We have seen what a comparison of the cases renders at least possible was the nature of the organic disease which retarded their convalescence. The next cases, in connexion with abdominal complication, will show it yet more clearly in the less fortunate termination of equally protracted disease.

## Original Papers.

# ON THE SOURCES OF HÆMORRHAGE IN CASES OF PLACENTA PRÆVIA, &c.

By THOMAS RADFORD, M.D., &c., Manchester.

In the report "On the Progress of Midwifery," (*British and Foreign Medical Review*, January, 1847,) Dr. West has (no doubt unintentionally) misrepresented my opinion of the source from whence the blood issues in cases of placenta prævia. He says that "It is obvious that these facts," (meaning the anatomical structure and distribution of the uterine veins, &c.) "assuming them to be correctly stated, lend much support to Dr. Simpson's opinion, which was also entertained by the late Dr. Hamilton, that the main bleeding in cases of placenta prævia takes place, not from the uterine surface, but from the placental orifices of the lacerated veins, from which the blood would escape in its natural onward course, unchecked by any contractile power in the veins themselves, or in the tissue by which they are surrounded." "Dr. Radford, (*Medical Gazette*, Nov. 14th, 1845,) with others, attack this theory of the source of the hæmorrhage in placenta prævia as being physiologically impossible. Whether correct or not, however, this theory involves no contradiction of ascertained anatomical facts; its alleged incompatibility with the account given by Weber, Wagner, and others, evidently rests on a misunderstanding of Dr. Simpson's statement."—p. 285.

Dr. Hamilton's opinion upon this point has been known to me many years, and I also understand that he was as well acquainted with the fact, that bleeding ceases on the placenta being detached, as any subsequent writer.

Gendrin also entertains the opinion, that the blood flows from the surface of the placenta, and not from the uterine openings.—"Traité Philosop. de Med. Prat.," tom. ii., 1839.

In the year 1832 I advocated the doctrine of a direct vascular communication existing between the mother and the fœtus in utero, ("On the Structure of the Placenta;") but the views of Weber, Wagner, Owen, Dr. J. Reid, Dalrymple, and Goodsire, with which I became acquainted as they were successively published, have convinced me that my conclusions at that time were incorrect.

With a knowledge of the opinions of the forementioned authors, and a conviction of their truth, I should indeed be not only guilty of the charge of "misunderstanding" an author's statement, but also of falsehood, if I had unconditionally attacked "this theory of the source of the hæmorrhage in placenta prævia as being physiologically impossible."

The allegation contained in the above remarks will be found altogether untrue on reference being made to my paper in the *Medical Gazette*. In it I have not mentioned the name of any author, nor have I alluded to, much more disputed the truth of, any of their opinions. On the contrary, I have only expressed my own views. I have stated that there always are two sources of bleeding in cases of placenta prævia, when the placenta is partially separated, and that sometimes a third is created; and have I not there mentioned that one of these is from the uterine surface of the placenta? Most assuredly I have, and am convinced that a great amount of blood is discharged from this situation. The difference between my opinion and that which was first entertained by Dr. Hamilton, Gendrin, and afterwards by Dr. Simpson, does not, and cannot, as Dr. West has assumed, consist in my disbelief in the doctrine that blood issues from the partially-detached placental surface, because I have, in the paper already quoted, advocated it, and I have also entertained this view for years past. In order to make myself more intelligible if possible, I shall make a few further remarks. To understand how floodings happen, and the sources whence the blood is discharged, it is necessary for us to have an accurate knowledge of the anatomy and physiology of the gravid uterus in all its progressive stages of development. We should also be well acquainted with the normal relative changes which occur previous to, during, and after labour. The moral and physical causes which act abnormally, either directly or indirectly upon the womb, so as to derange its functions, or lead to organic change of structure, must likewise be well considered.

But as it is impossible for me to give even a short sketch of these important subjects at the present, I must therefore refer the reader to the works of John Hunter, W. Hunter, Gifford, Rigby, Burns, Campbell, Lee, J. Read, Dalrymple, Goodsire, Wagner, Weber, Baer, Levret, Puzos, Velpeau, La Chapelle, Boivin, &c.

I shall, however, briefly allude to two or three points, so that I may more easily explain my meaning.

The uterine arteries bear no proportion, in either number or size, to the veins; but they are endowed with higher vital properties than these vessels, having the power to contract and retract. On the contrary, the veins are altogether devoid of these qualities, and entirely depend on the contraction of the uterus to produce a diminution in their calibres. They are arranged in tiers; but they so freely inosculate, as in reality to render them subject to the same results, when the womb is inactive, as if there was only one continuous vessel, more especially so as they possess no valves to prevent the reflux of blood. They terminate in the internal surface of the gravid uterus by large openings, which can be obliterated only by normal uterine contraction. The above facts, and a more comprehensive knowledge of the anatomy, physiology, and pathology of the gravid uterus and its contents, and the normal and abnormal changes which take place during labour, enable us to account why such immense discharges of blood take place, when the placenta is only partially separated, and the uterus is in a passive condition. When this partial detachment has happened, a cause exists, which soon excites abnormal or irregular contraction. In all cases of floodings which occur during the latter months of pregnancy, or in labour, several effects are produced by this accident:—Firstly, the utero-placental vessels are lacerated; secondly, the large venous openings are exposed; thirdly, sometimes, and, indeed, not unfrequently, there is laceration or disruption of the placental structure, whereby the ramifications of the umbilical arteries and veins are more or less torn through. There are, then, always two surfaces exposed, upon each of which vessels are laid open, which sometimes pour out blood in such torrents as to deluge the bed, and the floor of the room, and places the life of the woman in the greatest jeopardy, and, indeed, sometimes destroys her by the first gush. When the placenta is only partially separated, the blood which is lost is chiefly venous, and mostly comes either directly from the great venous apertures, or indirectly in its course from the placenta. The utero-placental arteries which are torn, pour out little blood, being of small size, and having an inherent contractile power. The nature of the injury which has been inflicted upon their coats lessens the chance of bleeding from their extremities. We know that when a uterine polypus is removed by torsion, no bleeding happens. A limb may be torn from the body by machinery, and no hæmorrhage ensue. On the contrary, the veins are very large and numerous, and if we could accurately measure their length and calibres, and then compute the aggregate admeasurement, we should find it equal to the size of a very large cavity, which would contain an immense quantity of blood. The veins therefore may be collectively considered as a large reservoir. But the blood which is discharged is not alone that which they contained when the flooding begun, but also that which continues, in the course of circulation, to pass into them. Nor does the discharge only proceed from the lower tier of veins whose mouths are opened by the separation of the placenta; but also the whole of the vital fluid which this system of vessels contained, runs off, as they have no valves to prevent its return towards, and consequently its discharge into, the uterine cavity. The amount of loss does not always bear a proportion to the extent of the separation of the placenta, but stands in an inverse order. In some cases it is great, although the degree of separation is small, and *vice versâ*. The concurrence or absence of a variety of contingent circumstances lead to these different results. Such are the following:—The constitution of the woman; the state of the general vascular system; the organic state of the abdominal viscera; the state of the uterine fibre, more especially in the vicinity of the placenta; the mode of separation of the placenta; the venous extremities being patulous or blocked up by portions of disrupted placental tufts. When the structure of the placenta is injured, the blood issues from the umbilical vessels, which is partly arterial and partly venous. It is greater or less in quantity, according to the extent of the mischief.

In cases of placenta prævia, the texture of the after-birth is disrupted by the pressure and contusion it sustains from the child's head. When the labour is long, whilst the os uteri remains rigid, or only partially dilated, both further separation and laceration of the placenta is produced by the head being forced down upon it, so as to push it against, and partly through, this circle. This organ is injured by rude examinations, and also by the unjustifiable practice of tearing a portion away, which is recommended by high authority, to enable the obstetrician to come to a correct diagnosis. When flooding

takes place from simple separation of the placenta, the blood is chiefly discharged from the maternal vascular system, and the woman suffers in proportion to the loss, or relatively to her power to bear it. The child suffers comparatively little at first, and probably ultimately more by its being deprived of the vivifying influence of the maternal blood, than on account of a direct loss from its own system. But when the organization of the placenta is broken into, the effects upon the child are very different; the blood now comes from its own vessels, and cannot flow long without causing its death. When born, the blanched white surface of its body is strong evidence of the fatal cause which has led to it.

I have endeavoured, in the preceding remarks, to show that the hæmorrhage always proceeds from two, and sometimes three, sources, and that it comes not alone from the surface of the placenta, which is partly separated from the uterus. If further evidence is wanted to prove that the blood is profusely poured out from the open extremities of the veins, we have only to recollect that serious and fatal post-partum hæmorrhage frequently occurs when both the child and the placenta are delivered or expelled.

February, 1847.

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ON THE

# CAUSES, CONSEQUENCES, AND TREATMENT, OF INDURATED CHANCRE.

By WILLIAM ACTON, ESQ.,

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(*Continued from p.* 12.)

LOCAL TREATMENT: *Importance of removing all causes of induration; employment of opium, advantage of an aqueous solution; application of water-dressing, calomel, and ointments, considered.—Compression by means of Indian-rubber bands recommended.—The plans of excision and cauterization discussed.*—GENERAL TREATMENT: *Course of the disease, if general treatment be not resorted to; necessity of waiting a few days, before deciding upon giving mercury; objections answered.—Is it proper to wait until secondary symptoms commence? Difference in treatment between the poor and the rich.—Opinions of Sir B. Brodie, Wallace, and Ricord, on duration of a course of mercury.—Exceptional cases.*

IN speaking of the treatment of indurated chancre, I shall first allude to local applications, and subsequently dwell on general treatment, although one or the other must be employed to dissipate this formidable symptom.

## LOCAL TREATMENT.

It has been shown that induration may be attended with simple ulceration, or that gangrene may come on in the centre of the ulceration, or the surface may become excoriated, and, lastly, that induration may exist without the slightest trace of ulceration, or may follow in the spot where a sore has existed, but which may have entirely healed. Now, in either one or other of these cases, the local treatment required may be somewhat different. If the surgeon have reason to believe that the induration attendant on a sore depend upon any irritating application the patient may have used, all such exciting causes must at once be left off, and water-dressing substituted. If induration disappears, the alarm of the surgeon vanishes, and the patient may be assured that he stands in but slight dread of secondary symptoms. If, however, under this treatment, the induration increases, the case comes under one of the heads we are about to describe.

Should the surgeon not be consulted until mollecular gangrene has commenced in the indurated chancre, as delineated in fig. 6 of part ii. plate 2, of my Atlas of Plates on Venereal Diseases, water-dressing would alone prove inefficacious, and we must have recourse to opium, or the ulceration and induration would increase very rapidly. I formerly recommended an ointment composed of calomel and opium, but I have frequently found this application too irritating. I usually now desire the patient to use a lotion containing two drachms of the watery extract of opium, carefully rubbed down in a pint of water, or I order a quantity of crude opium, the proportions varying from one drachm to half an ounce, to be boiled for half an hour in a pint of water, strained through tow, and the lotion kept constantly to the sore. I am obliged to have recourse to this solution, as I find the spirit, or acetic acid, contained in the preparations of the Pharmacopœia, even when largely diluted with water, cause great pain to irritable sores. It must be remembered that these aqueous solutions do not keep well, they should therefore be made in small quantities at a time, in warm weather.

The practitioner must not, however, expect the local application of opium to effect any other purpose than that of allaying pain; it will be enough, if, in doing this, opium should prevent the ulceration extending. It must be borne in mind, that the ulceration does not depend upon acute inflammation, as in phagedæna, but upon the effusion into the cellular tissue around the sore, thus strangulating the tissues, and causing their death. This effusion must, as we shall presently see, be removed by general treatment, and which has already been fully alluded to elsewhere.*

When called upon to treat simple excoriation on the surface of induration, water-dressing may be resorted to; or if there be any tendency on the surface of the excoriation to become converted into condylomatous growths, the very best application is sprinkling the parts with calomel, and placing dry lint between the glands and prepuce. I generally object to the employment of ointments, although many surgeons recommend them. I have found greasy applications become quickly rancid, from the heat and secretions of the parts, and thus produce much mischief. The idea formerly prevalent, that mercury would thus enter the system, has nearly exploded, inasmuch as most surgeons now believe that in all these cases, sores present a secreting, and not an absorbing surface, and our object is the opposite of encouraging secretion, as we no longer imagine Nature capable of throwing off the peccant humours, although some still treat syphilis as if this were possible.

If, then, by means of one or other of these plans, ulceration, gangrene, or excoriation, has ceased, the induration alone remaining, the next question is, how are we to remove it?—and various plans have been recommended. In my own private practice, I have derived the greatest benefit from compression. The way I proceed is the following, when the induration is so situated as to permit of my carrying the plan into effect:—Folding a small pledget of lint, about the size of the induration, I apply it to the surface, and keep it bound down tightly by means of those small Indian-rubber bands now commonly used for tying up letters; they can be had of all sizes, and are admirably adapted for this purpose: they should be broader than usual, or they may be liable to rub the delicate skin of the penis. To prevent this, a piece of lint may be placed between the skin and band. This simple plan I have found the most efficacious, after experimenting with many other substances. Mr. Busk tells me that compression has been long used on board the Dreadnought, by means of a watch-spring, which exercises considerable pressure on the induration, and with the best effects, in cases which have resisted other means of discussion.

Authors† have recommended the local destruction of these masses of induration; the quotation given below will, however, show the danger of applying caustic, and Wallace‡ corroborates this opinion. I can, from personal experience, speak of the objection to removing masses of induration, in imitation of Delpech,§ by the knife. During the time I was making my investigations on the microscopical appearance of induration, I removed several masses of induration from different persons, and in one instance the surface of the incised wound took on the same indurated appearance, although the original indurated mass had been entirely removed by the knife: I may mention that no mercury had been given to this patient. The case is so far interesting, as pointing out that the germ of the disease extends further than the mere mass of induration, and that something more is required than mere excision, and of which I now purpose to treat.

## GENERAL TREATMENT.

My readers must be already prepared for the statement, that general treatment will be required if we wish to effectually remove specific induration; with the exceptional cases of the

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* Practical Treatise on Venereal Diseases, by Wm. Acton, p. 247, et seq.

† "Quand une cicatrice a déjà recouvert la tuméfaction, nous faisons entamer cette dernière par la potasse; et a la chute de l'escarre, la plaie est touchée plusieurs fois avec la caustique mercuriel. Il faut être circonspect dans l'emploi de tout autre caustique en pareil cas: ces tuméfactions jouissent de la funeste propriété de passer aisement à l'état cancéreux."—*Delpech. Mal Veneriens, p.* 305.

‡ "But with this recommendation I can by no means coincide; for the application of caustics to these indurations will often cause troublesome and peculiar ulcers and serious consequent disease."—*Wallace on Venereal, p.* 312.

§ "Si une sensibilité extrême se faisait remarquer après chaque cauterisation, il faudrait y renoncer et pratiquer l'excision de la tumeur avec l'instrument tranchant."—*Delpech, loc. cit., p.* 306.

spurious hardened sores alluded to in a previous article, local treatment alone will fail in removing it. In spite of local applications, or when the case has been entirely neglected, the surgeon observes induration increase, or remain in *statu quo* for some weeks; secondary symptoms will then supervene, and we meet with relapses, again and again recurring, the indurated mass remaining as hard as when it commenced many months before; or every now and then, its surface will take on an excoriated or gangrenous appearance, if not controlled by general treatment.

Much has been written of late years on the abuses of mercury, and every practitioner, whatever his opinion may be on the subject, hesitates before subjecting a patient to a course of mercury; but I presume there are few in the present day who dare to treat indurated chancre without the mineral. I have, it is true, met with some few cases that have been under treatment for months, by practitioners who object to mercury generally, but finally admit that indurated chancre is the exception; it is the only form of syphilis, they say, which requires mercury. The homœopathic physicians, even, prescribe it, and acknowledge the virulence of the symptoms, and that the usual infinitesimal doses are of little avail.

Although, then, I believe that mercury will be absolutely requisite in specific induration, for the reasons above given, I would not recommend its employment for the first few days after the appearance of hardening. I would always advise the surgeon to pause before commencing a course of mercury, and see if Nature will not cause absorption of the mass, in the hope that it may not be of a specific kind. Delay is dangerous in many things, but here it is only a wise precaution: in several instances, it will enable you to avoid mercury altogether, and supposing the induration to increase, we may always have recourse to the mineral. There are authors who pretend that we should give mercury in the earliest stages of chancre, so that the antidote and the poison may enter the system together. This doctrine might be tenable, provided we held that all chancres require mercury, but as, nine times in ten, primary symptoms do not require mercury, and as, during the first few days, it is impossible to say what sores will become hard, and therefore be followed by secondary symptoms, we should give mercury unnecessarily in nine cases out of ten. The advocates of these opinions have not shown that their treatment is more successful than any other. I have not found it more difficult to treat an indurated chancre that has existed a fortnight than one which has become hard during the last few days; I have observed no severer secondary symptoms follow the one than the other: why should we then give mercury thus rashly? However, in advocating caution, I would not be supposed to recommend the surgeon to put off its use for an indefinite period: if the hardness does not abate, or if it increases without any assignable cause, or if gangrene is set up in the centre of the indurated mass, I would at once commence mercury; for delay can now be of no use, and it is well for the patient to see, that although you do not choose to give mercury inadvertently, you are not afraid of recommending it when necessary. Patients are often impressed with the idea that you avoid giving them mercury as something very dreadful; they have heard of noses being lost, and think, by your hesitating, that some grand calamity will happen to them. These alarms should be quieted by a true statement of the case; it avoids much misunderstanding or misinterpretation.

In consultation, I have heard the following objections to my views: "You admit the quantity of mercury must be large, and the duration of a course long, to dissipate induration, and even then you dread the occurrence of secondary symptoms; why give mercury at present? why not wait till the occurrence of secondary symptoms? thus you may avoid two courses of mercury."

My reply has been something to the following effect: "Your objection is valid in many cases among poor patients, but cannot be carried into effect among the upper classes for the following reasons:—A dispensary or hospital out-patient too often considers himself well as soon as the sore is healed; he absents himself, or, it may be, discontinues mercury too soon. This frequently happens in consequence of the fear of losing his work by attending at a public institution, and perhaps not one in ten go through a proper course of mercury. Now, as this so often happens, it becomes a question, whether it be good or bad treatment to give such a man mercury for an indurated sore, seeing that probably he cannot or will not attend the requisite time. Scientifically, the treatment may be right, but the surgeon may be unable to carry it into practice. As expediency is the order of the day, we may have to apply it to the treatment of the poor, and I have often been obliged to follow the plan. But observe the results: the symptoms are more severe, and less tractable, and the health suffers permanently. It is true that it becomes difficult to distinguish the effects of syphilis, dissipation, exposure to cold, bad food, and the mischief of an ill-directed course of mercury, as all these influences may be brought to bear upon the mechanic or prostitute unlucky enough to contract syphilis, and it remains for the surgeon to weigh the consequences, and choose the lesser evil; but among the upper classes I have no hesitation in recommending the surgeon to treat indurated chancre, and not wait until secondary symptoms appear. If my advice has been followed, the patient is told the true meaning of induration; and if he is at all a nervous person, he will not like the Damocletian sword held over his head; he will call upon you to give mercury, and blame you if you do not. When secondary symptoms occur, his friends will say—had you given mercury, these symptoms would have been prevented. These objections might, however, be overruled; but the surgeon will regret not having given mercury when he finds the eruption breaking out over the face of his patient, and no longer amenable to a moderate course of mercury; and believes, that had the mineral been given, the primary sore, the eruption, (if relapses occurred,) would be slight, and his patient would not attribute blame to his surgeon, but ascribe them to the virulence of the complaint."

I may now suppose that mercury is agreed to be given either internally or by friction, so as to affect the system, and through it the sore.* In former papers, and in my work on venereal diseases, I have dwelt at so great a length on the manner, the dose, the precautions, and consequences of giving mercury, that I have no intention of repeating what I have advanced. There are, however, some points which remain still to be alluded to; among others, the time necessary for the cure of the indurated mass. As a general rule, the mineral should be given as loug as any hardening remains around or beneath the sore, and this must vary from a fortnight to three months.† General rules, however, in this department of surgery, admit of a large number of exceptions, as I have frequently had occasion to mention, and as I now propose showing.

I have remarked, and I do not remember to have read or heard of the observation elsewhere, that when induration occurs in a person who has already had secondary symptoms, but little mercury is requisite to cure the induration; whereas, had secondary symptoms not preceded, probably larger quantities would have been required. The first instance which directed my attention to the subject was the following:—In the summer of 1845, a gentleman contracted chancre, which became indurated, raised, and the centre took on a gangrenous action. A simple plan of treatment was followed at first, but at length mercury was resorted to, when what was my surprise to see the symptoms totally and rapidly disappear. Having learnt that this patient had suffered some years before from secondary symptoms, I left off mercury a few days after the entire disappearance of the induration, and my patient has had no relapse since. At the time I witnessed this case, I was a believer in the doctrine of M. Ricord, that a person could not have a second infection followed by secondary symptoms. This case proved, however, that at any rate indurated chancre could occur in an individual who had had secondary symptoms; and the professor of the Hôpital du Midi now admits, I believe, that there are exceptions to his rule. It is for others to corroborate the opinion I advance, with some hesitation, as the occurrence of these cases is very rare, but on that account no less interesting, as bearing upon the treatment of induration.

* Wallace states: "In short, genuine primary syphilis will be found particularly well suited to mercurial treatment; for there is no medicine whose beneficial influence can in any way be compared to that of mercury in this form of disease." * * * "Mercury, administered for the cure of indurated syphilis, must be employed in larger doses, and continued for a longer time, than in the treatment of the regular form of this disease. Alterative doses will often be of no use, and the symptoms will frequently remain obstinate, until a decidedly mercurial state of the system has been produced, after which it will rapidly disappear."—*Wallace, loc. cit., p.* 309.

† Sir B. Brodie says: "If it (mercury) be taken for a primary sore, the patient should never leave it off until the hard cicatrix has disappeared. You must exhibit it until the sore has healed, and for some time afterwards."—THE LANCET, vol. i. 1843-4, p. 676.

"The principle which regulates my conduct in this point of practice, is to persevere with the use of mercury, provided it agree with the system, for at least ten days or a fortnight after the induration or contraction have ceased to diminish; and whatever degree of these states may then remain I leave to the slow operations of Nature, or to be removed at a future period by the knife, in case this should be desired by the patient, for the purpose of curing a phymosis, or any other inconvenient deformity."—*Wallace, loc. cit., p.* 313.

In carrying out the general rule, that mercury should be given as long as induration lasts, the surgeon must not forget, that in old-standing cases, the mass may consist of something more than specific induration, and may be made up of organized tissue, which it is in vain to think of removing by mercury, as is so ably stated by M. Ricord and Wallace.* I have myself seen persons bearing traces of induration for two years after a course of mercury has been left off, and yet no secondary symptoms follow; but in these instances it has been impossible, from the situation of the hardened mass, to apply compression. I now generally find these "remains" less common than formerly: the surgeon, however, must be prepared to leave them occasionally, particularly when he thinks he has given mercury enough, or the constitution of his patient will not allow him to carry it further.

In concluding these remarks, I have to apologize to my readers for dwelling so long on the subject of indurated chancre; but let it be remembered that induration is the keystone to the arch of syphilis, and that I have attempted to collect together all the available knowledge which science possesses, and have added my own observations. Much, however, still remains unknown; and I hope others will undertake the investigation of this scientific question, particularly the influence of climate and treatment on the hardening of sores.

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## ON A RARE FORM OF DISLOCATION OF THE ASTRAGALUS.

By J. H. MACDONNELL, M.D., Dublin.

In THE LANCET for January 30th, (p. 133,) there is a report from the London Hospital, of a highly interesting and rare case of dislocation of the astragalus, in which the head of this bone was forcibly driven inwards, and slightly upwards, from its connexion with the navicular bone. Mr Adams remarks, that he knows of no recorded case similar to his; and I am satisfied, after a careful search for such cases, that they are of extreme rareness. No such case is mentioned, as of ordinary occurrence, by Sir A. Cooper, Boyer, Chelius, or Gibson; from which I infer that the dislocation is not in the list of those recognised by the surgeons of England, France, Germany, or the United States.

I have, however, met with a case very nearly resembling this, which occurred in the person of Mr. Carmichael, the distinguished surgeon of the Richmond Hospital, Dublin, in 1839. The dislocation was occasioned by the sudden fall of Mr. Carmichael's horse, while he was moving at a brisk trot. Mr. Carmichael's weight was thrown, with great violence, on the anterior part of the right foot, which alone came to the ground. About half an hour after the accident, he was seen by Dr. Hutton and myself, when we observed the following deformity. The toes were turned outwards, the inner edge of the foot forming an angle of about thirty degrees, with its natural direction; the sole was slightly turned outwards, and the outer edge slightly elevated. The concavity of the tendo-Achillis posteriorly was increased, and the heel lengthened. On grasping the soft parts between the tendo-Achillis and tibia, we found the distance between them much greater than in the other leg. The absence of the hard projection, which would have been formed by the upper part of the astragalus, had it passed backwards with the rest of the tarsus, was evident. Each malleolus was perfectly defined: below and before the inner, there was a hard prominence, over which the skin was tense, formed by the inner surface of the astragalus, brought into relief by the dislocation and the slight eversion of the sole of the foot. Much the most striking feature of the deformity consisted in a prominence on the dorsum of the foot. Immediately in front of the tibia, this prominence presented a flat surface, broad, from the tibia forwards, about a finger's breadth, from which there was an abrupt descent to the anterior part of the tarsus. Over this projection, caused by the head of the astragalus thrown on the upper surface of the scaphoid and cuneiform bones, the integuments were so tense, that it was evident a very small additional force would have driven the astragalus through them. Lastly, on taking the distance from the point of the internal malleolus to the extremity of the great toe with a tape measure, I found it to be almost an inch less than the distance between the same points in the left foot. We could detect no fracture. The foot could be flexed and extended; but, as any movement occasioned great pain, we did not ascertain to what extent flexion and extension could be carried. There was no obscurity about these deviations from the natural form. There had not been time for inflammatory tumefaction to arise, and no effusion of blood had taken place.

The conclusion we came to was, that the violence had resulted in tearing the astragalus from its bed, on the os calcis, the inferior calcaneo-scaphoid ligament, and scaphoid bone, and throwing it on the upper surface of the scaphoid and cuneiform bones.

Unlike the case recorded in THE LANCET, we experienced considerable difficulty in the reduction of the dislocation. We were under the necessity of having recourse to pulleys, and even with their assistance, the reduction was difficult.

A detail of the manner in which the luxation was produced, and of the means used in the reduction, may be seen in the fourteenth volume (p. 235) of the *Dublin Journal of Medical Science.*

Except in the precise direction of the luxation, the London Hospital case was, I think, very similar to this. The reporter (Mr. Adams) would, I am sure, gratify the profession, if he would favour them with a more minute detail than he has given of his very interesting case.

Dublin, Feb., 1847.

## THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

II.—ANIMAL TEXTURES.

It may with great certainty be affirmed, that the blood contains the elements from which, in animal structures, the solid textures and the secretions are produced. Blood consists of a limpid fluid, holding in suspension a multitude of cells of two kinds; the one red, the other white or colourless; it may therefore with propriety be termed a cellular or corpuscular fluid. On its first discharge from the living vessels, blood is thin—that is to say, it drops like water, but it speedily becomes viscous or stringy, and then coagulates into a soft solid, which ultimately separates into two parts—a red clot, and a yellow, fluid serum. But blood, before it coagulates, frequently separates into two fluid portions; the uppermost colourless, and termed plasma, lymph, or liquor sanguinis, the lower red: both these portions coagulate, so that the solid clot is in part colourless and in part red. The colourless part of the clot, which is uppermost, and formed by the coagulation of the plasma or lymph, is a coherent and elastic fibro-cellular texture, ordinarily termed the buffy coat; it is usually depressed in the centre, with thin, fibrous edges, and there is frequently a viscous, colourless, gelatinous mucus in the cup-like depression, that may be drawn out in strings like ordinary mucus.

The microscopic appearances in a film of blood not disposed to exhibit a colourless layer of lymph or plasma, are very different from those of a film of blood that is disposed to do so. In blood not disposed to exhibit a buffy coat upon the clot, we see with the microscope numerous red corpuscles or cells, slightly cohering in strings and rolls, and a few colourless ones floating in a clear, limpid fluid. In blood that is disposed to have a buffy coat upon the clot, we see a much larger proportion of colourless cells, and multitudes of minute molecules floating with the red cells in the clear and limpid fluid; the red cells adhere more firmly to each other, and are congregated in larger and more irregular masses; and in the fluid, a network or tissue of interlaced filaments or fibrils is shortly observed to form. If a film of the colourless fluid, plasma, or lymph, be separately examined with the micro-

* "We will lay down as a general rule, that the surgeon should continue the mercury as long as induration remains. To remove a moderate-sized induration, treatment should be persisted in for six months, provided the mineral produces no ill consequences. But (adds he) a six months' treatment is no slight matter, and you should not prescribe it except when you are unable to do otherwise; and it would be well for our patient if this could be avoided." Again, lower down, he says: "We ought to continue mercury until the entire disappearance of the induration around the chancre. But here springs up a difficulty. Is this induration always easy to distinguish? By no means. When this specific induration has been destroyed, there remains sometimes *du tissu inodulaire, des tissus de cicatrice, des nodules de tissu fibro-cartilagineuse*, which may impose upon us as the remains of induration. Mistrust generally an induration which resists, during six or eight months, a well-regulated mercurial treatment." —*Ricord, Gazette des Hôpitaux.*

"It is, however, to be observed, that it will not be always in our power to disperse indurations of this kind; for it sometimes happens that a state of hardness and tightening will continue long after the period at which mercury ought to be omitted. Indeed, a state of induration and contraction of the parts which had been the seat of primary syphilis may persist even for life."—*Wallace, loc. cit., p.* 312.

scope, we find it mixed with innumerable colourless cells and isolated molecules; within the cells are a number of similar molecules, some of the cells containing much larger ones than the others; and when the coagulation commences, it is by the formation of fibres in the fluid. When water or a weak solution of potass is added to colourless blood-cells, they immediately begin to enlarge, gradually swell out to double their former size, and then burst open, discharging their contents, which consist of a viscous mass, mixed with molecules, and apparently identical, in all its properties, with natural or healthy mucus.

All the mucous secretions and the saliva contain colourless cells, which cannot be distinguished by any specific character from the colourless cells of the blood, and there appears no reason to doubt that the viscous matter of these secretions is an animal product elaborated in the interior of cells identical with those which are seen floating or mingled with it. Moreover, both mucus and saliva readily form fibrils or fibres when acted on by appropriate agents. These and several other well-known phenomena observable in the animal secretions may be treated of analogically, with a view to ascertain the origin of the fibrillating elements of the plasma, or lymph of blood, the element to which its coagulation into a coherent, fibrous, or fibro-corpuscular texture is due. Milk, among others, is a complex animal secretion, elaborated in the interior of cells or corpuscles, and set free by the thinning away, dissolution, or rupture of the cell-wall. The yolk of an egg is an analogous example, where the cells are large, and their walls so very thin, that it is with the utmost difficulty they can be touched, in the gentlest manner, without rupture. To the unassisted eye, milk appears as a homogeneous, white, opaque fluid; through the microscope, its white appearance and opacity are found to be owing to myriads of minute molecules,—and it is well-known to contain an oily element or butter, a fibro-albuminous element or curd, and a limpid fluid or whey, and to the sum of each of these products every milk-cell contributes its quota.

The plasma, lymph, or colourless element, floating on the surface of newly-drawn blood, appears to the unassisted eye, when first seen, as a semi-transparent, colourless fluid, gradually becoming viscous, and then fibrous and solid; and it is well known to contain, not only the solidifying, fibrous, but a soluble, albuminous, and oily element. There are, then, the very same reasons for concluding that the fibrinous and albuminous elements of the blood, plasma, lymph, or liquor sanguinis, are derived from colourless cells similar to those found in it, as there are for concluding that the elements of milk, saliva, or any other complex animal product, are derived from cells; and the plasma, or lymph of blood, therefore, is as much entitled to the term secretion,—to be considered as the product of cell-elaboration,—as any of the other fluid or solid materials of the structure.

An abundance of colourless cells, filled with a viscous matter and molecules, are at all times discharged or thrown off, mixed with a viscid mucus, from the mucous membranes, and their numbers are increased upon the slightest irritation or inflammation. Similar cells are at all times discharged or thrown off from all wounded and healing textures, where the process of reparation is going on—where new and conformable elements of growth are appearing, and where, therefore, the process of nutrition is normal. Similar cells are also discharged or thrown off from diseased textures, ulcers, and abscesses, from scrofulous joints, and from the cavities of the lung in consumption; in these latter instances, more especially, the cells have received the distinctive appellation of pus.

Pus varies in consistency: it may be nearly solid, or quite fluid—that is to say, it may be solid enough not to drop like water; and in this state it is a corpuscular texture, analogous to the incoherent corpuscular textures of the lower forms of vegetation, and the green parenchyma of a leaf. Recently excreted pus displays, under the microscope, an abundance of colourless cells, the interior contents of which, in various states of elaboration, present various appearances. Old pus has a different microscopical aspect, which it is well should be remembered in considering the origin of tubercles, consisting chiefly of minute molecules and granular matter, resulting from the breaking-down of the cell-walls. The cells or corpuscles of healthy or recently excreted pus vary in magnitude and appearance; active molecules are frequently visible in their interior; and when water, or a weak solution of potass, is added to them, they swell, burst, and discharge their contents, consisting of a viscous matter mixed with molecules.

No wounded, irritated, or abraded texture heals or ulcerates without the presence of a greater or less abundance of incoherent colourless cells; and there are no certain, specific, distinguishing marks between the colourless cells of blood, lymph, and pus. When, therefore, a healing wound discharges pus, it can be regarded in no other light than as indicating a superabundance of nutritive cells, which, from an actual excess in number, or some other cause, do not meet with the conditions required to make them deliver up their contents, and take part in the metamorphoses required for the reparation of the texture; but when an ulcerating wound (where there is no reparative process at all) discharges pus, it would appear, in that case, that all the cells, from some inherent defect, have lost the power of a conformable metamorphosis.

This explanation of the appearance of colourless cells, both in healing and ulcerating textures, implies, in the former case, a great excess of agents in the performance of a specific office or function—viz., the healing of the wound; and this, so far from being, as might hastily be imagined, contrary to, is, in fact, quite in accordance with, the usual plan of Nature as observed in other things, and in analogous instances. The pollen cells of vegetables, for example, have an important and specific function, and in what apparently excessive abundance are they produced. Of the myriads of pollen cells discharged from the anther, how few are actually expended in the fertilization of the embryo, compared with the myriads which seem to be wasted! In animals, the analogous fact, too, may be produced in illustration. Again, in the repair of a fractured bone, what an apparent excess of nutritive material, or callus, is collected for the cure, which is subsequently removed when the fractured extremities have been united! Moreover, there are other facts in surgery pointing to the same conclusion; for healthy granulations, copiously discharging what is called healthy pus, heal rapidly by moderate and regulated pressure, which, by diminishing the amount of blood flowing through the innumerable vessels of the young texture, diminishes also the amount of colourless cells, whereupon the quantity of pus diminishes, and the granulations, then becoming covered with a coherent, fibrous, non-secreting, instead of an incoherent, corpuscular, secreting, texture, are said to cicatrize or heal. Colourless cells, therefore, in all cases of nutrition, appear as the primary and active agents, the results depending upon their metamorphosis.

From these facts and observations, and from others fully detailed in former researches, I draw these important conclusions:—

First. That in all living structures—in all plants, and in all animals—the elements of growth and secretion—that is to say, the peculiar and characteristic solid and fluid matters of the structure—are prepared or elaborated in the interior of minute vesicular bodies, variously termed corpuscles or cells, which may either be coherent, forming a strong or solid texture, or incoherent, forming a soft or brittle, and more or less a fluid, one; and that the elaborated material, when set free by the opening or rupture of the cell-wall, undergoes ulterior changes or metamophoses, and either constitutes a part of the solid structure, or, remaining fluid, forms a secretion.

Secondly. That the incoherent cells of the parenchyma of the leaf are the primary elaborating cells of vegetables, and the incoherent cells of blood, the primary elaborating cells of animal structures. By the metamorphosis of the former, all the subsequent textures and vegetable colours and secretions are produced; and by the metamorphosis of the latter, all the animal textures and secretions. The incoherent parenchymatous cells of the leaf are in all their stages stationary; and the air necessary to their respiratory functions passes to and fro around them by the motive power of heat. The incoherent protoplasma cells of blood flow in streams throughout the body, traversing in their course the walls of the coherent cellular and aeriferous texture of the lung, into and out of which the air passes by the motive power of muscles.

Thirdly. That the relations subsisting between animal textures or secretions and the blood are analogous to those subsisting between vegetable textures or secretions and the leafy parenchyma; and therefore that the law of the morphology of animal must be analogous to that of vegetable structure. In the latter instance, the doctrines based upon the law do not profess to give any reason why the parenchyma of one leaf differs from that of another—why oil of peppermint is formed or secreted in one set of green cells, and prussic acid, opium, or bergamotte, in another; nor does it enter upon the question of the differences prevailing among the green granular cells of different parts of the same plants: on the contrary, the doctrines trace the form and mechanical properties, rather than the physiological function, of the textures; so that the main features of morphology are only secondarily affected by

differences and variations in secreted products. So, likewise, it appears to be in animal textures, that the morphology, in respect of form, is a branch of physiology sufficiently distinct from the morphology of secretion; and to admit, as is the case in plants, of a separate consideration.

"If we consider," says Mohl,—and he is speaking of the cells of plants,—"the place at which, in the interior of a cell, new cells are on the point of being formed, and at which the nuclei have already made their appearance, we find that the future mother-cell contains a viscous colourless mass, mixed with minute granules: and since this viscous mass everywhere precedes the first solid formations, I trust it will be considered justifiable, if I propose to designate it by the word 'protoplasma'—a term which recals to mind its physiological function."*

Now it is evident, in the universally existing process of cell elaboration, and whether the result be new cells, or permanent, cellular, or fibrous structure, or fluid secretion, that two distinct stages are recognised. In the first, the elaborating matter—the protoplasma, or primary element, (adopting the term proposed by Mohl,)—is in progress of preparation within the cell, shut out from all extraneous or exterior agents, except those specially admitted through the cell-wall to assist in the elaboration. In the second, the elaborated matter having been set free by the opening or rupture of the cell-wall, undergoes its ulterior metamorphosis, subject to the action of new agents, which may influence conformably or unconformably the completion of its permanent phase.

The liquor sanguinis or lymph which rises to the surface of newly-drawn blood is, if we adopt Mohl's term, the protoplasma of animal structures, and the buffy coat is a protuphasma, fibro-corpuscular texture, which, were it still within the vital influence of the whole structure, would, according to its analogies, become a secreting texture; and, moreover, the mucous or jelly-like matter often found in the depressed centre of the buffy coat is, in reality, the last change or secretion of this altering cell-texture. "The glairy fluid termed mucus being nothing more than an altered state of the fibrillating liquor sanguinis, the change from the one to the other being coeval with the changes within the cells. Hence, if we take the red portion of the buffed clot, and the red cells, to represent blood, then the colourless layer of liquor sanguinis (the protoplasma) will represent the first remove from blood, and mucus or pus will be next; and it would appear, generally, that the nearer the cell is to, or the fewer the stages of its removal (by morphological changes) from, the circulating current, the more nearly it resembles the colourless blood-corpuscle, and the more decidedly and visibly its fluid contents, when they escape, fibrillate; whereas, the further the cell is, or the greater the number of stages of its removal (by morphological changes) from the circulating cells, the larger it is, and the less perfectly do its fluid contents fibrillate."†

"The blood can hardly be said to be organized; yet, from the physical characters of coagulated fibrin, it is evident that while circulating in the body it holds a peculiarly endowed animal principle, (fibrin,) requiring only a moment's rest to constitute solid, organized (I do not say vascular) tissue. The texture, formation, cohesion, toughness, and elasticity, are all proofs of its organized nature; and it at once, without further aid or assistance, assumes all these properties, even after its removal from the body in venesection, or after death in its own vessels. There seems, then, to be but one step between the microscopic capillaries and the fibrin of the blood; the former are minute fibrinous channels; the latter may (not inappropriately) be termed organized tissue circulating with the blood." (*Medical Gazette*, March 26th, 1841.) These are sentiments expressed upwards of five years ago, and subsequent researches have confirmed the idea I then entertained. The term "fluid texture" may be objected to, nor can I contend for the congruity; but this does not alter the fact, that the blood is a cellular fluid, and a clot of blood a fibro-cellular texture. The incoherency or brittleness of the lower portion of the clot is owing to the predominance of cells; the coherency and toughness of the upper part to the predominance of fibres.

(*To be continued.*)

* See Mohl's paper "On the Circulation of the Sap in Plants," in the "Annals and Magazine of Natural History," July, 1846. (Translated from the *Botanische Zeitung* for Jan. and Feb. 1846.) This author objects to the term "mucilage," employed by Schleiden to designate this substance, as the term "vegetable mucilage" in the sense in which it is ordinarily used in chemical works, conveys a totally different meaning. The protoplasma of Mohl is termed "plastic element" in my "Researches," &c.

† "Second Series of Experimental Researches," p. 15, &c.—Churchill, London.

# Reviews.

*A Manual of Materia Medica and Therapeutics, including the Preparations of the Pharmacopœias of London, Edinburgh, and Dublin.* By J. Forbes Royle, M.D., F.R.S. London: Churchill, 1847. pp. 716.

As a specimen of typography and woodcutting, this Manual fully equals the best of the excellent series published by Mr. Churchill; it is, however, with its scientific and practical qualities that we have more especially to deal. The arrangement of the articles of the materia medica adopted by Dr. Royle, is good; and their therapeutic properties are, generally, set forth with lucid accuracy. Dr. Royle commences by some preliminary remarks on the objects of materia medica and therapeutics, and on the operations of pharmacy; proceeding to treat in succession of the mineral, vegetable, and animal materia medica. In the mineral materia medica, a chemical arrangement is adopted; the vegetable materia medica is arranged after the system of De Candolle, in this section, and the products of fermentation are included; and in the animal, the arrangement followed is that of Professor Graat.

As the title expresses, the articles of all the three national pharmacopœias are treated of, and new medicine, not included in either of the official works, are introduced. We give a specimen of Dr. Royle's treatment of a single article from each of the three great departments of Nature contributing to the service of the medical art. This will serve to convey the value of the work as a manual for students, and as a reminder to the practitioner. Our space obliges us to select substances the value and action of which are described with brevity.

From the first we take

"Hydrargyri Iodidum, L.

"Iodide or Protiodide of Mercury. Subiodide of some Chemists. *F.* Proto-Iodure de Mercury. *G.* Quecksilberiodür.

"Iodide of mercury (Hg I = 328) has been only recently introduced into medicine, its employment having been first indicated by M. Coindet. It occurs as a heavy greenish-yellow powder, sublimed by heat, insoluble in water and in alcohol, also in a watery solution of chlor. sodium, by which it is easily separated from the biniodide; soluble in ether and acids. It is decomposed by light, reddened by heat, but becoming yellow on cooling. By a higher degree of heat, it is resolved into metallic mercury and the red iodide. Comp. Hg. 55·5 + I 44·5 = 100.

"*Prep.* Rub together mercury, one ounce, and iodine, five drachms, adding gradually alcohol, q. s., till the globules disappear. With a gentle heat dry the powder immediately out of access of light. Keep in well closed bottles.

"The mercury and iodine being mixed in equivalent proportions, and triturated, considerable heat is produced, and sometimes even explosion; the alcohol is added to dissolve the iodine, and this being presented in a finely divided state to the mercury, the latter becomes rapidly extinguished. It acts also on some biniodide of mercury which is formed at first, and facilitates its combination with metallic mercury. The iodide of mercury may also be formed by precipitating or mixing together a solution of iodide of potassium with one of protonitrate of mercury having the slightest excess of nitric'. (Soub. ii. 515.)

"*Tests.* Yellowish when recently prepared, and when heat is cautiously applied it sublimes in red crystals, which afterwards become yellow, and blacken by excess of light. It is not soluble in chlor. sodium, L. Any impurity will appear if the iodide does not answer to all these characteristics.

"*Action. Uses.* Irritant poison. Alterative stimulant in syphilis occurring in scrofulous patients. Both the iodides, if continued, will produce the effect of mercurials.

"*D.* One grain to three grains.

"Pilulæ Hydrargyri Iodidi, L. Pills of the iodide of Mercury.

*Prep.* Beat into a uniform mass iod. mercury, one drachm, confec. dog-rose, three drachms, powdered ginger, one drachm.

"*D.* Five grains, to fifteen grains, as five grains contain one grain of the iodide.

"Unguentum Hydrargyri Iodidi, L. Ointment of iodide of mercury.

*Prep.* Melt white wax, two ounces, and lard, six ounces, add finely powdered iodide of mercury, one drachm. Mix.

"This ointment may be rubbed in, or applied as a dressing to scrofulous sores"—pp. 189, 190.

From the vegetable kingdom we take the bitter almond, interesting at the present time on account of the fatal case resulting from a prescription containing bitter "almond water."

"Amygdalæ Amaræ. Bitter almonds are usually found shelled, smaller, and commonly imported from Mogadore. These, like the sweet almond, are without smell, but have a strong and peculiar bitter taste. Like them also, they contain bland fixed oil, with *Synaptase*, and readily form a white emulsion with water. They also contain a small portion of an albuminous but very peculiar principle, called *Amygdalin*, soluble in water and in boiling alcohol, colourless, and crystallizable; this contains nitrogen, and has a pure bitter taste, but no smell ($C_{40}$ $H_{27}$ N $O_{22}$.) It should be remarked that neither volatile oil nor hydrocyanic acid is mentioned as a constituent of bitter almonds. Indeed, both have been proved by chemists not to exist in them, though they may easily be obtained from them. This is by the mutual action, with the assistance of water, of one principle, synaptase, when in solution, upon another, the amygdalin; the one being supposed to bear the same relation to the other that diastase does to starch, or acting as yeast does upon sugar. The result, made immediately evident by the smell, is the production of the oil of bitter almonds, which is a true essential oil, containing hydrocyanic acid.

"*Action. Uses.* Sedative, poisonous. Bitter almonds, even in small doses, disagree with many, producing derangement of the digestive functions, and a kind of nettle rash. They have proved fatal to men, children, and small animals. They flavour the almond emulsion of the D. P., but are seldom employed medicinally.

"*Oil of bitter almonds*, though not officinal, requires to be noticed as it is sometimes employed therapeutically, and is, moreover, a fearfully powerful poison. This when pure is considered to be a hydruret of benzoyle, a limpid colourless liquid, with a powerful odour; but it is not in this state so poisonous. Exposed to the atmosphere, it absorbs oxygen, and is converted into benzoic acid. Ordinarily, oil of bitter almonds is of a yellow amber colour, has an odour of hydrocyanic acid in addition to its own, which is usually considered rather agreeable. It has a bitter and burning taste, from containing hydrocyanic acid (8·5—14·33 per cent.) with some other substances. This acid may, however, be separated from the oil, which is powerfully poisonous, heavier than water, soluble to a small extent in water, but very readily in alcohol and ether.

*Action. Uses.* Poisonous, like hydrocyanic acid, and sometimes used for the same purposes, in doses of a quarter of a minim to one minim; also for flavouring.*—pp. 388, 389.

From the animal kingdom we select the leech:—

"Diplo-Neura *v.* Articulata.

"Class Annelida.

"Hirudo, L. Hirudo medicinalis, *Linn.* L. D. Sanguisuga, *Savigny.*

"Leeches and their effects must have been known from the earliest times. They were early employed therapeutically by the Hindoos, and the Arabs adopted their practice. (Royle, "Hindoo Med. p. 38, and Wise on "Hindu Medicine, p. 177.) Themison mentions the employment of leeches by the ancients. Herodotus alludes to one kind, *Bdella nilotica.*) Dr. Pereira infers that *Sanguisuga ægyptiaca*, the species from which the French soldiers in Egypt suffered, is that referred to in the Bible (Prov. xxx. 15) by the name of *Olukeh* or *Aluka*. The latter, or *Aluk*, is also the Arabic name for leech.

"The two species most commonly used, and which by some are considered varieties of one another, are, *Hirudo medicinalis* and *H. officinalis.*

"H. officinalis is distinguished by its unspotted olive green belly, and by the dark green back, along which, and the flanks, are observed six longitudinal, often interrupted rusty-red stripes. Six of the eyes are said by Savigny to be very prominent. Teeth about seventy in number. A native of the south of Europe, as of France and Germany. It is usually called the green leech, sometimes the Hungary leech, from being a native of that country.

"H. medicinalis, the kind usually employed here, and readily distinguished from the foregoing by its belly, which is of a yellowish green colour, but covered with black spots, which vary in number and size, forming almost the prevailing tint of the belly, the intervening spaces appearing like yellow spots. On the back are six longitudinal reddish or yellowish-red bands, spotted with black, and placed on an olive green or greenish-brown ground. The number of rings varies from ninety-three to 108. Teeth seventy-nine to ninety in number. A native of almost all parts of Europe, often called the English, the speckled, the true, the brown leech, &c.

"Other species are figured by Brandt, as *Hirudo provincialis, H. Verbana, H. obscura*, and *H. interrupta.* In the United States they use *H. decora.* In India, leeches are extremely abundant, procurable both in the tanks of Bengal and in the north-west provinces, as well as along the foot of the Himalayas. Six kinds of useful and six venomous leeches are mentioned in Susruta and by Avicenna, *l. c.*

"*Uses.* Leeches are effectual for the local abstraction of blood, affording indeed the best method in many cases, as in inflammation of the abdomen, scrotum, in hæmorrhoidal tumours, and prolapsus of the rectum. They may often follow general depletion; but, according to the quantity or the nature of the case, will themselves produce constitutional effects, especially in the cases of children. They act by a sawing motion, and draw about a drachm and a half of blood, though half a fluid ounce may be obtained by fomentation, &c. Excess of bleeding may be stopped by pressure, application of Matico; sometimes caustic is required, and even sewing up the wounds with a fine needle."—pp. 651, 652.

These extracts will sufficiently illustrate the style and method of Dr. Royle. Both are all that could be desired in an elementary work. The wood-engravings, by which the different crystals, the various parts of the vegetable products, and the medicinal animals, are illustrated, are better than anything hitherto attempted in this department of materia medica, and must prove a great assistance to the student, appealing as they do more powerfully to the mind than the most careful verbal descriptions taken alone could do.

The only department with which the most fastidious critic could disagree, is the section on the "Therapeutical arrangement of the Materia Medica." Dr. Royle, in his definition of therapeutics, observes that—

"Since a variety of substances are capable of producing the same general effects, though they may differ from each other in minute particulars, they are frequently grouped together, so as to form classes of medicines. These are convenient for practical purposes, because what is best suited to the peculiarities of a constitution, or to the different stages of any particular case, may be more easily selected; or one remedy may be substituted for another, when the first has begun to lose its effect."—p. 1.

In another place, Dr. Royle also informs his readers that he has in his lectures

"Usually, towards the end of his course, grouped together all those remedies which may be used for the same therapeutical purposes. This he has also done in this work in a tabular form, with general observations appended to each group. The student will become aware of the many instances in which medicines are relative agents from these observations. They ought to be read in connexion with the notices on the action and uses of drugs at the end of each article. The author has been obliged to compress his materials within the compress of a manual, though the subject would require a volume to itself, to be treated in connexion with modern physiology, pathology, and practice of physic."—pp. ix. x.

We think that, even in the short space allotted to this subject, a better classification and a more definite outline might have been given. This censure applies, however, in some degree, to every work on therapeutics yet published, and perhaps is almost inseparable from the present state of this branch of our art. Medicines require a therapeutic classification which shall naturally include *all* the articles of the materia medica, and not force opposite, or essentially different, substances into juxtaposition. Dr. Royle divides therapia into mechanical, chemical, evacuants, depressents, and stimulants. This places acids as chemical remedies, and tonics as stimulants, at the two ends of the scheme, though they are convertible one into the other; it places strychnia, as an excitant, side by side with green tea, camphor, and arnica

* Dr. Pereira remarks, that though its strength is variable, it is in general four times the strength of officinal hydrocyanic acid, and that two fluid drachms of the oil, in rectified spirit six fluid drachms, form an useful essence for flavouring and scenting.

montana; and it finds no place at all for such a remedy as the ergot of rye, except as an emmenagogue. Among the evacuants, antispasmodics have a place; but *spasmodics*, at least as important as their antagonists, are not mentioned as such. In our review of the Elements of Materia Medica, by Drs. Ballard and Garrod, we did something towards pointing out the advantages of a classification based upon physiology and pathology, dividing remedies into classes, according as they affect the general system, the great divisions of that system—blood, nerve, and muscle, or the different organs of the economy. The work of these authors pointed, though imperfectly, in the right direction. As a mistaken endeavour in this path we may instance the proposal of Dr. Pereira to give the term "cerebro-spinants" to narcotics. The term cerebro-spinal, from which it is derived, is a physiological solecism. There are no departments of therapeutics more opposite than those affecting the cerebral, the spinal, and the ganglionic divisions of the nervous system, yet hardly anything has been hitherto done towards their separation. But such faults lie at the door of therapeutics rather than at that of Dr. Royle, whose "Manual" is, generally, most admirable, and worthy of a less humble title.

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*Urinary Deposits; their Diagnosis, Pathology, and Therapeutical Indications.* By Golding Bird, M.D., F.R.S. (Second edition.) London: Churchill, 1846. pp. 356.

In the new edition of his work, Dr. Golding Bird states that his attention has been directed rather to revising and improving the whole work, than in adding much novel matter. There is scarcely any department of medicine in which the real advance of the medical art is more conspicuous and positive than in the diagnosis and treatment of urinary deposits. Modern chemistry, and modern modes of investigation, have changed this branch of practice from a focus for low quackery into an interesting and legitimate walk of art. The very term, "water doctor," has been obliged to shift its identity, and find new owners. The test-tube and the microscope are as certain in their applications to the urine, as the stethoscope is to the chest, or the sound to the bladder. Among the authors of the present generation who have contributed to this end, always placing first and highest the name of Dr. Prout, Dr. Bird holds an honourable place; and perhaps, of all the works on urinary deposits, his is now the most practical and useful, considering its moderate bulk.

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*Hunterian Lectures on the Comparative Anatomy and Physiology of the Vertebrate Animals.* Delivered at the Royal College of Surgeons of England in 1844 and 1846. By Richard Owen, F.R.S. Part I. Fishes. London: Longman and Co., 1846. pp. 308.

To the cultivators of comparative anatomy this volume equals, if it does not exceed, the former volume of lectures by the same author. The present volume consists of twelve lectures, the first two of which are preliminary, and the rest of which are devoted to the comparative anatomy and physiology of fishes; their osteology, myology, and neurology; and their digestive, vascular, pneumatic, and generative organs.

The interest and advantages belonging to anatomical study for the medical man are thus eloquently set forth by Professor Owen:—

"And, first, permit me to dwell a little on the inestimable privilege which we enjoy, in entering upon our professional studies by the portal of anatomy.

"How vast and diversified a field of knowledge opens out before us as we gaze from that portal! Consider what it is that forms the subject of our essential introductory study; nothing less than the organic mechanism of the last and highest created product which has been introduced into this planet. Contrast this, which both sage and poet have called the 'noblest study of mankind,' with the dry and unattractive preliminary exercises of the lawyer or the divine.

"Every new term which the anatomical student has to commit to memory is associated with a recognisable object, with some part which may be vibrating, contracting, or pulsating, in his own frame.

"First, we enter upon the study of human anatomy, that we may know with what we have to deal as operative surgeons; and, as physicians, may recognise the seat of disease. Then, that we may learn, by the structure and connexions of the parts of the human body, their office in the vital economy. We next test the physiological ideas, so acquired, by experiments on the lower animals, which we are thus led to dissect in order to find the amount of resemblance with the human structure which must guide the operation, influence the judgment as to the result, and indicate the conditions for new experiments.

"We cannot advance far into the lower region of anatomy without appreciating the same admirable adjustment of means to ends which pervades the human frame: thus the field of physiology expands before us, and we are enabled to bear a part with a Ray or a Paley in illustrating the doctrine of final causes, and demonstrating the 'Wisdom of God in the Creation.'

"In extending our anatomical comparisons, we cannot fail to be struck with the close general resemblance of the structure of the lower animals with that of Man: almost every part of the human frame has its homologue in some inferior animal; and we at length begin to perceive that man's organization is a special modification of a more general type. From analysis, the philosophic mind is irresistibly led on to comparison and synthetic combination of the multitude of particulars observed. In grasping the abstract idea of the general type, we appreciate the precise nature of the characteristic modifications of the human frame; and then only can we be said to know properly our own structure, and, from anthropotomists, to become anatomists in the true sense of the word."—pp. 2, 3.

The most interesting portion of the volume is the last lecture, that on the generation and development of fishes, which traces the male and female organs, and the development of ova, through the different stages of semination, germination, fecundation, fœtation, extrication, exclusion, and growth.

The following extract, on the growth of bone, contains some instructive facts:—

"The strong affinity of phosphate of lime for the colouring matter of the *Rubia tinctorum*, which, when taken as food, passes into the plasma of the circulating fluids, and combines with the phosphates of lime with which that fluid comes in contact, has been supposed to throw some clear light upon the growth of bone. All the phosphate of lime which is deposited in tooth or bone, whilst the madder is in the system, is deeply tinged by it, and Hunter found that the exterior layers of the growing bone of a young pig which had been fed a fortnight on madder were most strongly coloured. But he observed also in another young pig similarly fed, but killed a fortnight after the madder had been omitted from its food, that 'the exterior of the bones was of the natural colour, but the interior red.' (xi. p. 75.) The inference deduced was, that a new layer of bone, during the absence of madder from the circulating system, had been formed, uncoloured, on the exterior surface.

"Mr. Gibson endeavoured to invalidate the conclusion, by hinting that the colouring matter might have been removed from the previously stained bone by the serum of the blood, which fluid he believed to have a greater affinity for the dye than phosphate of lime had; but Mr. Paget has proved by experiment that the phosphates have actually the stronger affinity for the dye.

"The well-known fact that the phosphates on every internal or external surface of the bone, which is exposed to the current of the dye-charged plasma, attract the dye, by no means invalidates the conclusions from the ingenious experiments of Hunter; for the quantity of colour so imbibed by the previously and completely formed bone is always much less than that which the growing bone receives from the phosphates deposited during the presence of madder in the circulating system.

"Hunter's experiments, therefore, coincide with those of Du Hamel, made by encompassing shafts of growing bones with rings of wire, in proving that the increase in circumference is due to growth at the periphery beneath the periosteum, such rings having been found, after a certain period of growth, in the cavity of the enlarged bone."—p. 32.

In the preface, Mr. Owen informs his readers that the next and concluding volume of the course will be published during the present half year.

*An Inquiry into the Action of Mercury on the Living Body.* By Joseph Swan. Third edition. Longman and Co., 1847. pp. 34.

This is a repetition and continuation of a former investigation by Mr. Swan. His object is, to ally the operation of mercury with the sympathetic nerve, using experiment and post-mortem examination as the means of testing the truth of his hypothesis. The following passage gives the origin of the inquiry:—

"On considering the effects of various preparations of mercury, it appeared that even if they become absorbed, and enter the circulation, or produce their effect by contact with living parts, they affect the nervous system. This opinion was strengthened, in the first instance, by considering the appearances presented in dissecting the sympathetic nerve of a person who seemed to have been under the influence of mercury; for both sides of the face were much swollen; the salivary and absorbent glands were much enlarged; the teeth were loose, and there was a separation of the gums. The ganglia and branches of the sympathetic nerve were found larger than in any previous dissection; there was also an increased size of the par vagum. The other nerves were not enlarged."—p. 4.

In the first two experiments, the mercurial preparation was introduced into the stomachs of dogs; in five other experiments, the mineral was introduced into the jugular vein; and in three experiments, mercurial inunction was performed. In every case, the animals died from the influence of the poison, and according to the observation of Mr. Swan, the ganglia of the sympathetic nerve were uniformly found much injected, and more or less inflamed. Mr. Swan deduces that all the phenomena following the therapeutic exhibition of mercury, such as the increased action of the heart, the increased secretions, &c., are due to the influence it exerts upon the ganglionic system.

Mr. Swan thought it desirable to ascertain whether arsenic also affected the nerves, and details two experiments made with this object. In one, the poison was introduced into the jugular vein of a dog; in the other, it was applied to a wound. In the post-mortem appearances in both cases, changes described by Mr. Swan as abnormal had occurred. In one, "the ganglia of the sympathetic nerve had increased vascularity;" in the other, "the ganglia of the sympathetic nerve were inflamed."

These are important subjects. To determine them correctly, many experiments, most carefully devised, conducted, and observed, would be necessary. There seems, on the part of Mr. Swan, somewhat of haste in induction and generalization.

# Medical Societies.

## MEDICAL SOCIETY OF LONDON.

Monday, Febeuary 15, 1847.—Mr. Dendy, President.

### TREATMENT OF ABSCESS BENEATH THE PECTORAL MUSCLE.

Mr. Hilton had lately met with some cases of deep-seated abscess under the pectoral muscles, resulting from local injury to the thumb, which he had opened in the following manner, to prevent the tedious separation process which followed the evacuation of an abscess, by making an opening from the above downwards. Having examined the axilla, to see that there was no abnormal distribution of the artery, he made an incision about half an inch deep, and then pushed up a grooved director for two or three inches, until it reached the walls of the abscess at its lower part; by exerting moderate pressure, the point of the instrument was thrust through them, and the matter, at its most depending point, readily and completely evacuated. He had tried the plan, in several cases, with the best success, the recovery being in each case rapid and complete.

Mr. Hird should prefer, even at the risk of a little hæmorrhage, to use a cutting instrument in the operation; though he thought the best plan would be to cut down upon the pectoral muscle at the lowest point of the abscess, and thus evacuate its contents.

Mr. Hilton had seen the bistoury used in the manner which he had recommended that the director should be employed, and the result was, an alarming, indeed, almost a fatal, hæmorrhage.

### EFFECTS OF ETHER, INHALED TO PREVENT PAIN IN SURGICAL OPERATIONS.

Mr. Hird briefly alluded to the case of a young woman who, having inhaled ether for the purpose of submitting to the extraction of a tooth, was seized with syncope, in which she remained for a length of time, and for ten days afterwards suffered from its effects. This patient laboured under disease of the heart. In another case a gentleman was submitted to the action of ether with the same view as in the former case. Soon after, his face became flushed, his lips purple, his temporal arteries enlarged, and there was altogether so much excitement, that his attendant was alarmed. The tooth, however, was extracted, but convulsions supervened, attended by slight stertorous breathing, and other symptoms of an alarming character. He gradually recovered, but suffered from the effects of the agent for some time after.

Dr. Waller related the case of a man in whom the ether produced such violent coughing, spitting, contracted pupil, rapid pulse, and incipient convulsions, that it was necessary to desist with the inhalation.

Dr. Roberts related a case of asthma, in which the patient, having consulted some advertising practitioner, was directed to inhale a mixture, containing belladonna, Hoffmann's anodyne, and conium, in water at 130°. He pursued this plan for several days, the cough ceased, but the man was prostrated by the remedy; and when he (Dr. Roberts) was called in, he found him in such a state of collapse, that he died in a few hours.

Mr. Alder Fisher related a case in which this kind of inhalation had produced sudden death in a patient affected with chronic phthisis.

Dr. T. Thompson regarded it as a gratifying circumstance, that no death had as yet resulted from the inhalation of ether, though it must have been used already in thousands of instances. It was a great boon to humanity. He regarded the temporary ill effects resulting, in some cases, from its use, to the patient having inhaled his own breath again, and the lungs thereby becoming charged with carbonic acid. Of all stimulants, he regarded ether as the safest, its effects going off sooner than that of any other stimulant.

## WESTMINSTER MEDICAL SOCIETY.

Saturday, February 13, 1847.—Mr. Hancock, President.

Dr. Snow read some

### OBSERVATIONS ON THE VAPOUR OF ETHER, AND ITS APPLICATION TO PREVENT PAIN IN SURGICAL OPERATIONS.

He said, that as the vapour occupied space when mixed with the air, it might be supposed that its action was partly due to its excluding a great deal of the oxygen of the air and causing a kind of asphyxia; such, however, was not the case, for he found that supplying the displaced oxygen did not counteract the effects of the vapour. Mixed with oxygen gas it affected mice as powerfully as when mixed with the air, as he had found in several experiments. Asphyxia was a very different state from that produced by ether. Although an animal in a state of asphyxia from breathing air deficient in oxygen, was insensible to pain, as he had ascertained, yet the insensibility was of but short duration, ending soon either in return to sensibility or in death; the production of asphyxia in this way was attended with suffering, and with great danger to life, whilst just the reverse was true of the effects of ether. The latter allowed the blood to be changed from venous to arterial in the lungs, but probably interfered with the changes which take place in the capillaries of the system. He had ascertained that a little vapour of ether mixed with air would prevent the oxidation of phosphorus placed in it, and considered that it had a similar effect over the oxygen in the blood, and reduced to a minimum the oxidation of nervous and other tissues.

In giving ether for surgical operations he considered that the insensibility should be rapidly produced, and that previous excitement ought to be either imperceptible or very transitory. In addition to the state of the eye the character of the respiration afforded a good criterion of the patient's state; when completely insensible, the respiration was deep, slow, and automatic, but should never be stertorous—he had never seen it

so. In full four-fifths of the cases in which he had administered the ether, there was not the least flinch or groan during the cutting by the surgeon's knife. He considered cases of this kind the only truly successful ones, and believed that with proper care nearly every case might be of this nature. When the patient exhibited signs of pain, although he might have no knowledge of it afterwards, the ether was only partially successful. A large number of the so-called successful cases related were of this nature. Cries and struggles could not depend on the reflex function; the patient felt pain; he had sensation, with little or no consciousness, and, consequently, no memory of pain, as memory was the continuance or repetition of consciousness or of knowledge, and not of simple sensation.

With the apparatus on the table,* the patient could breathe a good volume of vapour and air; he usually put it in water at about 70°, when the air and vapour would be equal in quantity, but he allowed the patient to begin by breathing merely air, and turned on the etherized air by degrees, by means of a two-way tap, to prevent the irritation its sudden admission occasioned in some persons; and when the state of insensibility was fully formed, and an operation commenced, he turned the tap to dilute the vapour more or less, and thus to keep up the requisite state of insensibility, without increasing the effects of the ether beyond the necessary degree.

Dr. Murphy had used the ether in a case of turning. The woman was against its application, and after her consent to its use was obtained, she quickly lost consciousness, and was sent to sleep. She had been placed in a proper position for the operation previous to the inhalation. On passing the hand into the vagina, the woman was thrown into a momentary state of tetanic spasm. This was succeeded by a half-drunken, stupid state. He believed, from careful observation, that the uterus was not under the influence of the ether. Delivery was effected in five minutes. The child was "asphyxiated," but soon recovered. Altogether, he believed the woman felt less pain than if the ether had not been used.

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Saturday, February 20, 1847.—Dr. Sayer, President.

INHALATION OF ETHER.

Dr. Ayres made some remarks on the mode in which ether when inhaled, produced its effects upon the system. He believed that, like other intoxicating agents, its effects, when inhaled, were identical with those exhibited when it was taken by the stomach, except that the effects were more decidedly and rapidly portrayed. In this way it might act in the manner described by Dr. Snow. He had tried to use the vapour of alcohol for the same purpose, but it produced irritation of the larynx and headach only.

Mr. Brooke laid before the Society an inhaler he had constructed. It consisted of a glass cylindrical vessel, about the size of a pint measure. To the interior of the cap was fixed a portion of a gas-glass, so placed as to stand in the middle of the outer vessel, and to reach nearly to the bottom of it. The inside of the outer vessel, and the inside and outside of the interior cylinder, are coated with lint, saturated with ether. Thus, a large extent of rough surface, the most favourable for evaporation, was contained in a small space. The air entered through valves, between the two outer evaporating surfaces, as the vapour is withdrawn from the inner one, by a tube screwed into the centre of the cap. The double valve is of very simple construction, consisting only of a piece of glass tube, contracted at two points, at which the apertures were closed by balls of wood, producing the usual alternate action.

Mr. Hancock related some cases in which the vapour of ether had been inhaled, with the effect, in one instance, of producing convulsions, and in another, of producing irritation of the throat, which remained until the patient, who was previously in a very low condition, died. After death, the mucous membrane of the larynx and trachea was found congested.

Mr. Hale Thomson regarded the ether as a most valuable boon to humanity. In his own practice he had seen no ill results from it, and thought that we ought not to blame the agent, when the failures might depend upon the manner in which it was administered.

Mr. Norman had seen the ether exhibited to an infant eight months old, who had a nævus removed successfully whilst under its influence. It was administered by sprinkling a little ether on a handkerchief, and holding it before the mouth and nose of the little patient.

Mr. Clarke had seen Dr. Snow's instrument used on many occasions: it possessed the great advantage over all others which he had seen employed, of producing insensibility more rapidly and without the previous excitement which often accompanied the use of other instruments.

Dr. Chowne spoke at some length on the subject, and cautioned the members respecting its use. Our knowledge regarding it was at present but limited, and great care was necessary in our future investigations to discover its real value.

Dr. Snow said, that since he read his paper at the previous meeting, he had completed some experiments, by which he had ascertained that the vapour of ether was given out again from the lungs unchanged, and that the amount of carbonic acid gas produced during the inhalation of ether was less than at other times: these circumstances he considered confirmed the explanation of the *modus operandi* of ether which he had previously given.

The discussion was adjourned.

* Described at page 120 of the present volume of The Lancet.

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## PATHOLOGICAL SOCIETY OF LONDON.

Monday, Feb. 15, 1847.—Dr. Williams in the Chair.

Dr. Ogier Ward exhibited a specimen of

NECROSIS OF THE SHAFT OF THE HUMERUS, AND OF THE HEAD OF THE FEMUR.

The patient, a girl aged ten, came under the care of Dr. Ward in August, 1844, complaining of a tingling pain down the right arm to the hand, and of the right hip, down the back of the leg to the foot. This was followed, in six days, by a high state of fever and phlegmonous erysipelas of the right shoulder and arm. A large abscess formed in two days, and which was punctured about the middle of the arm, a large quantity of healthy and sanious pus escaping. A few days after the opening of the abscess, a red spot appeared over the head of the humerus, and which ulcerated in about a fortnight, and through the ulcerated opening, the head of the bone, deprived of its epiphysis, protruded to the extent of two inches, the other wound having healed in the interim. She soon afterwards entered St. Bartholomew's Hospital, where she remained fifteen weeks, at the end of which time nearly the whole length of the humerus was extracted, and the wound healed rapidly. After her return, there appeared to be ankylosis of the joint; and shortly afterwards she was thrown down, the new bone becoming bent at its upper third, in which state it still remains. At this time, the head and upper part of the thigh-bone were affected with periostitis, followed by the formation of several abscesses about the great trochanter, and the discharge, at intervals, of small pieces of bone. The disease of the thigh-bone continued for more than a year and a half, and the healing of the sinuses was immediately preceded by the coming away of a large portion of the head of the bone. The patient now enjoys good health, the right arm being shorter by two inches than the left; there is great mobility of the scapula, and when this is fixed, there is motion of the arm to the extent of 20°. The right leg is an inch and a half shorter than the left; and in consequence of a false joint between the femur and ileum, she possesses tolerably free movement.

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Mr. Obre exhibited the

KIDNEYS OF AN INFANT PRESENTING CARCINOMATOUS DEGENERATION.

The subject of this case was the only child of young parents, born apparently healthy, and continued so until its seventh month, when scrotal hernia presented on the right side. The following month, a hard abdominal swelling, the size of an egg, was felt in the anterior part of the left lumbar region, which rapidly increased, in a few days attaining the size of a small melon. No definite opinion being given of its character, he was visited by Sir James Clarke, who also was unable to decide either on its structure, or from what organ it had its origin, all the functions and secretions being apparently undisturbed. The rapidity of its growth suggested malignant disease; but that was the only symptom which indicated such a result. A fulness was shortly observed in the right hypochondriac, caused by a similar tumour under the hepatic region. In the course of three or four months, the swellings had gradually increased until they attained a most enormous size, filling the abdomen, pressing back into the lumbar regions, and so distending the abdominal parietes, that they required the application of oil to promote their relaxation from the enormous pressure within; the tumours coalesced till they presented no definite boundaries; the distention was too great to prevent the child being placed in any position

except lying on its face. It lingered in this state until its thirteenth month, when it died exhausted, emaciated to a miserable skeleton, presenting a sad object with this enormous abdomen. Occasional constipation and vomiting were the only distressing symptoms. The abdomen was the only cavity examined after death: its contents were pale and attenuated; the intestines displaced by two large, globular swellings, filling either side of this cavity, which proved to be the kidneys converted into cancerous structure, the right weighing two pounds twelve ounces, the left, two pounds four ounces; conjointly, therefore, five pounds. Their external surface is smooth, the fibrous covering not being diseased; internally, they are of an encephaloid structure, the several tissues of the organs being transformed into brain-like substance, but of firmer consistence; they had lost all character by which it could be supposed they had been transformed from kidneys, not even the pelvis or infundibulæ being distinguishable; the left is lobulated as in the fœtal state, having somewhat its normal form; the other has lost all anatomical character. These organs were not suspected to be diseased; therefore the urine was not chemically examined. After death, the bladder contained a little of this secretion, but only sufficient to detect its constituents, being largely impregnated with alkaline matter.

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Dr. Johnson then read a communication from Mr. Fergusson on three cases of affection of the upper jaw. The specimens were exhibited.

OSSEOUS TUMOUR REMOVED FROM THE FACE OF A GIRL, AGED FOURTEEN, INVOLVING THE RIGHT SUPERIOR MAXILLA AND THE MALAR BONE.

Enlargement was noticed six or seven years before the operation, and seemingly commenced in the alveolar ridge. There was no trace of the antrum. Patient made a favourable recovery, and has remained well since.

OSTEO-SARCOMATOUS TUMOUR FROM THE FACE OF A WOMAN, AGED THIRTY-SIX, INVOLVING THE GREATER PART OF THE LEFT SUPERIOR MAXILLA.

The tumour projected slightly into the mouth, and filled the interior of the antrum. Portions of the alveoli had been removed on two occasions previous to the last operation, when the whole mass, including the malar bone, was extirpated. The operation was performed about three months ago, and there has been no indication of return of the disease. The reappearance of the disease, which does not indicate malignancy in its physical characters, may probably admit of explanation, by reference to the manner in which the growth has extended in an upward direction, so that it was not isolated by the horizontal sections of the alveoli which had been made for its removal at the first operation.

PORTION OF A MEDULLARY TUMOUR OCCUPYING THE SITE OF THE SUPERIOR MAXILLA, REMOVED, AFTER DEATH, FROM A MAN, AGED FIFTY-FOUR.

An operation had been proposed at an early period; but the patient refused to submit. The tumour grew rapidly, and he was anxious for an operation when it was too late. It extended to the base of the cranium, and had all the characters of malignancy.

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Dr. Bentley exhibited a

TUMOUR OF THE LOWER JAW,

which had been removed by Mr. Key. The patient, a boy, aged thirteen, was admitted into Guy's Hospital in October, 1841. He was pale and sallow, with a high and somewhat projecting forehead, light hair and eyes, and emaciated appearance. In consequence of his not being able to articulate distinctly, some difficulty was experienced in obtaining a history of the case. The following particulars were noted at the time:—

About two years ago, a small lump appeared on the anterior part of the lower jaw, gradually increasing and extending backwards, forcing out, after a time, many of the lower teeth. Has never experienced any pain. The jaw gradually increased in size, when he applied to a surgeon, who tried various remedies without relief. Has always enjoyed a fair share of health, and can eat and drink well.

When admitted into the hospital, the lower jaw was apparently much enlarged and thickened, and advanced beyond the upper, having, resting upon the upper part of the symphisis a globular, vascular sarcoma, which, about fourteen days back, had begun to ulcerate on the surface, and at intervals bled profusely. Styptics were applied to arrest hæmorrhage.

Seven days after admission, Mr. Key determined to remove the diseased part, which was accomplished in the following manner:—An incision was made along either side of the horizontal ramus of lower jaw, commencing from the angle in the hollow of the neck, meeting each other in the mesial line; the flap was turned up, and the cut vessels immediately secured; the lower jaw was sawn through, just anterior to its angles, detaching a small portion of the massiter muscle on each side. The jaw was carefully dissected out, the flap brought together, and sutures applied.

On the fourth day, the sutures were removed, and the whole of the wound had nearly healed. He left the hospital on the 9th of November, having had no bad symptom, and is now in perfect health.

The condition of the jaw prior to and after the operation was illustrated by drawings.

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Dr. Hall Davis exhibited

MICROSCOPICAL PREPARATIONS OF MOLLITIES OSSIUM,

with which a woman, dying from rare uterine disease, the particulars of which had been submitted to the consideration of the Society some weeks back, had been affected. Dr. Davis had previously submitted some specimens to the examination of Dr. Sharpey, Mr. Dalrymple, and Mr. John Quekett, who had remarked that the Haversian canals were much larger than natural; as also the bone cells; and in parts, near the edges of the bone, forming the wall of the Haversian canals; the canaliculi were but slightly visible, or had entirely disappeared. The bone along the edges above mentioned was extremely transparent; and numerous nucleated cells, blood discs, and fatty matter, occupied the cancellated structure, and some of the Haversian canals. The bone had also been examined chemically by Dr. Garrod, who found that 100 parts dried at 212° yielded—

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| Phosphate of lime ... ... ... ... ... ... ... | 16.40 |
| Carbonate of lime, with phosphate of magnesia ... | 4.88 |
| Fatty matter ... ... ... ... ... ... ... ... | 20.35 |
| Gelatine yielding matter ... ... ... ... ... ... | 58.37 |
| | 100.00 |

thus exhibiting a considerable difference from the proportions given for healthy bone by Berzelius—viz.,

| | |
|---|---|
| Earthy matters ... ... ... ... ... ... | 66.70 |
| Animal matters ... ... ... ... ... ... | 33.30 |

The history of the case was then detailed, and it appeared that the female had, at the commencement of the affection, lived in a dry climate, and for the last six years of her life in Lancashire, on the borders of a lake surrounded by woodland. There had been no hereditary tendency, the father and mother being still alive, as also five other children, all enjoying perfect health. She had never been affected with rheumatism, and died from an acute attack of pneumonia.

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Dr. Handfield Jones then read

SOME OBSERVATIONS ON A VARIETY OF NUTMEG LIVER,

and which were illustrated by drawings. He remarked that every lobule on those parts of its surface which form the sides of interlobular fissures has undergone, for some little depth in its interior, the fatty degeneration; while all the interior part, comprising about two-eighths of the whole lobule, remains in nearly its natural state. If a thin section be taken from a liver in this condition, it presents, when viewed under slight compression, by transmitted light, the appearance shown in this drawing—viz., a dark zone, occupying solely the peripheral parts of the lobules, bounding distinctly the fissures by which they are separated, or indicating their situation when they are not disclosed by the section. Congestion in these instances is usually, I think, of the slighter kind,—the first stage of hepatic venous. It does not extend to the opaque margins of the lobules, which thus appear, by direct light, of a lighter tint than the central parts. He (Dr. Jones) suggested the following explanation of the above fact:—The cells of the liver, the acknowledged agents in the work of secretion, are known to be ranged very much in a radiating manner, forming long rows, which branch and communicate with adjacent ones. This disposition has appeared to me to obtain most perfectly in those livers which exhibit the least appearance of retained secretion, such as those of the rabbit and pig; while in specimens from the human subject, where the organ had been long congested, and the cells contained numerous particles of biliary matter, it has been more or less lost—the cells coalescing together in such a manner as to represent a plexus with small meshes.

It seems therefore probable that the linear arrangement of the cells has some relation to the due discharge of the secretion. Further, I have lately endeavoured to show, that it is by the cells at the margins of the lobules, forming the terminations of the several radiating series, that the secreted matter is finally discharged. It appears to be transmitted from cell to cell until it reaches these, which, projecting at such times towards the fissure, burst, and yield up their contents, to be conveyed away by the minute efferent ducts. Thus, the secreting process appears to reach its termination in the marginal cells of the lobules, which are often seen to contain more numerous or deeper tinged particles of secretion than those in the interior; and in these it is quite conceivable that the transmissive function may be especially liable to interruption—the centrifugal force by which the secretion makes its way outward failing as it were at this point, and thus an accumulation of oily matter taking place in the cells. How far this theoretical view may prove to be correct, further inquiry will probably show. Its main idea, however, is, I think, well founded, and practically important, as it recognises, and in some degree explains, the great tendency of the liver to be affected with biliary congestion, or, in other words, undue detention of secreted material in its cells.

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Mr. Sankey exhibited specimens of

GREAT HYPERTROPHY OF THE SOLITARY AND AGMINATE GLANDS OF THE INTESTINES,

Which were taken from the body of a female patient, who had died on the fourth day of fever.

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Mr. Dalrymple exhibited a specimen of

DISEASED HEART, IN WHICH THE ROOT OF THE AORTA HAD AN OPENING COMMON TO THE TWO VENTRICLES.

The patient, a delicate female, aged twenty-five, with narrow thorax, had been subject to deranged circulation from her birth. She died from ascites and anasarca. The heart weighed twenty-six ounces; the right auricle was large and thick, the right ventricle dilated, and encroached on by the bulging of the septum; the tricuspid valve healthy, the pulmonary thickened; left auricle thin and dilated; mitral valve thickened, and studded with nodules on its free edge; left ventricle dilated and hypertrophied to a great extent, and, at the apex of its cavity, was observed a fleshy polypus, adherent to the anterior wall, injected, and having a purulent deposit in the centre. Aortic valves healthy; foramen ovale closed; root of the aorta opening between the two ventricles by an aperture of the size of a sixpence.

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Mr. Toynbee exhibited a preparation of

ANEURISM BY ANASTOMOSIS, IN THE SUBSTANCE OF THE PARIETAL BONES.

The subject of the disease was a youth aged nineteen, who died of consumption. He was brought into the room for dissection; and there is no evidence to show that the disease was detected during life. Corresponding with each parietal eminence, there is a rough and slightly elevated portion of bone apparently occupying the centres of ossification, and situated about an inch from the coronal, and an inch and a quarter from the sagittal suture. These osseous projections are pear-shaped, the apices being directed posteriorly, and the broad ends in front. That on the right side is rather the larger, measuring three inches in length, and at its greatest breadth one inch and three quarters; that on the left side is in length two inches and three quarters, while its breadth is an inch and a half. The surface on the right side measures seven inches in circumference; that on the left, seven and three quarters. The right projection, though as broad at its widest end, diminishes so much as to be not more than three quarters of an inch at its narrowest. On further examination of these surfaces of bone, they are found to present at their circumference a certain degree of unevenness, caused by numerous superficial grooves, as if from vessels lying upon the bone. These grooves radiate from the circumference of the surface; and as they approach the portion of bone most diseased, they become deeper, and small orifices are observed opening into them. The rough surface itself is composed, firstly, of grooves, which are in some parts from a line to a line and a quarter in depth; secondly, of osseous cavities, about a line in diameter, and bounded laterally by the walls of the canals; thirdly, of canals which admit of a free communication between the grooves. These grooves, cells, and canals, are so numerous, and their intercommunication so intricate, that they form a labyrinthine network of singularly beautiful appearance. Into the floor of the canals and sulci innumerable orifices enter. The grooves and canals were, in the recent state, full of an intricate network of ramifying bloodvessels, but it was impossible to inject them, from their being cut into before their nature was detected.

Mr. Toynbee remarked that, so far as he had been able to examine, the tumours situated in the substance of these bones were analogous to the congenital vascular tumours so frequently developed in the integuments of the head and face.

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## British Medical Journals.

PHARMACEUTICAL QUACKERY

is the heading under which some sensible remarks are made, in a late number of the *Pharmaceutical Journal*, the drift of which will be perceived from the following quotation. Something must be done to remedy an evil so universally diffused; the privilege which the writer claims is one of its most fruitful sources, and must be surrendered before the abuse can be corrected.

"The following extract from a handbill is an illustration of a description of quackery which is particularly objectionable, as the author is a chemist, who, by transgressing the boundary of his legitimate province, *injures our whole body* by furnishing an instance in which legislative interference appears to be called for. It is practices of this kind which bring discredit on chemists in general; and while we claim, on behalf of our brethren, a discretionary power of giving a dose of medicine on an emergency, or in any simple case, we protest against a proceeding which, if found to prevail to any considerable extent, would frustrate our efforts by affording an unanswerable argument against us:—

"'Pro bono Publico.—Should any one despair of relief after having taken all kinds of quack medicines, (Morison's pills not excepted,) with many other puffs and nostrums of the present day, they are invited to call at ——'s philanthropic establishment, where they can be supplied with remedies for their various ailments at a comparative trifling expense, and which in most cases will be attended with a speedy, safe, and certain cure.'

"We have before us a specimen of a shopbill, in which the proprietor states, that 'as he prepares his drugs, and compounds his medicines, he can answer for their goodness.' He gives a long list of remedies, among which are—

"'Pills for cough and asthma, pills for pain in the back, pills for diarrhœa and looseness, and physicking pills strong and mild, often giving relief after once taking. He also makes plasters of all kinds; his warm plaster is much esteemed. He likewise makes ointments of all kinds; his universal ointment is much esteemed for curing burns, scalds, wounds, and foul ulcers. And he makes lineaments of all kinds, one of which is very efficacious in curing sprains, bruises, stiffness of the joints, rheumatic pains, and often brings down a swelling in twenty-four hours; he also makes a very efficacious ointment for the piles, sure to give relief in one night; he has a cure for toothach, relieving it in one minute; he also compounds a cure for the gripings of infants, giving relief in half an hour; he also makes a compound for a pain in the back, generally curing it in two days.—Physicians' prescriptions accurately prepared, and horse medicines compounded.'

"This is followed by a list of oils, colours, &c. &c., including

"'Slates, school-books, blacking, nails, flaws and tacks, shoemakers' nails, muds, and sprigs.

"'Take notice, R. R. has a back shop, where he keeps a provision store, and supplies families with flour, maslin, wheat, meal, split peas and whole, salt, and barley; also with groceries of all kinds, spices of all kinds, birdseed, soap, candles, tobacco and snuff, butter and cheese, potatoes, &c.

"'R. R., wishing to make himself useful in the neighbourhood, has followed the business of bookbinder and glazier fifteen years; therefore he will be happy to bind any book or number of books sent to him, in the neatest manner, and on the shortest notice. He will also glaze any window or number of windows, or put in a single pane of glass, (he has glass,) on the most reasonable terms.'

"We give this extract, not for the purpose of criticizing the combination of trades, (a custom unavoidable in small country

towns,) but to give an idea of the kind of establishment in which physicians' prescriptions are compounded, and various ailments cured in definite periods of time. We could give many other specimens of a similar description, having received a considerable collection from various parts of the country; but the above is sufficient to illustrate the genus.

"The editor of THE LANCET has recently exposed the prevalent custom of fraudulently using the name of eminent medical men as alleged promoters of quack medicines, as in the case of 'Ashley Cooper's pills,' 'Locock's pulmonic wafers,' 'Holloway's ointment,' *said to be* 'recommended by Dr. Bright,' &c. This kind of imposition ought not to be tolerated; and although medical men may shrink from a controversy with the authors of such libels, they ought not to be subjected to the annoyance, and a summary process should be contrived by which the offenders could be punished. This forms a branch of the question of medical reform," [an important one, too.]

### ON THE FORMATION AND CHARACTERS OF PUS.

Some highly interesting observations on this subject, by Dr. HUGHES BENNETT, are contained in the last number of the *Edinburgh Monthly Journal*. The peculiar appearance which he describes in certain pus corpuscles from parenchymatous organs, is altogether new, and, if correct, would cause us to change our ideas of their constitution. The description corresponds with some very recent observations on the blood corpuscles.

"Exudation poured out on a mucous membrane sometimes coagulates in a mass, forming lymph; but, in the generality of cases, passes into an opaque, unctuous, straw-coloured, or slightly greenish fluid, long known under the name of pus. When poured into the meshes of the areolar tissue, the same transformation occurs, constituting an abscess, the contents of which, in an otherwise healthy individual, must be considered as the type of this formation.

"On examining well-formed pus under high magnifying powers, we find it to be composed of numerous corpuscles, floating in a clear fluid. These corpuscles are perfectly globular in form, and vary in size from the $\frac{1}{150}$th to the $\frac{1}{75}$th of a millimetre in diameter. Their surface is finely granular. They have a regular, well defined edge, and roll freely in the liquor puris upon each other. On the addition of water, they become much increased in size, their finely granular surface disappears, and they become more transparent. Weak acetic acid partially, and the strong acid completely, dissolves the cell wall, and brings into view the nucleus, which generally assumes the appearance of two or three granules close together, each with a central shadowed spot. They are generally about the $\frac{1}{400}$th of a millimetre in diameter. Occasionally the nucleus may be thus seen to be composed of four or even five granules. Alkalies and ether completely dissolve the whole corpuscle.

"These corpuscles seem to be produced in the following manner:—The exudation first forms a molecular and granular blastema, the individual granules of which unite together in twos and threes, to constitute the nucleus from which the cell wall arises. The early stages of the formation of pus may frequently be observed in the coagulated masses occasionally squeezed out of unripe abscesses, and may also be seen in fluid exudation in the discharge from blisters, and early purulent formations, following frictions with tartar-emetic ointment.

"In grey hepatization of the lungs, and in minute abscesses, scattered through other parenchymatous tissues, we have frequently seen the bodies just described as pus corspuscles to be surrounded by a distinct though very delicate, cell-wall. The cell so formed is about the $\frac{1}{100}$th of a millimetre in diameter, and is highly elastic, assuming different shapes, according to the degree and direction of the pressure to which it is subjected. Water and acetic acid cause the cell wall to be at once dissolved, whilst the nucleus, which, before the addition of reagents, exactly resembled an ordinary pus corpuscle, exhibits the usual two or three granules, which, under these circumstances, must be considered as nucleoli. Are, then, the bodies, which have hitherto been considered as pus cells, only the nuclei of corpuscles, the delicate walls of which are dissolved very rapidly, and at an early period? We have no hesitation in stating that this is the case in certain instances, but whether it be invariably so, requires further observation to determine.

"Pus when formed on a mucous membrane is frequently mingled with epithelial cells in various stages of development. Some have spoken of mucous corpuscles, but there are no bodies peculiar to mucus. What have been described as such are sometimes those of pus, at others those of epithelium."

### "CÆSARIAN SECTION.

"Four cases are related of the performance of this operation, with a favourable result both to mother and to child; two in which the mother survived; six in which the life of the child was preserved; and two in which neither life was saved. The history of the mother, in Mr. Goodman's case, is not carried beyond the third week, at which time, however, she was doing well. In the patient on whom Dr. Meyer operated, the uterus contracted around the neck of the child so firmly after the body was extracted, as to render it necessary to enlarge the incision—an accident which illustrates the advantage of extracting the head first whenever that is possible. Mr. Lyon's case presents many points of interest. The operation was rendered necessary by the presence of a tumour blocking up the pelvis, and which, from its position behind the rectum, as well as from its firmness, was taken for an osteo-steatomatous tumour of the pelvis. It turned out, however, to be the left ovary, enlarged, and converted for the most part into an adipocire-like substance. [The case derives great importance from being almost, if not quite, the only instance of an ovarian tumour getting behind the rectum; and it illustrates the necessity of making an experimental puncture or incision of such tumours through the vagina, before exposing a patient to the dangers of the Cæsarian section.] In the case reported by Mr. Aitken, the uterus had given way before the patient's admission into the hospital, so that the Cæsarian section, which the extreme contraction of the pelvis rendered necessary, could not be regarded as the sole cause of her death. [The statistics of the operation at present yield the following results:—It has been performed in 378 cases, of which trustworthy accounts have been given. In 145 of these cases the women recovered; in 233 they died; or the recoveries were in the proportion of thirty-eight per cent., or as one in 2·6 cases. The fate of 318 children is mentioned, of whom 219 were saved, ninety-nine were lost; or the child survived in sixty-eight per cent., or in rather more than two cases out of three."]—*British and Foreign Review.*

### HELLER'S OBSERVATIONS ON THE BLOOD, URINARY DEPOSITS, ETC., IN BRIGHT'S DISEASE.

"The deposits are composed of two classes of materials, one comprehending those which are normally and constantly present in urinary deposits; the second, those which are accidentally present. The constant ingredients are:—1. *The pavement epithelium.* This epithelium is always found in large quantity, especially at the commencement of the disease, at which time the deposit is almost entirely composed of it. The epithelial cells are not, however, of a natural figure, being rather round than oval, with very distinct nuclei.—2. *The epithelium of the tubes of Bellini.* This epithelium is generally small in quantity at the commencement of the malady, wherein it differs from the former. It presents itself under the form of colourless canals, containing brownish nuclei of variable size. Considerable attention is required to detect the species of epithelium in the urinary deposit, as it is frequently so transparent as to elude observation.—3. *Albuminous flocculi.* (*Albumin pilze.*) These are very distinct, especially when the urine is alkaline, of various shapes and sizes, and resemble fragments of pearls.—4. *Mucus-globules.*—5. *Inflammatory globules.* These are found, for the most part, during the stage of congestion.—6. *Fatty globules.* Which exist principally in the chronic stages of the disease.

"The accidental matters found in the urine of Bright's disease, are—1. *Crystals of uric acid*, for the most part colourless, and of a rhomboid figure.—2. *Urate of ammonia*, which exists principally in the early stages.—3. *Pus*, generally seen in the early periods.—4. *Crystals of uro-glaucin.* These crystals are seldom seen in the urine at the time of excretion, but are often visible after it has stood for some time. They appear as a crystalline mass of an indistinct blue colour.—5. *Crystals of ammoniaco-magnesian phosphate.*—6. *Carbonate of ammonia.* Both these are peculiar to the last stages."—*Provincial Medical and Surgical Journal.*

### CHARACTERS OF THE BLOOD IN BRIGHT'S DISEASE.

"The blood in this disease loses its density in a notable manner in consequence of the loss of albumen. It, however, retains its natural appearance and coagulates perfectly. The serum is pale, and of a low specific gravity. It contains urea in considerable quantity, but no biliary colouring matter. The fibrin and globules are not materially changed. The chief alteration, therefore, consists in a loss of albumen and the presence of urea; the latter condition, however, is not peculiar to the disease in question, but is observed also in cholera an in ischuria renalis."—*Idem.*

THE LANCET.

LONDON, SATURDAY, FEBRUARY 27, 1847.

We thought we had done with the President and Council of the Royal Society, for some time to come, at least, when we published the final proofs of their multifarious irregularities and illegalities in all that relates to the promotion of science, and the real interests of the Royal Society. But we are disappointed, and the circulation, during the present week, of the new edition of the first chapter of the statutes, relating to the election and admission of Fellows, and which has been altered by the present Council, imperatively demands our remarks.

In the old statutes, the following were the clauses relating to the nomination and ordinary election of candidates into the Society as Fellows, the whole body of the Fellows being the sole electors:—

"III. Every such candidate shall be proposed and recommended by a certificate in writing signed by six or more Fellows, of whom three at least shall certify their recommendation from personal knowledge. The certificate shall specify the name, rank, profession, qualifications, and usual place of residence, of the candidate; and being delivered to one of the secretaries, he shall enter upon it the day when delivered; after which it shall be fixed up and remain in the meeting-room of the Society for five several ordinary meetings, before the candidate shall be put to the vote.

"V. In the election of a person to be a Fellow of the Society, the votes shall be taken by ballot; and no person shall be declared elected, unless he have in his favour two-thirds of the numbers voting."

In the altered statutes proposed by the Council, the independent election of Fellows is interfered with by the Council in the most extraordinary manner, as the subjoined clauses will show:—

"III. Every such candidate shall be proposed and recommended by a certificate in writing, signed by six or more Fellows, of whom three at least shall certify their recommendation from personal knowledge. The certificate shall specify the name, rank, profession, qualifications, and usual place of residence, of the candidate; and, being delivered to one of the secretaries, shall be entered in a book to be kept for the purpose, with the date of delivery and particulars as stated thereon.

"V. At the first ordinary meeting of the Society in March, 1848, the names of all candidates duly proposed after the first day of March, 1847, and in subsequent years, at the first ordinary meeting in March, the names of all candidates proposed subsequently to the first meeting in March of the preceding year, shall be announced by the secretary from a list arranged in alphabetical order, without reference to the dates of the certificates of the candidates; and these certificates shall be suspended in the meeting-room until the day of election.

"VI. In the first week in April, a list shall be printed, containing the names of all the candidates so announced at the first meeting in March, arranged in alphabetical order, without reference to the dates of the certificates, together with the names of the Fellows by whom each candidate is proposed and recommended; and a copy of such list shall immediately thereafter be sent to every ordinary Fellow.

"VII. *The Council shall select by ballot from such printed list of candidates a number not exceeding fifteen, to be recommended to the Society for election;* but no such selection by the Council shall be valid, unless eleven members at least be present and vote, a majority deciding, or, in the event of equality, the president or his deputy having a casting vote.

"VIII. At the first ordinary meeting of the Society in May, the president, or his deputy, shall read from the chair the names of the candidates whom the Council have selected as most eligible, arranged in alphabetical order; and after such meeting, a circular letter shall be forthwith sent to every Fellow, naming the day and hour of election, and inclosing a printed list of the selected candidates, with space for such alterations as any Fellow may determine to make in pursuance of Statute X.

"X. On the day of election, two scrutators shall be nominated by the president, with the approbation of the Society, to assist the secretaries in examining the lists; and each Fellow present, and voting, shall deliver to one of the secretaries, or scrutators, one of the printed lists mentioned in Statute VIII., having erased the name of any candidate or candidates for whom he does not vote, and, if he shall have thought fit, having substituted or added the name of any other candidate or candidates contained in the printed list sent in pursuance of Statute VI. of this chapter.

"XI. One of the secretaries shall take down the names of the Fellows who vote; and the scrutators, after examining the lists with the secretaries, shall report to the president or his deputy the names of the candidates who shall have been duly elected in compliance with the charters; and the president or his deputy shall announce those names from the chair.

"XII. Any candidate announced at the first ordinary meeting of the Society in March, as aforesaid, who shall not have been elected, shall, if his proposers so desire, continue a candidate; his name shall be placed in alphabetical order with those of the new candidates to be announced in March following, without reference to the date of his certificate; and his certificate shall be suspended in the meeting-room in the same manner as those of the new candidates."

Thus the election to the Fellowship of the Royal Society will in great measure be taken out of the hands of the great body of Fellows, and given to the Council, if these altered statutes are submitted to by the Society. This substitution of a house list by the Council cannot but interfere with the freedom of election into the Society, and it invests the Council with new powers, inimical to the spirit of the Society and to the spirit of the age. We cannot, however, believe that the Royal Society will submit to such dictation from a body which has for years brought shame upon its proceedings. Other special general meetings, as conclusive as the last against the President, Secretaries, and Council, will no doubt be convened.

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The mass of the poor population of Ireland is in a state of starvation. Gaunt Famine, with raging Fever at her heels, are marching through the length and breadth of the sister island, and they threaten to extend their fury to this country. The British public, under the form of clubs, committees, and relief associations, are actively engaged in sending food to the famine districts. All this is done without boasting or ostentation. But parliament, and the executive, in the midst of the best intentions, seems to be agitated by a spasmodic feeling of benevolence, at one time adopting public works, at another, preaching a poor-law,—now considering the propriety of granting sixteen millions for railways; and then descending to M. Soyer, the chief cook of the Reform Club, with his ubiquitous kitchens and soup, at some three farthings the quart, which is to feed all hungry Ireland.

As this soup-quackery (for it is no less) seems to be taken by the rich as a salve for their consciences, and with a belief that famine and fever may be kept at bay by M. Soyer and his kettles, it is right to look at the constitution of this soup of pretence, and the estimate formed of it by the talented, but eccentric, self-deceived originator. M. Soyer proposes to make soup of the following proportions:—Leg of beef, four ounces; dripping fat, two ounces; flour, eight ounces; pearl barley, eight ounces; brown sugar, half an ounce; water, two gallons.

These items are exclusive of two onions, a few turnip parings, celery tops, and a little salt, which can hardly be

considered under the head of food. The above proportions give less than three ounces of solid aliment to each quart of the soup à la SOYER. Of this its inventor is reported to have said to the government, "that a bellyful "once a day, with a biscuit, (we quote from the *Observer*,) "will be *more than sufficient* to maintain the strength of a "strong healthy man!"

To bring this to the test. Organic chemistry proves to us that the excreta of solid matter from the body of a healthy subject, by the eliminatory organs, must at least amount to twelve or fourteen ounces; and organic chemistry will not, we fear, bend to the most inspired receipts of the most miraculous cookery book. To supply the number of ounces, without which the organic chemistry of the human body will no more go on than will the steam-engine without fuel, M. SOYER, supposing each bellyful of his soup for the poor to amount to a quart, supplies less than three ounces, or less than a quarter the required amount, and of that, only one solitary half ounce of animal aliment, diluted, or rather dissolved, in a bellyful of water. Bulk of water, the gastronome may depend, will not make up for deficiency of solid convertible aliment. No culinary digestion, or stewing, or boiling, can convert four ounces into twelve, unless, indeed, the laws of animal physiology can be unwritten, and some magical power be made to reside in the cap and apron of the cook, for substituting fluids in place of solids, and aqua pura for solid aliment, in the animal economy.

It seemed necessary to bring forward these facts, as M. SOYER'S soup has inspired the public mind with much satisfaction, a satisfaction which we venture to say will never extend to the public stomach. Marquises, and lords and ladies, may taste the meagre liquid, and pronounce it agreeable to their gustative inclinations. But something more than an agreeable titillation of the palate is required to keep up that manufactory of blood, bone, and muscle, which constitutes "the strong healthy man."

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THE Address of the Institute of Medicine, Surgery, and Midwifery, lately published, and a Letter, addressed by the Society of Apothecaries to the Secretary of State in August, 1846, brought to light by a return ordered by the House of Commons, enable us to put the objections of these two bodies to a Medical Registration Bill in a clear light before the profession.

The letter of Mr. UPTON, clerk to the Society of Apothecaries, thus sets forth their opinions:—

"The present Bill (the Bill of last session) authorizes the registration in England of individuals who have obtained medical degrees or diplomas from Scotch and Irish universities and colleges; and such individuals, upon registration, are entitled to demand a certificate of registration."

"The possession of such certificate of registration will entitle the holder to all the privileges of a legally-qualified practitioner in England."

"The Society of Apothecaries have no objection to the establishment of a perfect reciprocity of practice between the medical practitioners of the three kingdoms, provided such reciprocity of practice is established on the basis of a uniformity of education and examination in the three kingdoms."

Now, the present Registration Bill does provide for equality of education, as well as reciprocity of practice; so that, upon their own showing of what is right and fit, the Society of Apothecaries ought strenuously to support the Bill. They cannot oppose it in the present session, unless they discover some new ground, tangible or trivial, of disapprobation. This we have no doubt the Society will do,—as we forewarn and forearm the profession,—and strenuously attack the Registration Bill or the most perfect system of registration that could be devised. The truth is, that their expressed desire to protect the English practitioners against the handful of Irish and Scotch graduates is a mere feint; their desire for reciprocal practice and equal education is intensely hypocritical. To prove these points, and to show their real grounds of opposition, we must refer to the proceedings of the Institute, when the same parties which pull the strings at Apothecaries' Hall guide the proceedings of the former body. The same men who meet at Blackfriars meet at Hanover-square; and at one place following one line of conduct, at another, pursuing the direct opposite. Some of the members of the Apothecaries' Society walk to Downing-street from Apothecaries' Hall with one story, on one day, and on another day, they proceed from Regent-street to the Home Office with quite a different tale. The fulminations from Regent-street give a new version to the opposition of the Institute to a system of medical registration. They say that the proposed Medical Registration Bill "is most unquestionably ill-timed, whatever may be its intrinsic merits." According to them, the present time, when the profession is robbed and degraded by countless quacks, without a rag of qualification, and when, as our courts of law and coroners' inquests abundantly show, the lives of the public are continually sacrificed to quackery with the most reckless and daring impunity, is not the proper time to fence round the profession, and defend the public from the uneducated and dangerous pretenders to medical knowledge who swarm on every side. And why? Simply because the National Association became corrupted, and lost its influence with the minister and the profession, and because the Institute—the phœnix which was to rise from the ashes of its parent—is a poor, sickly progeny, of no weight or influence anywhere. Here are the ratiocinations of this body, as they appear in the last Address of the Council of the Institute to the General Practitioners. They say,—

"That defeat will be the fate of every attempt at medical legislation, whether it be a simple matter of registration, or a matter embracing the whole question, is the opinion of the council of the Institute, unless an ostensible *head and home* be found for the general practitioners, as an indispensable and natural preliminary to any rude, extensive, or comprehensive measure of reform."

The writers of these documents still pant for a "head and home;" and this is what is wanted, though not a head nor a home for the general practitioners as a mass. Mr. PENNINGTON wishes devoutly to become a "head," to die a President of some body less ephemeral than the present Institute; and the secretaries, Messrs. BIRD and ANCELL, are the parties requiring a "home." This is the true meaning of the "head and home" sighed for in document after document issued from Regent-street, or Hanover-square. This cry—the head and home—is the stirring battle-sound by which it is sought to lead on the general practitioners of Great Britain, men preëminently distinguished for sagacity and sound common sense. The profession is impotently called upon to sacrifice what is, on all hands, allowed to be at once a liberal and stringent Registration, because of the pert ambition of two mischievous secretaries, who desire to be metamorphosed, at the expense of the profession, from Nobodies into Somebodies.

We have thus attempted to show, that at the Society of Apothecaries there is a clique who oppose the Registration Bill on the plea of a silly apprehension lest it should lower the standard of professional education; and yet this same clique, as the Council of the Institute, are adverse to it, not for the selfsame reason, but because they first want to get a "head and home" for themselves in a new College. The latter argument, or rather ghost of an argument, is the one really entertained. It is the "head and home," the pay and place, which are wanted. Let the profession at large plainly consider the respective advantages of adopting a "head" for the pleasure of one individual, and of supplying a "home" for two others, a kind of sulky and double-sulky; and of a Registration Bill, which at one move checkmates unqualified practice, provides against quackery in the profession, and draws a legal cordon round all educated medical men. Let them deliberately weigh these things, and then decide with promptness and energy what they will DO.

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IN Scotland the press are beginning, in real earnest, to oppose the vile system of quack medicines, and quack advertisements. Articles have been forwarded to us from *Chambers' Edinburgh Journal*, the *Scottish Reformer's Gazette*, the *Glasgow Constitutional*, the *Fifeshire Journal*, and other respectable newspapers, expressing their determined opposition to medical quackery in every shape. The *Glasgow Constitutional* tersely observes:—

"We have often been astonished that some journals, otherwise as respectable as their neighbours, should, for any trifling pecuniary advantage, place themselves in the position of *socii criminis* to a parcel of vagabond quacks.

"We consider the insertion of quack advertisements a most dangerous imposition, and the persons who give it as little better than the more daring criminal. The quack and his newspaper agent are as necessary to each other, in order to dupe the unwary with complete success, as is the receiver to the thief, being all in concert; and they divide the spoil wrung from the pallid hand of poverty, disease, and death."

*Chambers' Edinburgh Journal*, entering, as it does, the homes of tens of thousands in every part of the empire, can render immense service to the anti-quackery cause. In Ireland, also, the anti-quackery feeling is alive. As we stated some weeks ago, the *Nation* is most vigorous and determined in its reprobation of quack medicines and advertisements. Side by side with this paper we must place the *Dublin General Advertiser*. We are sanguine in the hope, that the press, which has so long been the stronghold of quackery, will now become an agent in its destruction. We contend that every qualified medical man should become an active propagandist of anti-quackery opinion, and above all, should endeavour to influence the public press for the suppression of the whole system.

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## THE SANATORY CONDITION OF LONDON AND PARIS.

IN the autumn of 1844, J. R. Martin, Esq., F.R.S., then a member of the "Health of Towns' Commission," made a visit to Paris. His intention having become known to the members of the Commission, he was requested to institute inquiries into the sanatory condition of the French capital; and with this view he was presented by the authorities with an introduction to Lord Cowley, the then British minister in Paris. Through his lordship, Mr. Martin was speedily placed in communication with the prefect of police, with whom he had several conferences, during which it was agreed that the information sought should be put in the form of queries, and to which replies were promised from the prefecture. Many months elapsed before the replies were furnished; and when they arrived in England, the second report of the Health of Towns' Commission had been completed, and no space was then left for the information transmitted respecting Paris.

It is believed, however, that the publication of Mr. Martin's queries may be of service, by directing attention, in the most brief form, to subjects of importance to public health; and the catalogue raisonné of the Parisian prefecture furnishes a list of authorities, official and other, on the health history of Paris, such as has never before been published.

Let us hope that the singularly valuable information they contain may not be lost to the cause of sanatory improvement, whether in France or England.

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QUESTIONS relative to the existing sanatory arrangements for the city and suburbs of Paris, submitted to Mons. Mons. GABRIEL DELESSERT, Peer of France, Counsellor of State, and Prefect of Police, &c. &c., by JAMES RANALD MARTIN, Esq., one of her Majesty's Commissioners for inquiring into the sanatory condition of populous towns and districts in England and Wales.

*General Queries relating to Administrative Affairs.*

1. Does there exist in Paris any general plan of levels for the site of the City, with a view to regulate the arrangement and construction of buildings—the regulation of public and private drainage—the distribution of water—and the other arrangements requisite for the convenience and health of the inhabitants; and if such plan is in use, under what authority, and at whose cost, was it constructed?

2. From whence do the general laws and regulations in sanatory matters emanate?

3. What is the authority that specially conducts the details in sanatory matters within the metropolis, and under what superior direction does it carry out its operations?

4. Does the system of supervision and control in sanatory affairs which holds in Paris appear to you necessary, and does it work well?

5. Are the local authorities vested with powers for the enforcement of sanatory regulation, for the prevention of nuisances, and for the punishment of offenders against the law?

6. What are the powers given to the local authorities for enforcing regulations as to—

*a.* The arrangement and construction of habitations?
*b.* The arrangement and construction of streets?
*c.* The arrangement and construction of sewers?
*d.* The arrangement and construction of house drains?
*e.* The ventilation of habitations?
*f.* The cleansing of habitations and thoroughfares?
*g.* The supply of water for cleansing streets and sewers?
*h.* The supply of water for prevention and suppression of fires?

*Nature of the site of the City, and of the surrounding localities.*

1. What is the composition of the soil forming the site of Paris; and is it of a nature to afford free transmission to, or is it retentive of, moisture?

2. Within the circle of Paris, are there any obstructions to the natural escape of the waters, and is the city, or any portion of the surrounding district, liable to be flooded?

3. Altogether, is the site of the metropolis considered a healthy one?

*The Streets, in the quarters occupied by the Working Classes.*

1. In the quarters here referred to, are the houses laid out in wide streets, or are they built in narrow lanes, courts, and alleys?

2. Are there masses of houses built back to back in the said quarters?

3. Are there many of the courts, lanes, and alleys, closed at the end?

4. How are the streets of the worst quarters paved, and have they flagged pavements for foot passengers?

5. Are they generally in a wet or damp condition, and is foul exhalation from their surface a common circumstance?

6. Are there any public regulations prohibiting the closing up of streets at the end, or their being crossed by new buildings?

7. Are there any public regulations for promoting the regular extension and advantageous disposal of suburbs, with reservation of open spaces?

*The Habitations of the Working Classes.*

1. What is the general structure and condition of the dwellings of the working classes within the metropolis?
2. What number of families of the said classes, on an average, inhabit each house?
3. What number of persons are found, in the worst quarters, to live in one room, and what is the general size of such room?
4. What is the general state of the air in the habitations of the working classes, and are any arrangements introduced by authority for ventilation?
5. Are there cellar-dwellings in Paris occupied by the working classes; and if so, how are they drained, lighted, and ventilated?
6. Are cellar-dwellings under any, and what, special regulation?
7. Are there lodging-houses for the poorer classes; and if so, what are the police or other regulations that control their management?
8. What are the regulations in force with respect to party-walls, and with a view to prevent the propagation of fires?

*The School-rooms for the Children of the Labouring Classes.—The Ventilation of Public Buildings.*

1. Are the school-rooms for the children of the labouring classes under any, and what, regulation?
2. Are they well constructed as respects site, drainage, ventilation, light, and warmth?
3. Have they any play-grounds attached to them?
4. To what extent, and in what manner, are the public buildings of Paris ventilated?

*The Drainage and Sewerage of the Metropolis.*

1. What are the regulations for the surface-drainage of the district comprising the site of Paris and its vicinity?
2. Are the streets, lanes, and courts, occupied by the working classes, so laid out as to afford a sufficient inclination for the discharge of surface-water, or are they uneven, damp, and ill-drained?
3. Are there any arrangements for underground drainage, and are they sufficient or otherwise?
4. Are there any sewers or branch drains in the streets?
5. Are the public sewers so constructed as to act without accumulation or deposit of refuse matter?
6. Are they trapped, so as to prevent the escape of offensive smells into the streets and houses?
7. What are the means used to prevent, and to remove, accumulation in the sewers?
8. How are the public sewers cleansed, and what is the annual expense of such cleansing for the metropolis?
9. What is the thickness of the walls of the sewers of Paris?
10. What is the sectional form of the sewers of Paris?
11. What is the cost per English running foot?
12. Are house-drains communicating from the houses with the public sewer, in common use?
13. Is the communication with the sewer by means of a house-drain imperative, or optional, with the owners and occupiers of houses?
14. What is the construction and sectional form of the house-drains?
15. What is the cost per yard?
16. Are the house-drains properly cleansed by water, or other means, or does refuse accumulate in them so as to become choked, and emit offensive smells?
17. Is a large proportion of the liquid refuse of the town thrown into the water-courses, or is it allowed to soak into the sub-soil, or remain stagnant on the surface?

*The Public and Private Necessaries.*

1. Are there any public necessaries in the quarters occupied by the working classes, and if so, under what regulation are they, and in what state are they kept?
2. Have the houses of the working classes proper necessaries?
3. Are they so arranged as to empty into sewers, or into cess-pools?
4. Have the school-rooms occupied by the children of the working classes proper necessaries attached to them?
5. In what manner are the necessaries and cess-pools cleansed?
6. How are the houses of the wealthier classes circumstanced in the above respects?

*The Scavenger's Service.*

1. Is there any local and responsible authority vested with powers to enforce cleansing, and the prevention of all nuisances, within the city and district of Paris?
2. Is there any, and what, service of scavengers for cleansing the streets, lanes, and courts, and how often are these cleansed?
3. Are the houses of the working classes provided with dust-bins for the reception of refuse, and how frequently, and in what mode, are they cleansed?
4. What is the annual cost for the scavenger's department within the city and district of Paris?

*Conservation of Town-refuse for Agricultural Purposes.*

1. Are any, and what, arrangements made for the conservation of town-refuse?
2. Where, and at what distance from the city, is the refuse matter deposited?
3. If sold for agricultural purposes, what is the sum annually accruing from the disposal of the manure?

*Public Nuisances.*

1. What are the public nuisances noticeable in Paris?
2. What powers are given to the local authorities for the suppression of nuisances?
3. What powers are given for the removal from within the city, of factories which are proved to be injurious to public health, and for the suppression of smoke and other nuisances?
4. What is the present condition of Montfaucon, and what are the arrangements carried on there?

*The Market-places and Abattoirs of Paris.*

1. What are the regulations under which the business of the abattoirs, or slaughter-houses, is carried on?
2. What are the regulations under which business is carried on in the market-places of Paris?
3. Under whose authority are the regulations issued and carried out in their details?
4. What is the number of market-places within the metropolis?
5. What is the number of abattoirs within the city and district?
6. Are there any regulations for the management of places allotted for the accommodation of the lower animals, and if so, please to state them?

*The Burial-grounds within and without the City.*

1. Is the burial of the dead permitted within the city of Paris, and close to the habitations of the living?
2. What are the regulations under which intra-mural burials are permitted?
3. What is the number and extent of the burying-places without the city, and what are the regulations under which they are conducted?

*Open Parks and Places of Exercise and Recreation for the use of the Lower Orders.*

Be pleased to state the number and extent of the public parks and places of recreation for the use of the lower orders within and without the city of Paris?

*Bathing-places open to the Working Classes.*

Are there any proper open bathing-places or public baths, and if so, what are the regulations that apply to them?

*The Sources of Supply, and the Distribution of Water for the City of Paris.*

1. What are the several sources from whence the city of Paris is supplied with water?
   *a.* For domestic use?
   *b.* For cleansing and watering the streets?
   *c.* For the prevention and suppression of fires?
2. What are the qualities of the waters used for domestic purposes? Please to give the analysis of them?
3. Are any complaints made, or evils experienced, in respect to them?
4. Please to describe the several modes in use for the distribution of water—
   *a.* To the houses of the wealthier classes?
   *b.* To the houses of the working classes?
5. Is the distribution made by joint-stock companies or by public officers?
6. What is the estimated number of houses in the city and suburbs, and into how many houses is water introduced by pipes?

7. Have the houses, thus supplied, separate tanks?

8. Are the poorer classes supplied from stand-pipes placed at particular stations, from pumps, or draw-wells, or how?

9. Is the deficiency or difficulty of obtaining water much complained of by the poor, and are they in the habit of begging water?

10. Do the lower orders complain of the water as to quality, quantity, or price?

11. What is the present annual charge respectively, for water afforded through pipes, and through other modes, in the several classes of houses?

12. What is the quantity supplied for the different sums?

13. What are the public means of redress in the cases of undue charges, deficient supply, or defective quality?

14. Are filters in common use in private houses?

15. Where water is supplied by pipes, is it kept on constantly night and day, and how is it introduced?

16. Is there any system of stand-pipes in the city from which the water may be used for cleansing the pavements and the fronts of houses?

17. What are the arrangements in respect to supplies of water for the protection of public and private buildings against fire?

18. Is water kept on constantly in the main pipes, so as to be in readiness in all places and at all times in cases of fire; and is it kept on at high pressure, so that it may be thrown over the highest edifices in such case?

19. In case of fire, how long is it, usually, before a full supply of water can be brought to bear on the premises?

20. Are there any well-appointed and practised engines and service of firemen for the prevention and suppression of fires?

21. What is the average number of fires in the year, in Paris and its suburbs, and what are their prevailing causes?

*Diet, Clothing, Bedding, Fuel.*

1. What is the ordinary diet of the labouring classes within the city?

2. How are the said classes generally clothed?

3. How are the working classes circumstanced in respect to bedding, especially in the winter season?

4. Are the habitations of the working classes comfortably warmed in winter, and what is the nature of the fuel in use?

5. What is the form and construction of the fire-places in the houses of the poorer classes, and are they made so as not to waste the heat required for the comfort of their apartments?

6. Is gas-light generally introduced in the shops or dwelling-houses, and is any escape provided for the bad air which it produces?

*Morals.*

1. What is the state of morals amongst the poorer classes?

2. Please to state the circumstances connected with the morals of the poorer classes which tend to prejudice public health?

3. Are the working classes in general given to early marriage?

4. Are they given to excess in the use of wine, beer, or spirits?

5. Are they given to excess in the use of tobacco?

6. How is the Sunday passed by the operatives of Paris? Is it a day of rest from labour and excitement?

*Public Health.*

1. What is the general condition of the city and suburbs in respect to public health?

2. What is the state of the worst parts of the town, and especially of those where, from the mortuary registers, there appears the highest rate of mortality, and where fever and other epidemic diseases are the most prevalent amongst children and adults?

3. What is the average duration of illness among the working classes of the metropolis?

4. Please to state, statistically, the influence of the several trades on the health of the operatives?

5. Please to state, statistically, the present and past state of health of the inhabitants residing on the borders of Montfauçon.

6. What is the extent of general or district charitable relief, given in aid of sickness, in those quarters where the average duration of life is the lowest?

7. What proportion of the losses of rent, and of rates, from the poorer description of tenements, are caused by interruption in the employment of the inmates, and what are the expenses occasioned by sickness and mortality?

8. To what extent is medical advice or assistance sought for by the poorer classes, and how far is it afforded them gratuitously or otherwise?

9. What is the number of hospitals and dispensaries within the city and suburbs, and what is the average number of patients?

10. Please to furnish numerical tables of the adult mortality in the worst quarters of Paris, with a comparison of that in the best quarters.

11. The same description of table of mortality amongst children under five years of age?

12. Please to furnish any other information that may appear to you of importance in reference to the purport of this inquiry.

J. R. Martin.

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The following is a list of the documents furnished by the French Government to the "Health of Towns' Commission," in reply to their queries as above:—

1. Decrees respecting the functions of the municipal authority, 1790, 1789.

2. Police regulations respecting gutters, 1831.

3. Police regulations respecting passages, 1811.

4. Police regulations respecting the security and freedom of circulation, 1829.

5. Police regulations respecting works executed in public thoroughfares, 1837.

6. Police regulations respecting lodging-houses, 1832.

7. Regulations respecting primary schools.

8. Police regulations respecting sewers kept up at the expense of private individuals, 1838.

9. Royal ordonnance respecting water-closets, Sept. 1819.—Police ordonnance respecting water-closets, Oct. 1819.

10. Police ordonnance respecting water-closets, June, 1819.—Regulations respecting night-carts, 1834.

11. Police ordonnance respecting the cleansing of water-closets, 1843.

12. Police ordonnance respecting the sweeping of thoroughfares, 1844.

13. Expenses of street-cleansing, 1841.

14. Police ordonnance respecting noisy musical instruments, 1829.

15. Police ordonnance respecting dogs, 1844.

16. Police ordonnance respecting the noise of French horns, 1837.

17. Police ordonnance respecting cow-keeping establishments in Paris, 1838.

18. Police ordonnance respecting pigs, pigeons, rabbits, fowls, &c., 1829.

19. Police ordonnance respecting establishments of a dangerous or insalubrious nature, 1810. Royal ordonnance respecting establishments of a dangerous or insalubrious nature, Jan. 1815. Police ordonnance respecting establishments of a dangerous or insalubrious nature, Nov. 1837. Classification of such establishments.

20. Governmental decree fixing the duties of the Prefect of Police in Paris, year viii. Governmental decree fixing the duties of the Prefect of Police in the Department of the Seine, year ix.

21. Police ordonnance respecting the opening and the police of the Abattoir of Aubervilliers, and of the knacker-yard, 1841.

22. Police ordonnance respecting knackers, 1842.

23. Police ordonnance respecting the trade in fruits, flowers, vegetables, and plants, 1816.

24. Police ordonnance respecting the opening and police of the Market des Blancs Manteaux, 1819.

25. Police ordonnance of the Horse Market, 1828.

26. Police ordonnance on the daily sale of bread, 1828.

27. Police ordonnance of the opening and police of the Market Popincourt, 1831.

28. Police ordonnance of the Market des Patriarches, 1832.

29. Police ordonnance of the Flower Market de la Madeleine, 1834.

30. Police ordonnance of the Rag Market, 1835.

31. Police ordonnance of the Hay Market, 1834.

32. Police ordonnance of the sale of fruit at the Quay des Miramionnes, 1835.

33. Police ordonnance of the price of stalls at the Market Rue des Prouvaires, 1836.

34. Police ordonnance of the opening and police of the Flower Market Boulevard St. Martin, 1836.

35. Police ordonnance of the price of stalls at the Flower Market Quai Desaix, 1836.

36. Police ordonnance of the opening and police of the Market St. Maur, 1837.

37. Police ordonnance of the Fowl Market, 1837.
38. Police ordonnance of the price of stalls at the Market des Carmes, 1839.
39. Police ordonnance of the price of stalls at the Fish Market, 1840.
40. Police ordonnance of the police of the New Market, 1843.
41. Police ordonnance of the Cow and Bull Market, 1844.
42. The Market St. Germain, 1844.
43. The opening and police of the Oyster Market, 1845.
44. Police ordonnance respecting market gardeners, and sellers of vegetables, 1833.
45. General regulations for the concession of stands in the markets of Paris, 1829.
46. Police ordonnance respecting the measures of salubrity to be observed in the markets, 1832.
47. Police ordonnance respecting the regulations of the trade in meat in Paris, and respecting the abattoirs, 1830.
48. Decree respecting the burial of the dead, year xii.
49. Decree respecting funerals, 1806.
50. Decree respecting the transport of the dead, 1827.
51. Decree respecting funerals, 1835.
52. Instructions of the Prefect of the Seine respecting the dimensions of sepulchral monuments, 1844. Rules for the guards of the burying grounds, 1834.
53. Decree of the Prefect of the Seine respecting the cemeteries of the town, 1843.
54. Regulations of the Prefect of the Seine respecting concessions of ground in cemeteries, 1829.
55. Model of a permission for river baths in the Seine.
56. Police ordonnance respecting the police of public fountains, and of water-carriers, 1837.
57. Police ordonnance respecting fires, 1843.
58. Police ordonnance respecting the pipes and apparatuses for lighting by gas in the interior of houses, 1842.
59. Police ordonnance respecting deposits of manure in the suburbs, 1839.
60. Collection of the General Reports of the Council of Salubrity, 1804 to 1839.
61. Pamphlet of M. Vivien on the attributions of the Prefect of Police in Paris.
62. Report of the Gas Commission.
63. Report of the Administration of the Hospitals for the year 1843.
64. Plans of the sewers and water ducts of the Ourcy.

## Operations Without Pain.

### MIDDLESEX HOSPITAL.

IMMENSE CROP OF WARTS COVERING THE GLANS AND PREPUCE—EXCISION UNDER THE INFLUENCE OF ETHER.

Reported by J. H. Rogers, Esq., Acting House Surgeon.

Thomas B——, aged twenty-four; single; admitted under Mr. Arnott, Feb. 16th. The prepuce was in a state of phymosis, and greatly swollen, giving to the end of the penis a bulbous appearance. On its inferior surface, some way from the natural aperture, was an ulcerated opening, the size of a shilling, through which protruded a number of large warts, seated on the glans penis, which they nearly covered. There was a considerable discharge of thick matter from beneath the prepuce. The urine passed through the ulcerated opening. The account the man gave of himself was, that he never had gonorrhœa; that he could always draw the foreskin back until about three months ago, when for the first time he observed some warts about the orifice; since then he had never been able to get it back. Six weeks ago, the prepuce became red and much swollen, and about a fortnight since, it ulcerated at the lower part, forming an opening through which the warts appeared. This opening has since enlarged.

17th.—The portion of prepuce between the natural and ulcerated aperture being divided, the thickened prepuce was turned back, and found to be completely covered with a multitude of warts, which completely obscured the natural surface. The glans also was covered by a number of large warts, some pedunculated, but the greater number attached by broad surfaces, so that scarcely any portion of it could be discovered.

23rd.—Was operated on by Mr. Arnott. After inhaling the ether for about six minutes, he appeared fully under its influence, and Mr. Arnott commenced snipping off the warts from the surface of the glans. The man appeared, by his gestures and inarticulate expressions, to be suffering considerable pain, but the operation was, however, continued. After trimming off the whole of the warts from the glans, the greater part of the prepuce was removed with a scalpel. The whole operation, including the application of ligatures to some vessels which spurted very freely, occupied about seven minutes. The patient inhaled during the whole of this time. After the removal of the mouth-piece, the man sat up, and appeared in a state of imperfect intoxication, declared that he had felt no pain, and that he did not know what had been done to him. When told that the warts had been cut off, he appeared extremely pleased, and insisted on shaking hands with everybody near him, and thanking them for what had been done. Soon his manner changed, he complained of pain, and began to blubber like an hysterical girl; and in this state he was led from the theatre, and placed in bed, where he continued sobbing and crying for some time. On questioning the patient some hours after the operation, he still states that he has no recollection of the operation, nor of having felt pain; but he also says that he does not remember anything that took place afterwards, and before he was taken to bed. He had evidently no recollection of the conversation he had held for some time with the surgeons, when he ceased to inhale. It is possible, therefore, that his gestures, and the cries which he uttered when the operation was being performed, might really be indicative of pain felt at the time, but which, like the occurrences which took place after the first effects of the ether had passed off, had left no permanent impression on the mind. The hysterical sobbing has been seen in other cases which have been operated on in this hospital, particularly in that of a young female, aged twenty, who had the little finger and a portion of the metacarpal bone removed, a few days since, by Mr. De Morgan. Instead of returning to a state of consciousness after the first effects of the ether had passed off, she went into a distinctly hysterical condition, sobbing and crying with the peculiar choking in the throat. This lasted several hours, and it appeared from her statement afterwards, that she was quite unconscious of anything that took place during that time. When this had somewhat passed off, she sunk into a deep sleep, and did not perfectly recover her natural condition for two days; she did not, however, suffer any permanent inconvenience.

AMPUTATION OF THE LEG ABOVE THE KNEE.

On the same day, Mr. Shaw removed the leg of a boy, aged eleven, under the following circumstances:—The patient, who had previously been a patient in other hospitals, was admitted here, some six weeks since, with scrofulous disease of the knee-joint, which had existed for years. As the boy's health was suffering from the profuse discharge, it was determined to remove the limb; but this determination was carefully concealed from the patient, and he had no idea that anything of the kind was contemplated. When blindfolded and taken into the theatre, he was told that it was for the purpose of having a new kind of splint put on. He began to cry; but the mouth-piece of the ether apparatus being immediately fixed over his mouth, he was obliged to respire through the instrument. In one minute, the crying ceased, and he breathed deeply; in three minutes more, the operation was commenced, and completed without the slightest cry or gesture indicative of pain. The inhalation was continued during the whole time the ligatures were being applied, and the stump dressed. When the mouth-piece was removed, the boy almost immediately sat up, and did not exhibit the slightest appearance of confusion; but spoke in his usual quiet manner, said he had felt no pain, and was carried off by the nurse quite unconscious of what had been done. When visited by Mr. Shaw, more than half an hour after he had been in bed, he seemed very comfortable and happy, still thinking that he had merely had a fresh splint applied. When the clothes were turned down to examine the stump, he gazed on it for some moments with the most intense astonishment, and then exclaiming, in the accents of extreme surprise, "Oh! you have cut off my knee!" burst into a violent fit of crying. He was, however, easily pacified, on being told that he would now soon get well, and has since been very quiet and contented, making no complaint of pain; and early in the evening he fell into a profound sleep. The same day, Mr. Shaw removed the great toe and metatarsal bone, for strumous caries, from another boy, of about the same age. In this case, the ether was equally successful; not a sound, not a gesture, indicated pain during the whole time of the operation, which lasted nearly five minutes. It was thus prolonged, in consequence of some considerable time being occupied in removing some fragments of bone and diseased tissue. This boy was quite unconscious

of what had been done, saying afterwards, when questioned on that point, "No, Sir, it did not hurt me at all;" but soon after he was taken to bed, he complained of a good deal of pain, which continued for several hours.

In both these boys, the ether appeared to take effect in about a minute, and in two minutes more they were perfectly insensible. The man was certainly not fully under its influence when the operation was commenced; he had inhaled for six minutes. It appears, however, that this man had been in the habit of partaking pretty freely of fermented liquors, which probably accounts for his being less susceptible. Several cases have now occurred, in which it has been found difficult to get those who are in the habit of indulging in the use of beer or spirits fully under the influence of the ether.

## LONDON HOSPITAL.

Communicated by JOHN ADAMS, Esq., F.R.C.S.E., Assistant-surgeon to the London Hospital.

### AMPUTATION OF BOTH THIGHS.

ON Feb. 6th, 1847, a young man, aged twenty-three, whilst attempting to oil the wheels of an engine on the Eastern Counties' Railway, during the motion of the train, was knocked off by coming in contact with a bridge, and the wheels of a train of thirty carriages passed over both legs, crushing them completely, almost as high as the knee, on both sides. He had lost no blood; but was much depressed; his pulse weak, skin cold, and face pale. He, however, answered questions readily enough, and was scarcely so much affected by the injury as, from its extent, might have been expected. The accident had happened at Broxbourne, and must have occurred at least an hour before his admission to the hospital. He readily assented to the amputation of both thighs.

He was put under the influence of the ether-vapour in one minute and a half, and the limbs were both amputated in eighty-five seconds. I removed the left thigh first, and whilst Mr. Curling was securing the bloodvessels, the right was amputated. The influence of the ether was most marked; his pulse rose under it, and he appeared in a tranquil sleep. The blood in the small arteries was much darker than usual, so that it was really difficult to distinguish it from venous blood; the muscles did not retract as they are wont in amputation from recent accident. When he had recovered from the effects of the ether, he said that he knew something was being done to him; but he had really felt no pain.

It is quite unnecessary to detail minutely the after-treatment pursued. An opiate was administered about an hour after the operation, and this was repeated, as there was no tendency to sleep. On the following day, he is stated to have passed a restless night; complained of pain in the legs; had considerable fever; his pulse being full and bounding. He was ordered some saline effervescing medicine, and two grains of calomel, with five of antimonial powder, at night.

Third day.—He had been delirious in the night; his aspect was sunken; his pulse 140. Was ordered some castor oil; and to take camphor mixture and acetate liquor of ammonia, with carbonate of ammonia, and compound tincture of camphor; and to have some broth.

Fourth day.—Is in every respect better; the pulse has fallen to 120; his bowels have been freely open; his tongue is much cleaner. The stumps were dressed, and are healed to a considerable extent. He had, on the seventh day from the operation, a slight attack of fever, with pain in the head, and great restlessness, his pulse being quick, and tongue dry. He had therefore eight leeches applied to his temple, and took two grains of calomel at night. The feverish symptoms soon left him, and on the tenth day he appears going on in every respect well.

In communicating this case to the profession, I think I am warranted in asserting that it is the most formidable operation as yet successfully performed, whilst the patient has been under the influence of ether; and it certainly goes far to establish the importance of this new method of procedure. But even from a case of this serious description resulting favourably, as it in all probability will, we must not be too sanguine as to the universal applicability of this new remedy or adjuvant in surgical operations. This man was a young man in the prime of life, of healthy constitution, and unquestionably of sober, steady habits, and therefore a most fit case for testing the efficiency of the ether vapour, and one in whom, independent of the severity of the accident and operation, we need not have anticipated any unpleasant result. I must confess in the cases I have witnessed I have seen no ill effects calculated to deter me from its employment, although I candidly own, that if I were the subject of operation, I should hesitate much before I would submit to the stupefaction induced in this manner.

With regard to the effects of ether on the system, I apprehend that nobody can doubt that its primary influence is through the blood upon the cineritious texture of the cerebral hemispheres, the recognised seat of sensation. This readily explains its exhilarating influence, or its power of inducing insensibility, according to the degree of its effect, or according to the idiosyncrasy of the patient. It appears to me, however, to produce a decided influence on the blood itself, obvious to the senses; for, independent of the odour which is perceptible, it induces an altered state of the circulating fluid, as is at once apparent in the black state of the arterial blood in the smaller arteries. In the first amputation I performed under its influence, this condition was most marked, and has been remarked in all subsequent amputations at the hospital. I think this fact is one of great importance, as elucidating the effect upon the delicate vesicular structure of the hemispherical ganglia. The same fact, also, in my mind, explains the apparent anomaly occasionally observed—viz., that although consciousness remains, the part is insensible to pain; for I think it probable that the sentient extremities of the nerves are influenced by the contact of this deteriorated blood, and are thus incapable of transmitting the impression to the brain, the seat of sensation. So, also, would the ultimate muscular fibrilla be affected, and hence its irritability be seriously compromised. The rapidity with which the ether-vapour permeates the tissues is proved by the examination I made of a leg amputated by Mr. Luke: the limb had remained a whole week in the dissecting-room, and yet the smell of the ether was most distinct, although the leg had been removed immediately after the patient was put under its influence, which did not occupy more than three or four minutes.

## LEAMINGTON HOSPITAL.

### OPERATION FOR LITHOTOMY.

By Mr. PRITCHARD, Surgeon to the Hospital.

A boy, aged seven, labouring under symptoms of stone, became a patient at the Leamington Hospital for the purpose of its removal. It is impossible to imagine a more violent and refractory patient than this little fellow had proved under several examinations by the sound, previous to his admission into the hospital. Some days before the operation, I had him put under the influence of ether, for the purpose of sounding the bladder. The presence of a stone was clearly ascertained, and the effect of the inhalation was so entirely satisfactory, that I did not hesitate to repeat the proceeding on Tuesday, February 2nd, with a view to the operation.

The boy, on entering the operating room, was induced to believe that he was "to smoke again, in order to bring away the stone." In about three minutes from his beginning to inhale, the countenance became flushed, the eyes turned up under the eyelids, and consciousness was gone. I immediately made the first incision, and from that moment until the stone was in my hand, no sign or expression of pain was observable; the little fellow was (the bleeding from the wound excepted) as a dead body under my hands. A delay of some few minutes occurred in the extraction of the calculus, from its considerable size in so small a subject, (measuring in its long axis an inch and three-eighths, and in its short, three-fourths of an inch,) and from my having first caught it in its long axis. The inhaler used was Hooper's, and the process was most judiciously watched and regulated by my friend Mr. Male, who declares that he had no difficulty in alternating the exhibition of the ether with that of atmospheric air, according to the appearances and pulse of the patient. On withdrawing the ether, when the operation was finished, the boy was immediately capable of answering questions, and appeared much as when he entered the room; he said he had felt no pain.

The boy went on well through the day, but at one A.M. I was called to him, and found that he had had three rigors. His pulse was quick and feeble, countenance sunken and anxious, pupils dilated in some degree, and not normally sensitive to light; no abdominal tenderness or other evidence of inflammatory action was present. Ordered, sinapisms to spine and feet; carbonate of ammonia, three grains; with a teaspoonful of brandy immediately, and to be repeated at discretion.

Wednesday.—Eight A.M.: Better; no more rigors during the night.—Ten A.M.: A slight convulsive rigor, and a tendency to delirium. Apply seven leeches to the temples, and

a blister to the neck; and ordered to take some light broth. —Nine P.M.: Had suffered from two more rigors this evening, still no symptoms of abdominal inflammation; complained of pain at the wound. Ordered, calomel, one grain; compound ipecacuanha powder, two grains; a dose of castor oil; with a fomentation to the perinæum.

Thursday, nine A.M.—Had passed a good night; going on well.

From the above date to the present, (Feb. 10th,) he has gone on well, excepting a slight recurrence of rigor on Sunday night, after seeing his parents, and undergoing some excitement. To what cause may we attribute the rigors and the symptoms of prostration? Not, certainly, to inflammatory action, nor to infiltration, nor to hæmorrhage; neither to any stretching of the urethra, as the staff I used was a very small one,—neither may we attribute his condition to the shock sustained by the nervous system; for in so doing, we nullify the beneficial effect of the ether, which in this case seemed to be so complete. The question arises—Are we to ascribe these symptoms to disturbance of the cerebral functions induced by the inhalation? I confess that I am disposed so to ascribe them. The experience which is now widely accumulating will soon decide this important point. It is, I think, much to be feared that an agent so striking in its effects, and so simple in its exhibition, as the ether-vapour, will be damaged by incautious application. It is impossible to witness its instantaneous and powerful effect on the cerebral system without a fear, that if the vessels of the brain be diseased in the subject under its influence, a fatal result may be expected. In the capital operations, and in patients discovering no tendency to cerebral disorder, more especially in those so sensitive to pain as to add a danger to the operation in the shock to be sustained by the nervous system, the ether-vapour must prove of the highest utility. I suspect, too, that it will be found very applicable to operations in children, unless where fits or other cerebral disorder would seem to forbid its use. My own experience of its value in the case I have here recorded is such, as to induce me greatly to hope that it may not be damaged by incautious and indiscriminate application.

Leamington, Feb. 1847.

## STOCKPORT INFIRMARY.

### AMPUTATION OF THE LEG.

By Mr. JOHN RAYNER, Surgeon to the Infirmary.

THE patient, a delicate girl of seventeen years of age, suffering from an incurable strumous affection of the right ankle, which prevented her following any occupation, was admitted into the institution for the purpose of having it amputated, whilst under the influence of sulphuric ether. The inhalation commenced about a quarter past twelve on Friday last, and in twelve minutes the lethargic state was satisfactorily established, at which period the sensibility of the skin appeared to have entirely left her. Up to this time she kept talking, complained of sickness, and several times forced the tube from her mouth, which no doubt prolonged the operation. In about four minutes from the time of her becoming comatose, the foot was removed, there being no manifestation of pain until the muscles between the bones were divided, at which period she said, "You are cutting my leg off," but not in a tone that betokened suffering. The vapour was, however, again respired for a few seconds, when she a second time became unconscious, in which state the operation was completed. When about to inhale the second time, she called out, "I wish I had said nothing; you are going to give me some more of that stuff that makes folk drunk." A little delay took place in securing one of the vessels, which was at length tied. Whilst sponging the limb, she became apparently conscious again, saying, "You are rubbing my leg." A suture was then used, and at each prick of the needle she cried out as if in great pain, the effect having passed off. When being removed from the table she said, "Thank you, Sir; you have not hurt me much."

Feb. 12th.—Two P.M.: The surface of the body warm; the expression calm and natural; pupils rather dilated, and do not readily contract; is perfectly conscious; sensibility of the skin restored; no unpleasant sensation in the head, throat, or chest; says she felt no pain during the operation, and that she was quite unconscious until awoke by some one rubbing her leg previous to its being dressed; pulse 122, small, and feeble; a little sickly, which she attributes to the ether; wants some broiled ham.—Half-past four P.M.: Pulse 108; no pain or smarting in the stump; has felt sick, and retched once; slept for a short time since last report.—Ten P.M.: Pulse 106; no pain or uneasiness whatever.

13th.—Ten A.M.: Slept well last night, after taking a quarter of a grain of acetate of morphia; complains of slight uneasiness in the stump; pulse 108; skin warm and moist; no sickness; took her breakfast with a relish. To have milk diet and beef-tea.—Evening: Pulse 126; skin hot, but moist; face flushed; no headach; stump feels hot, but is free from pain; has had some twitching in it, which prevented her sleeping. Ordered, Battley's solution, ten minims; mint water, half an ounce.

14th.—Slept well; has no twitching in the stump; pulse 128; bowels have not been moved since the operation. To have an enema of warm water, and wet cloths to the limb.

15th.—Slept well, and feels quite comfortable; bowels have been moved; pulse 120.

16th.—Going on well. On questioning her to-day, says she remembers nothing but a dream of its being cut off at her grandmother's, and cannot recollect speaking to any one, or being spoken to.

## THE NORTHERN DISPENSARY.

### OPERATIONS ON THE TEETH.

By W. H. HEWETT, Esq.

CASE 1.—Jemima S——, nineteen years of age, inhaled the vapour of sulphuric ether six or seven minutes before insensibility was procured, which was preceded by strong hysterical symptoms, of short duration, when a lower molar fang was extracted. On recovering, which she did in a few minutes, she exclaimed,—"Oh! why did you take me from that beautiful place? Let me go back. Oh! how beautiful! It is heaven!" and a variety of other rapturous expressions, evidently showing she had had a dream, and was unconscious of any operation having been performed on her. During the day, however, at intervals, she exhibited symptoms of hysteria, which I have found to be a frequent occurrence when administered to females; and in one case which has come under my knowledge, where it was inhaled by a young lady for experiment merely, these symptoms were so alarming, as to induce her friends to send for a medical man; but no ill effects ultimately ensued.

CASE 2.—Jane P——, aged thirty-one, inhaled the vapour about three minutes, and became perfectly insensible, when a lower molar was extracted without the slightest pain or unpleasant symptom.

CASE 3.—Ann C——, aged fourteen, applied to have a tooth extracted, and breathed the vapour two minutes, when she became perfectly insensible; and on proceeding to extract the tooth, a lower molar, I had great difficulty in opening her mouth to insert the forceps, and before I succeeded, was obliged to use some force. The tooth being removed, she began immediately to recover. On asking her why she kept her mouth so tightly shut, she said she had had a dream, and thought she was drowning, and that somebody was forcibly trying to open her mouth. She was quite unconscious that the tooth had been removed, and had not suffered the slightest pain. The time occupied from the first commencement of the inhalation to her perfect recovery did not exceed four minutes.

CASE 4.—Elizabeth W——, aged fourteen, inhaled the vapour about one minute and a half, which produced insensibility, without any hysteria or unpleasant symptom occurring; and the second bicuspid of the lower jaw was removed. She recovered almost instantly, and had suffered no pain whatever.

CASE 5.—Richard G——, aged nineteen, inhaled the vapour about two minutes, and became unconscious and insensible to pain, which I have invariably observed is shown by the dilatation of the pupil and the turning up of the eyeball in the socket. In this state, a lower molar—the first permanent tooth he had ever had extracted—was removed without his knowledge, or the least pain.

# Correspondence.

## ETHER INHALER.—STOMACH-PUMP AND ENEMA, WITHOUT VALVES OR STOPCOCKS.

*To the Editor of* THE LANCET.

SIR,—I have lately shown the above instruments to the Philosophical Society, and to the members of the Medical Institution of Liverpool, and shall be glad to introduce them to the readers of your valuable journal, having no other desire,

however, in doing so, than to make them useful to the profession.

In the suggestion for a novel kind of stomach-pump, I make use of the fact, that the vulcanized Indian-rubber tube, if bent at an acute angle, becomes immediately impassable to fluids, forming, in fact, a capital temporary stopcock, which you can produce at pleasure in any part of the tube. Two small portions of a three-eight inch pipe are joined like a T, communicating at their point of junction. On the single, or down-stroke portion, an Indian-rubber bottle, fit for a hand's grasp, is tied; the cross portions are introduced into the course of an Indian-rubber tube, two or three feet long. On one end of this tube is a socket to fit the œsophagus tube, which is used in the ordinary way; the other end is allowed to hang down into the basin of warm water. This is the whole instrument; and to work it, you have only to take the Indian-rubber bottle in one hand, letting the flexible tube lie across the other, then to inject the stomach, make a flexure above, or at the proximal side of the T pipe, and draw up liquid from the basin into the bottle; reverse the flexure to the distal side, and force the liquid into the stomach by grasping the bottle. A succession of these movements will quickly fill the stomach; to extract from it, they have only to be reversed; but even this is hardly required, for when the flexible tube is full, and without any flexure, it acts so powerfully as a syphon, that the use of the bottle becomes unnecessary. The undoing of one flexure and the making of the other are effected at the same moment by the simple change of position of the bottle, its mouth pointing alternately downwards and laterally. Of course the identical instrument serves for enemata by merely changing the œsophagus tube for an anal one.

The second contrivance mentioned above is a modification of the common bladder apparatus for the inhalation of ether. It is evident that a large bladder, used as directed by Mr. Herapath, is sufficient for the purposes of the dentist, and for the minor operations in general; but to obviate the inconvenience of breathing the same air over and over again, when protracted inhalation is required, I have made the following addition to it:—A helix of brass wire, twenty inches long, and a three-quarter inch aperture, is coated with flannel half way, (the end also being closed over,) and the other half is covered with glazed calico, leather, or other investment, which will make it impervious to air, while it still remains flexible. At the top of the tube is an oval tin box, in the bottom of which are two valves, one opening inwards from the tube, the other directly outwards into the air; each valve consists of a bit of sheet Indian-rubber hooked on to three small studs, and the apertures are made as large as possible, so as not to impede the breath. The ether is poured over the flannel portion of the tube, which is passed into the bladder, leaving sufficient space around it for the entrance of air. The flannel offers a large surface for the distribution of the ether, and all the air inspired by the patient is made to pass through it. The ether spreads itself quickly over the flannel by capillary attraction, and the instrument has been found very efficient in practice. The mouth-piece which I use is made by stretching a collar of vulcanized Indian-rubber round the edge of the tin box, and slightly shaping its free margin. The flexible tube admits of the mouth-piece being applied when the patient is lying down, which the simple bladder does not well allow. In some of the other apparatuses I think flannel might be used with more advantage than sponge; in all we should aim at having a good surface for evaporation, and large apertures, to breathe through as freely as possible. There is nothing about my apparatus to be broken by a fall or a blow during the bustle of an operation, and the bladder may be used with or without the addition which I have been describing.—Yours respectfully,

ALFRED HIGGINSON,

Liverpool, Feb. 1847. Hon. Surg. to the Liverpool South Dispensary.

## SELECTIONS FROM CORRESPONDENCE.

FROM the great number of interesting communications weekly addressed to THE LANCET, and all of which it would be impossible to publish, even if the journal were twice its present size, we are constrained to abbreviate and select from the mass of correspondence, believing that this will at once be found interesting to the readers of THE LANCET, and more agreeable to the writers than the delay which must otherwise inevitably occur in the publication of entire papers. We would urge upon our correspondents at all times to write with as much brevity and conciseness as the subjects they may be treating of will admit.—ED. L.

A correspondent signing himself *W. T.*, (*Putney,*) draws attention to "a risk incurred in using the ergot of rye to accelerate labour, not hitherto recorded—namely, when this medicine is given in the belief that only one child is in the womb when in reality there are two. The birth of the first child may be natural in every way, and the presentation of the second may be such as to require artificial aid before delivery can possibly take place. If ergot produces any effect at all, it is that of inducing continued contraction of the uterus until it is emptied. Hence it is clear, that were this medicine administered to promote the deliverance of a child, and there should happen to be another about to present so preternaturally as to require a manual proceeding before it could possibly be born, the lives of both mother and second child would be placed in peril; because the continued contraction of the uterus would render it difficult or impossible to rectify the malposition by turning or otherwise; and because this continued contraction would not likely cease until the child were violently thrust through the natural outlet, or through a rupture in the walls of the organ, or till some such serious mischief were produced.

From a letter by *Mr. Stokes, (of Nailsworth)*, we extract the following description of two cases of malformation:—

"It became my duty to examine the body of a man who was a pauper, and had died from pulmonary affection, the result of cold and inadequate support; and I was much struck with the extraordinary capacity of the stomach, and with the extreme smallness of the heart, connected as it was with the aorta, venæ cavæ, and other vessels of a very large size. On inspecting the brain, the cerebrum was small, the cerebellum exceedingly so; the internal ventricles seemed to me larger than common. Several of the jury at the coroner's inquest knew this man very well, and I learned he was quite the Maximilian of gluttons in the neighbourhood; that he had devoured enormous quantities of victuals and drink, and was more a pig than an epicure; had swallowed, at one time, a bucketful of wash intended for a pig, and had even been driven from home by his wife and family for eating up all the household stores. A question may arise, whether Nature gave the peculiarities of structure noticed, or the man's habits. I incline to the former opinion; but have no doubt a greater moral government in the man would have lessened such peculiarities. It seems fair to think, that the largeness of the aorta and other vessels facilitated ingress and egress of blood from the small heart, and left it free from liabilities of hypertrophy or dilatation.—I will now beg leave to mention the second case, which was brought to my recollection as a curiosity fit for observation with the first. Robert Bennett, an inhabitant of Nailsworth, died some years ago, but is still remembered by hundreds for his peculiarities of person and mind. He was a little, smart, well-grown man, straight and active as any rope-dancer at the age of eighty, fiery and impetuous in pursuing a foe or serving a friend, and generally very abstemious, on account of his suffering much from the contrary. He was well known to have passed six months at a time without any fæcal evacuation, and commonly six, twelve, and eighteen weeks. This habit of body grew up with him in defiance of medicine and diet; and as he advanced in years, the intervals became longer, and finally he appeared to sink from the powers of declining age being insufficient for the work of expulsion—a process which sometimes lasted for days. The fæcal mass usually came away black, without smell, and pulverable, but sometimes mingled with a clay-like substance of offensive smell. On opening the abdomen of this remarkable individual, the cause of all this became at once apparent in an immense pouch and enlargement of the colon just above the sigmoid flexure. The almost continual pressure of this loaded bag upon parts near, may be reasonably supposed to have had a power of greatly diminishing their bulk; and such was the fact, the liver being about one-fourth the natural size, and the intestinal canal and stomach considerably reduced also."

*Dr. T. Cossar (of Harworth, Darlington)* has found cod-liver oil beneficial as an external application in ophthalmia tarsi occurring in scrofulous subjects, having used it in a number of cases with complete success. The plan he recommends is to rub in the oil three times a day along the eyelids. An instance is given, in which an obstinate case was cured in the course of a few weeks by this treatment.

*C. E. H. Orpen, M.D.*, writes, at great length, to complain of what he considers the very illiberal and exclusive laws of the Birkenhead Hospital and Dispensary. The managers of this hospital have passed resolutions to the effect that all the medical officers of that institution shall be general practi-

tioners, engaged in dispensing their own medicines. The effect of such a by-law is, of course, to disqualify all physicians or surgeons who do not engage in dispensing.

*M. R. C. S.* remarks, that Mr. Oke's plan of suppressing hæmorrhage from the nose, "by introducing the little finger into the nostril," (*vide* THE LANCET, Feb. 6th,) is much easier in theory than in practice. He advises, in preference, plugging by the anterior nares, or if this is not sufficient, by the posterior nares. The same correspondent describes two cases of the secretion of milk in the new-born infant, in one of which abscess occurred, and a large quantity of pus was evacuated three weeks after birth.

*Mr. Wilson (of Hull)* has seen several cases in which a secretion oozed from the breasts of infants. In fact, in all children, a thin fluid may be squeezed from the nipple soon after birth, a circumstance well known to nurses and others.

*A Student of University College* wishes, through the medium of THE LANCET, "which redresses all grievances, and dresses the aggressors, to ask Dr. Sharpey when the third part of 'Quain's Anatomy' will appear. Three sessions since, as a junior student of anatomy, I bought the first part, the remainder being promised at Christmas. A portion only was published *twelve months after*, with a second promise that the work would be completed in a month or two. This period appears, however, *not yet* to have expired; and it has been announced that the delay is due to *Dr. Sharpey* ALONE!"

*J. David, Esq., M.D. M.R.C.S.E. &c.*, relates the following case:—

"I was requested, on the 10th December, to see a little boy, six years old, confined to his bed with scarlet fever: the symptoms were severe, and continued so for a fortnight; a change then took place, his health daily improved; sitting up, and taking light nourishing diet. At this period I noticed a swelling in his neck, which he complained of being painful on pressure. Liniments, fomentations, and poultices, were applied, but it daily increased in size, and eventually came to a point; an opening was made, and about four ounces of the most fœtid matter discharged; the orifice increased in size, being ragged, and of a dark blue appearance, exposing the jugular vein more than an inch; the coats appeared black, livid, and unhealthy. I cautioned the parents not to allow the child to be left alone, and gave them my reason. My orders were attended to, but unfortunately, whilst the nurse was sleeping, early in the morning, the coats of the vein gave way, profuse hæmorrhage took place, and upon the mother entering the room she found her child dead, deluged in blood, and the nurse comfortably asleep."

## Medical News.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, February 18th, 1847:—John Bleeck, Bristol; Temple Chevallier Paley, Gretford; Edward Monement, Lynn Regis; George Pretyman Hubbard, Bury St. Edmund's; Anthony Unthank, Nottingham.

WESTMINSTER MEDICAL SOCIETY.—The Anniversary Meeting of this Society was held on the 20th instant, at the rooms, 27, (A) Sackville-street. The Society is in a most prosperous and thriving condition. The result of the ballot was as follows:—*Presidents:* Henry Hancock, Esq.; John Webster, M.D., F.R.S.—*Vice-Presidents:* Fred. Bird, M.D.; Francis Hird, Esq.—*Hon. Secretaries:* S. W. J. Merriman, M.D.; John Snow, M.D.—*Members of Council:* W. Andrews, M.D.; P. B. Ayres, M.D.; J. M. Coley, M.D.; E. Lankester, M.D.; E. W. Murphy, M.D.; J. F. Clarke, Esq.; R. Greenhalgh, Esq.; G. M. Leese, Esq.; J. F. Marson, Esq.; Peter Marshall, Esq.

The Annual Dinner of the Society for the Relief of Widows and Orphans of Medical Men, in London and its Vicinity, established 1788, is appointed to take place on Saturday, the 24th of April.

UNIVERSITY OF DUBLIN.—At the Spring Commencement, held on Shrove Tuesday, Feb. 16th, the degree of M.D. was conferred on George James Allman, and the degree of M.B. upon Arthur Leared and James E. Scott.

DEATH FROM ARSENIC.—Last Monday evening, Robert Shaw, of Dewsbury, plasterer, aged twenty-one years, feeling unwell, mentioned the circumstance to William Waite, carpet-weaver, who advised him to go to a druggist and get one pennyworth of mercury, one pennyworth of spirits of nitre, one pennyworth of spirits of wine, and take thirteen drops each, night and morning. It appears that Shaw preferred making his purchases at three separate shops, and obtained double the quantity recommended by Waite. At the place where he obtained the arsenic, he said he wanted it to mix with whiting, to destroy bugs. He was cautioned as to its dangerous nature, and stated that he knew that very well, as he had often used it with whiting for the purpose of killing bugs. After obtaining these ingredients, he mixed the whole in an eight-ounce bottle, went into his father's store-cellar, and took, as he thought, a tea-spoonful of the mixture, about seven o'clock in the evening, shortly after taking his tea. He then went out and stayed until ten, at which hour he was taken seriously ill. He returned home, but could eat no supper; he then went to bed, but was so ill that he could not remain long there. He came down stairs, and told his mother that he believed he was going to die, for he had taken some medicine which he believed would kill him. His father ran for medical aid, which was obtained immediately, (it being then about eleven o'clock) but he continued in great agony till about half-past ten on Tuesday morning, when death put a period to his sufferings. An inquest was held on Wednesday, at the Royal Oak Inn, Dewsbury, before G. D. Barker, Esq., deputy-coroner. The verdict returned was, "Died from taking arsenic as a medicine."—*Halifax Guardian, Feb.* 20th, 1847.

DEATH FROM HOLLOWAY'S PILLS.—Almost every week we see announced in the newspapers the miraculous cures performed by taking Holloway's pills. We have this week the painful duty to reverse the picture, and announce that a cloth-dresser, named Joseph Cockcroft, residing at Hillhouse, near this town, has fallen a victim to the use of this quack medicine. An inquest was held on the body on the 16th instant, before George Dyson, Esq., at the Black Bull Inn, Hillhouse, when it came out in evidence that the deceased was seventy-seven years of age; that on the night of the 12th instant, he took *ten of Holloway's pills in five roasted apples*, and which caused a severe relax of the system the following day. On the nights of the 13th and 14th, he again took doses of five pills each night, the severe attacks of which caused him to sink rapidly until the afternoon of the 15th, when he expired. The jury returned a verdict of "Died from Exhaustion, after taking an overdose of Holloway's Pills." The coroner informed the jury, that the deceased not having taken the medicine according to the printed direction, no hold could be had of the vendor of the pills.—*Huddersfield Paper.*

WESTMINSTER HOSPITAL.—The following are said to be the circumstances under which the College of Surgeons take their recognition of the lecturers on anatomy at this School: The means of illustration were Dr. Hunter's Museum, which the lecturers state they had every reason to believe would be left at their disposal during the present session. In the middle of the course, Mr. Pennell, the lecturer on practical anatomy, found it to his interest to leave London for Oxford, at a week's notice. It was necessary to supply his place, and Mr. Holt was nominated. He applied for the usual recognition, stating that the lectures would, as before, be illustrated by the preparations from Dr. Hunter's Museum. The Court of Examiners, feeling it their duty to ascertain in what condition that Museum was, found that a considerable number of the preparations had been removed, and that, in their opinion, not sufficient were left for the adequate illustration of the lectures on healthy anatomy. On this ground the recognition of the lectures on practical anatomy proposed to be delivered by Mr. Holt, was withheld. By an arrangement with the Professor and authorities of King's College, facilities were afforded for the pupils receiving the anatomical instruction.

GLASGOW INFIRMARY.—Proceedings have been set afoot for raising a fund to build a new hospital in Glasgow, the present accommodation for the sick poor being lamentably deficient, in spite of enlargements which have been from time to time made in the present hospitals. There is one great blemish in the outward anatomy and inward spirit of the principal hospital, which ought to be abolished as pharisaical to the last degree. There is actually painted, in legible letters, on a sign board, at the gate of the Royal Infirmary, "*No advice on Sunday.*" The managers of the hospital, however, do not hesitate to make collections for the support of the Infirmary "on Sunday." Such a regulation as that adverted to is probably singular in the United Kingdom; it is alike in opposition to Christian morals and the ethics of the medical profession.

A QUACK HANDBILL.—"Mr. Baldwin, No. 6, Brewer-street, Maidstone, next to Zion Chapel, (formerly of Union-street,) having returned from North and South America, will devote his time to the following parts of his profession exclusively: Midwifery, Cupping, Dentistry, Bleeding, Ruptures, Defor

mity, &c. It is not Mr. B.'s intention of visiting the Sick, but may be consulted only at his residence. Mr. B. is the inventor of the Patent North and South American Truss, for Ruptures, considered for utility, durability, and comfort, far superior to any hitherto in use. Also a new and superior method of extracting Teeth, which scarcely gives the least pain."

Mr. Langstaff's Museum.—The sale of the late Mr. Langstaff's Museum took place, in New Basinghall-street, on the 16th instant. Among other lots, there was a mahogany cabinet, lot 143, which contained upwards of 200 skeletons of birds' heads, very neat; and another, lot 144, which was catalogued as "containing nearly 600 species and 1000 specimens in Entomology, arranged and named after the Linnæan system." The next lot, 145, contained 250 specimens of insects and moths. There were more than a hundred pathological specimens, upon which much money and great pains had evidently been bestowed. The specimens of anatomy, both human and comparative, were in a state of excellent preservation. It is lamentable to have to say, that the record of these labours—to wit, lot 67, described thus—"MS. Common-Place Book; Cooper's Surgical Lectures; Abstract from Sir E. Home's Lectures; 15 other MS. Books, various; and Catalogue of Mr. Langstaff's Museum, 11 vols. MS.—together, 29 vols.," was sold for the paltry sum of thirteen shillings. The books might be called a miscellaneous medical library; no one branch of study seemed to have the preference; and they were in wretched condition. There was a fine colossal bust of Cline, which fetched £1; and another, of Abernethy, bought for £1 11*s.*; both in plaster, and both very dirty. They were said to be authentic; but it would be important to the profession if some one would narrate the history of these noble-looking works. The print of the Medical Society, containing portraits of Dr. Sims, Letsom, and of Abernethy, and others, seated round a table, listening to a medical paper, was purchased for 18*s.* There were other prints, of Cheselden, Dupuytren, Gall, Tiedemann, Fothergill, &c., sold, some of which were very interesting. The two engravings of full-length portraits of J. Abernethy and J. Hunter, glazed, in ebony frames, distinguished as "scarce," rose to £3. And this is the termination to the labours of Mr. Langstaff, who devoted a long and energetic life to his Museum, and who deserved that his exertions should have met a better appreciation!

Cavendish Society.—The circular of this new Society states, that it will be one of the leading objects of the council to publish translations from the German, Dutch, Swedish, Danish, and French languages, of all the most important works and memoirs on Chemistry, in its various bearings on Physiology and Pathology, Materia Medica, Pharmacy, and Toxicology. Such a society, honestly carried out, issuing its volumes regularly, and without cliquism, favouritism, or secretaryism,—the disorders which so seriously afflict the Sydenham Society,—could not fail to be both prosperous and useful. Dr. G. E. Day is the medical secretary of the Society.

Sugar in Normal Blood.—In The Lancet of May 1845, we published several experiments by Dr. R. D. Thomson, delicately conducted by fermenting the serum of the blood, which tended to show that when an animal is fed upon a purely farinaceous food, a sugar can be detected in the circulation. The result was obtained by taking two light flasks connected by a bent tube, one or both of which possess a safety tube. The serum to be examined was carefully weighed out in one of the flasks, which was placed in a vacuum, or in hydrogen gas, to remove any carbonic acid which might be in solution, while into the other is introduced a solution of caustic barytes, the bent tube dipping into the barytes solution, yeast being mixed with the serum, the connexion between the flasks re-established, and the whole apparatus placed in an atmosphere of 70°. Fermentation speedily begins if sugar is present, and the carbonic acid evolved precipitates the barytes. Every 49 grains of the carbonate of barytes are equivalent to 22·5 grains of sugar. In one experiment the amount of sugar in a pound of serum was found, by Dr. R. D. Thomson, equivalent to 2·57 grains, in another = 4·19 grains. It is important to observe that these results have lately been corroborated by Magendie, (*Journ. de Pharmacie, Janvier*, 1847, p. 41,) who has detected likewise the presence of sugar in the blood of dogs which were fed exclusively on starchy food. He likewise injected starch into the veins of dogs, and found that it is immediately converted into dextrine and sugar, as no trace of it could be recognised by means of iodine. He found sugar in the blood of dogs fed on oats, while the urine was acid, clean, and supplied with urea, but destitute of sugar. Magendie does not state the process by which he succeeded in detecting the sugar. But it is interesting to observe, that a discovery, which was first made in this country, in 1844, by Dr. Thomson, has been confirmed by such a distinguished physiologist as Magendie, ("Thomson on the Food of Animals, &c." p. 30.) It is scarcely necessary to say that this observation is one of great consequence in the present stage of medical physiology, since it explains the means by which the starchy part of the food is brought in contact with the atmospheric oxygen, so as to produce animal heat during its gradual progress into the condition of carbonic acid.

Obituary.—Mr. Philip J. Hurlock, the resident apothecary of St. Bartholomew's Hospital, expired, after a very short illness, at his official residence, on Monday last. The deceased was formerly one of the examiners of Apothecaries' Hall, and an old member of the College of Surgeons, his diploma bearing date Feb. 2nd, 1816.

St. Bartholomew's Hospital.—Mr. James Paget, the recently-appointed Professor of Surgery to the Royal College of Surgeons, was on Wednesday last elected assistant-surgeon to this institution by a large majority—the numbers being, for Mr. Paget, 142; Mr. M'Whinnie, 78; Mr. Pennington, 22.

Royal College of Surgeons.—At a meeting of the Court of Examiners, on the 19th inst., the following gentlemen, having undergone the necessary examinations, were admitted Members of this College—viz., Messrs. Henry Davies, London; Thomas Pratt, King's Court, co. Cavan; Lewis Powell Madden, Clifton; Joseph Nash, Eden Bridge, Kent; James Wood Poland, Cloak-lane, Cheapside; Adam Grzybowski, Berlin; Richard Blizard Power, Royal Navy; Edward Lowe Webb, Birmingham; James Hutchinson, Lambeth; and Abdallah Asmar, Lebanon: the latter gentleman is a native of Syria, and is one of the three medical students brought over to this country by, and educated at the sole expense of, Mr. Assaad Yacool Kayat, of Beyrout, a member of the Syro-Egyptian Society, who was himself recently admitted a member of this College.—The Course of Lectures annually delivered in this College, will be commenced by Professor Owen, F.R.S., on the 9th of March, on the Comparative Anatomy and Physiology of the Vertebrated Animals with cold blood. The second part of the course will be delivered by James Paget, Esq., the recently appointed Professor of Surgery to the College.

Norfolk and Norwich Hospital.—The benevolent and lamented Mr. J. J. Gurney has bequeathed to this institution, and the Norwich Dispensary, the sum of 100*l.* each.

## CORRESPONDENTS.

*Mr. Bibby* is thanked for his communication.

*Mr. Visick.*—The number of The Lancet has been forwarded.

*Mr. Higginson* will find his paper in the present Lancet.

*Miles* can attend the lectures on natural history and natural philosophy either at University College or King's College.

*C. W. B.* writes to say that Dr. Cronin formerly prescribed at a chemist's shop in Barbican, who was his agent for a variety of pills, sold under the names of Dr. Cronin's Cough Pills, Antispasmodic Pills, &c. As he has been committed to take his trial for manslaughter, at the Old Bailey, we shall be at liberty to comment upon the case in our next.

*Bervesensis.*—We have no doubt the effects of etherization in tic douloureux will be speedily ascertained.

*Mr. Goddard.*—We are not conscious of ever doing any injury to our correspondent.

*A Constant Reader.*—The medical men of Birmingham should hold no communication with a party so discreditable to the profession as the author of the quack circular which has been forwarded to us.

*Quilson.*—We never recommend particular medical men in The Lancet. Our correspondent should confide in his ordinary medical attendant, and take his advice as to the proper person to consult, or select for himself *any* respectable practitioner.

*Mr. Evans.*—The paper is in type, and would have been inserted earlier, but for an extraordinary press of matter.

*Nottingham.*—A correspondent writes to complain of the introduction of quack advertisements into the advertising pages of orthodox medical works, instancing two advertisements in the *London and Provincial Medical Directory*, one respecting "the Lisson-grove association of persons bodily or mentally afflicted," the other respecting a Dr. Feldman, the cold-water quack, and his hydropathic boarding-house at Primrose Hill.

Communications have been received from—Dr. Alfred Hall; Dr. Addison, (Great Malvern;) Mr. Bibby; Mr. R. Griffin, (Weymouth;) Mr. Viseck, (Exeter;) Mr. Higginson, (Liverpool;) Miles; Mr. Somerset Tibbs; Mr. Charles Edwards, (Cheltenham;) C. W. B.; Mr. Hendrie, (Hull;) Dr. Baly; Dr. Robert Dick; Bervesensis; Dr. Henry Bennet; Dr. Radford, (Manchester;) Dr. R. Chambers, (Colchester;) a Constant Reader of The Lancet; Quilson; Mr. Evans, (Wrexham;) M.R.C.S., (Bethnal-green,) with "a case for the Society of Apothecaries, alias the Society of Slugs;" Dr. Philpot Brookes; Mr. C. Somerville, (Walsall;) Nottingham; Mr. Moore, (Woodbridge;) Mr. Johnston Luce; Mr. Chapman, (Tooting.)

FOR DISPOSAL, a genteel PRIVATE PRACTICE, in a good situation near town; receipts £400; introduction of three or six months. Premium £400. The house is good, at a moderate rent, and lets well. Reasons for relinquishing the above satisfactory.—For further particulars, apply to Messrs. Lane and Rathbone, 13, John-street, Adelphi, London; if personally, between Twelve and Four.

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A SURGEON, who is about retiring from the Profession, wishes to DISPOSE OF his PRACTICE and RETAIL. The Shop is well fitted up, and has been established fourteen years. Returns about £250 to £300 per annum. Would suit a Young Man commencing Practice, as it offers a good nucleus, and is capable of great increase.—Address, if by letter, post paid, to D. G., at Mr. Toby's, Bootmaker, 41, Wellington-street, Southwark.

A MARRIED GENTLEMAN, who has been in the Medical Profession for the last sixteen years, wishes to Engage with an established Medical Practitioner, who wishes to be relieved from the more arduous duties of the profession, and who, after the lapse of a year or two, would wish to retire, or take in a Partner.—Address, A. B., care of Mr. Lyon, Surgeon, Market Rasch, Lincolnshire.

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TO MEDICAL MEN, OR CHEMISTS AND DRUGGISTS.

A YOUTH, who has served three years of an apprenticeship, and is fully capable of Dispensing neatly, is desirous of a SITUATION, where his time can be actively occupied in Compounding or Retailing. A small premium only will be given, as it is considered that his services will be adequate to his board and lodging.—Address, R. S., Mr. Wyman's, Chemist and Druggist, Redcross-street, Cripplegate.

A MEDICAL FIRM, Seven Miles from London, has a VACANCY for a Pupil. More than ordinary advantages are attached to the situation.—Apply to Mr. Hills, Guy's Hospital; Messrs. Hodgkinson, Skinner-street, Snow-hill; Mr. Barrand, Chemist, &c., Camberwell.

WANTED by a M.R.C.S.E. and L.A.C., aged twenty-eight, who is married, and without children, a Situation as OUT-ASSISTANT to a medical practitioner, or to take charge of a Surgery, apart from the residence of the principal.—Apply to J. B., LANCET Office.

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MEDICAL TRANSFER AND PARTNERSHIP.

MR. ORRIDGE, MEDICAL TRANSFER AGENT, 30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the honour of being allowed to refer TO THE WRITTEN TESTIMONY of upwards of forty gentlemen of the highest respectability, (between many of whom he has been professionally engaged in matters of transfer,) as a guarantee of the sincerity of his endeavours to conduct business in an honourable and straightforward manner.

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Assistants provided on the plan formerly observed at Apothecaries' Hall.

THE MEDICAL SOCIETY OF LONDON.—The Seventy-fourth Anniversary Meeting of this Society will be held at the Albion Tavern, Aldersgate-street, on MONDAY, the 8th of MARCH, at Five o'clock P.M.

WALTER COOPER DENDY, Esq., President, in the Chair.

The Oration will be delivered by GOLDING BIRD, M.D., F.R.S., after which the Fothergillian Gold Medal will be presented to Silus Stedman, Esq., for his Essay on the "Pathology of Insanity;" and the two Silver Medals to Wm. Anthony Harrison, Esq., and Henry Marshall Hughes, M.D.

The Members and their friends will then dine together.

STEWARDS.

| | |
|---|---|
| J. M. Beane, Esq. | W. A. Harrison, Esq. |
| N. Clifton, Esq. | Edward Headland, Esq. |
| H. Clutterbuck, M.D. | Francis Hird, Esq. |
| Edward Evans, Esq. | F. Hutchinson, Esq. |
| Wm. Eales, Esq. | Wm. Kingdon, Esq. |
| Alder Fisher, Esq. | Silas Stedman, Esq. |
| H. Hancock, Esq. | Forbes Winslow, M.D. |

The Dinner will be on the table at half-past Six o'clock precisely, Tickets for which (Twenty Shillings each) may be had of the Stewards, at the Society's house, 3, Bolt-court, Fleet-street, or at the Albion Tavern.

JAS. F. CLARKE, WM. SMILES, } Hon. Secs.

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The urgent necessity for such an institution may be estimated by the fact that *two-thirds of the population* are not assurable as healthy lives, and that about *one* in five of the applicants to other offices is declined on examination.

And that during the period of five years, as shown at the Annual General Meeting of the Proprietors in November last, upwards of 2,000 proposals had been made to the Society, covering Assurances to above One Million.

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*N.B.—Applications for Agencies to be made to the Actuary.*

LONDON ASSURANCE CORPORATION, by Royal Charter of King George the First, A.D. 1720, 7, Royal Exchange, Cornhill, and 10, Regent-street.

LIFE ASSURANCE.—The Annual Abatement of Premium on the series of 1831 Policies, due this day, and which have paid five years' premium, is £30 11s. 9d. per cent. in addition to the permanent reduction made on the 1st of January, 1846, equivalent to a bonus of upwards of three per cent. per annum on Policies but five years in existence. Assurances may be effected to partake of this annual abatement of Premiums, or the profits may be added as a bonus to the policy, or received in cash, or a new Policy will be granted without premium.

The expenses of managing the Life Department are paid by the Corporation, and not taken from the Premium Fund—an advantage afforded by no other office, and which merits the serious attention of those about to effect Life Assurances.

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| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| 25 | 19 0 0 | 24 0 10 | 1,265 0 0 | 2 6 5 |
| 30 | 20 15 0 | 26 14 2 | 1,287 0 0 | 2 8 7 |
| 35 | 23 8 4 | 29 18 4 | 1,278 0 0 | 2 7 8 |
| 40 | 27 7 6 | 33 19 2 | 1,240 0 0 | 2 4 0 |

Full tables, Annual Reports, &c., may be had at the London Office, No. 12, Moorgate-street, Bank.

J. R. LEIFCHILD, Secretary.

WINDSOR UNION.—The Board of Guardians are desirous, at their Meeting, to be held, at half-past Ten o'clock in the forenoon, on the 2nd day of March next, at the Union Workhouse, Old Windsor, of receiving proposals from Medical Men, duly qualified, to serve the office of MEDICAL OFFICER of the First District of the Union, comprising the Parishes of New Windsor and Clewer, the Hamlet of Dedworth, and part of the Parish of Old Windsor. Yearly salary, £70. The duties and regulations are those prescribed by the Poor-law Commissioners.

Dated this 16th day of February, 1847,

W. C. LONG, Clerk.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The COURSE OF LECTURES in the Theatre of this College for the present year will be COMMENCED on TUESDAY, the 9th of MARCH next, when Professor OWEN will begin his Lectures on the "Comparative Anatomy and Physiology of the Vertebrated Animals with Cold Blood."

The Second Part of the Course will be commenced, by Professor PAGET, on the conclusion of the Lectures by Professor Owen.

The Lectures will be delivered on each Tuesday, Thursday, and Saturday, at Four o'Clock.

Cards of Admission will be issued to Members of the College, upon personal or written application at the College, between the hours of Ten and Four.

Feb. 25th, 1847. EDMUND BELFOUR, Secretary.

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ROYAL COLLEGE OF CHEMISTRY,
HANOVER-SQUARE, LONDON.

THE PRACTICAL COURSE OF SCIENTIFIC INSTRUCTION in this Institution is under the direction of Dr. A. W. HOFMAN, assisted by Dr. JOHN BLYTH, and Junior Assistants.

The FOURTH SESSION will commence on MONDAY, the 8th of MARCH next, in the NEW LABORATORY, and end on the 31st July.

The fee for Students, working every day during the Session, is £12 10 0

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The hours of attendance are from Nine to Five.—Further particulars may be obtained on application to the Secretary, at the office of the College, Hanover-square.

By order of the Council,

WILLIAM JOHNSON, Secretary.

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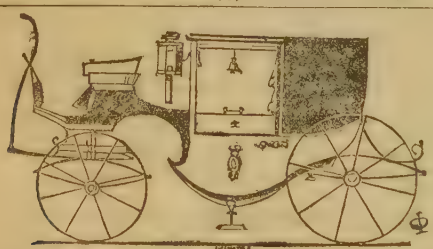

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# Annual Address

DELIVERED BEFORE THE

# ROYAL MEDICAL & CHIRURGICAL SOCIETY

OF LONDON,

*At the Anniversary Meeting, held on Monday, March 1,*

By W. F. CHAMBERS, M.D., F.R.S., K.C.H.,

PRESIDENT, PHYSICIAN TO THE QUEEN, ETC.

GENTLEMEN.—It is seldom that one who undertakes to address such an assembly as this, has to congratulate himself and his audience on the deficiency of his materials. This, however is my good fortune on the present occasion; for it so happens, that the number of our departed associates does not this year amount to more than a moiety of those whom it was my painful duty to commemorate when I last had the honour of addressing you. The names, however, to which I am now to invite your notice, though comparatively few in number, are by no means of inconsiderable weight and estimation amongst us; for in the catalogue we find the names of BOSTOCK, JOHN THOMSON, HATCHETT, and TOMMASINI—men highly honoured by the profession and the public—men who have illustrated this Society by the brightness of their talents, and by the reputation they have achieved for themselves.

First in the list of those whom death has removed from our ranks during the last year, stands the name of Dr. JOHN BOSTOCK, a very eminent chemist and physiologist, and a physician also of no inconsiderable fame; the only son of a physician, whose early promise of eminence was extinguished by his premature decease in the flower of his age and his prosperity.

Dr. John Bostock, after spending the greater part of a successful professional life in his native town, (Liverpool,) retired with a competency, which he had most honourably acquired before he had attained the forty-third year of his age. He then transferred himself to London, and in a very few years became distinguished in the best literary and scientific circles of the metropolis. In the year 1818 he became a Fellow of the Royal Society, of which he was subsequently one of the vice-presidents. But he was author of one paper only, in the *Transactions* of the Society, entitled, "An Essay on the Spontaneous Purification of the Water of the Thames." He was also a frequent writer in the scientific portions of the *Monthly Review*, in the *Edinburgh Medical Journal*, and in the *Transactions* of this Society, of which he was one of the earliest and most efficient supporters. He wrote also several papers in Brewster's "Encyclopædia," amongst which may be mentioned, the articles, Albino, Galvanism, Heat, Animal Magnetism, Materia Medica, Medicine, and Physiology, and contributed largely to most of the medical and scientific journals of the day. He afterwards occupied much of his time in collecting many of his more important essays into separate volumes. The result of these labours is well displayed in his "Essay on Respiration" and his "History of Medicine."

But it was not till he had attained the sixty-third year of his age that he commenced his principal work, on which, indeed, he desired to fix the basis of his high reputation—namely, his "Elementary System of Physiology," which was completed in the year 1827, and collected within the following ten years (in the last edition), into one large octavo volume, forming a most commodious compendium of all the facts and theories belonging to this extensive subject which were then extant. After this period he meditated some other important works, the completion of which was arrested by his unexpected death from an attack of cholera in the autumn of 1846.

This will suffice for a sketch of the professional life of Dr. Bostock, one of the most eminent chemists and physiologists of our day. There have been, indeed, in our time, as well as in every earlier period of the existence of our Society, many eminent physiologists and pathologists, many men deserving most highly of philosophy in general, and of our science in particular, whose fame may be said in all ordinary respects to vie with that of Dr. Bostock. But I doubt whether there has appeared one who has more fairly earned the meed of praise for a quality standing as much higher than any other mental characteristic"—

"Quantum lenta solent inter viberna cupressi,"

I mean, the quality of scrupulous integrity and unimpeachable truth as to all his facts and statements—a quality, the want of which renders so large a portion of medical literature worse than useless, whilst its presence illumines the plainest and homeliest narrative with an inimitable lustre.

It is unnecessary that I should occupy your time in recapitulating Dr. Bostock's various works in every department of medicine; for a complete account of which I would refer you to the memoir of his life by the learned author of the "Medical Portrait Gallery," or to the catalogue of the library of this Society, for the amplification of which he so successfully laboured.

Dr. JOHN THOMSON, professor of general pathology in the university of Edinburgh, stands next in the list of those whom we have had the misfortune to lose by death since our last anniversary meeting;—who, having survived two generations of his professional brethren, seemed, as it were, the connecting link between them, and formed in his character a remarkable combination of the excellencies of both.

It would be impossible, in such a notice as this, to mention all the particulars of his life and professional labours. I would, however, call your attention to a few prominent features in his character, which at the same time that they tend to establish his well-deserved eminence, may serve as materials for useful reflection and improvement to ourselves.

Dr. Thomson was born at Paisley, in a humble station and straitened circumstances; but nevertheless, while yet a youth, and in the midst of the drudgery of a medical apprenticeship, he contrived to devote himself to the study of botany with great energy and success. He next entered on the pursuit of chemistry, and having settled at Edinburgh, delivered a course of lectures on this science, and published a translation of Fourcroy's Elements, accompanied with valuable notes.

In the year 1800, he was appointed one of the surgeons of the Royal Infirmary, and professor of surgery to the college of Edinburgh, the duties of which lectureship he ably performed for sixteen years, and became, in 1806, the first occupant of the chair of Military Surgery, then just established by the Government.

It is not necessary or expedient that I should carry you in detail through the different stages by which Dr. Thomson mounted from the comparative lowliness of his early professional station to the enviable position and distinctions of his latter life. Suffice it to say, that having early imbibed, as might be fairly anticipated regarding such a mind, the soundest principles of liberality, both as to politics and science, he became naturally associated with many leading men, both in Edinburgh and in this metropolis, with whom he sustained a philosophical intimacy throughout his long life. It is enough to mention, in this galaxy of talent, the names of Stewart, of Allen, of Mackintosh, of Horner, Lauderdale, and Brougham: in the society of these and other kindred spirits he passed through his professional career with an unblemished private and public reputation. At length he resigned the chair of Surgery, but was anxious (on the ground of having pursued general pathology with much assiduity and zeal) to succeed, on the death of Dr. Gregory, to the professorship of the Practice of Physic; he was not, however, successful in this attempt; but as soon as his political friends returned to power, he was appointed to the professorship of General Pathology, to which he had long aspired; and this he retained till his death, in the year 1846, at the advanced age of eighty-one years.

Having described, very cursorily, the general history of Dr. Thomson's life, I will detain you only with a short commentary on some of the principal improvements in medical science for which we are indebted to *his* researches.

John Hunter had a few years previously published his "Treatise on the Blood and Inflammation," which had hitherto remained almost a closed book to the profession, on account of the complexity and indistinctness of its enunciations, when Dr. Thomson, being struck with the importance of the work, and the little attention, as compared with its real value, with which the profession appeared to regard it, determined to apply his powerful mind to the elucidation of the doctrines propounded by the great author, and reduce them to a more systematic and philosophical arrangement than had been previously attempted by any writer on the subject.

It was in the course of surgical lectures, founded on these doctrines, that he expatiated over the wide field of cutaneous diseases, particularly those which are known by the term *specific eruptions*, and he was able to communicate much information of the utmost value and interest, both to the physician and the surgeon.

From observing the difficulty which was acknowledged to

exist in diagnosticating between *specific* sores and those which were simply *cachectic*, he was induced to adopt the opinions of Mr. John Pearson, Sir William Fordyce, Mr. Abernethy, and others, on the efficacy of sarsaparilla, mezereon, sassafras, and the mineral acids, in the treatment of certain cases closely resembling syphilis, as to many of their symptoms and habitudes—opinions, in truth, of which his own experiments were abundantly confirmatory. It was nevertheless obvious, that the diagnosis was not yet clearly made out, and that still much was to be done before a satisfactory position could be taken up, with regard to the degree of confidence that was to be placed in the various substitutes for mercury which had been proposed in syphilitic and syphiloid maladies. He resolved therefore to ascertain, in the true spirit of the inductive philosophy, whether *all* cases of this class might not be taken out of the category of diseases curable only by specific remedies, and treated on the simple principles and indications of reasonable medicine—I mean by such remedies as the antiphlogistic regimen—repose, and mild local applications.

After a fair trial of this system of treatment, he came to the conclusion that both primary and secondary affections were curable without mercury, and that although some of these cases proved somewhat obstinate, yet that the instances in which no mercury was used yielded, on the average, at least as speedily as those which had been subjected to the influence of that mineral. The profession, after due experience, have, with a few exceptions, adopted Dr. Thomson's doctrine on this subject, reserving, however, the opinion, which is pretty generally received, that although, by great care and management, syphilis, both primary and secondary, may in due time be removed by the means recommended by Dr. Thomson, there are certain cases which are so much more readily removed by the mercurial treatment than by any other, that no practitioner of the present day would feel justified—in the more inveterate instances of the secondary disease, at least—to allow his patient to be exposed to all the risks of a relapsive delay, when it is evident that a well-conducted and well-defined course of mercury will certainly eradicate the poison.

It is but fair to state here, in justice to my late lamented friend and colleague, Mr. Rose, surgeon to St. George's Hospital, and a distinguished member of this Society, that during the progress of Dr. Thomson's investigations, he had somewhat anticipated him, not as to the discovery of this truth, but rather as to the time of the publication of the doctrine in question, which, indeed, Dr. Thomson did not seem unwilling to admit, as the following sentence in one of his letters will testify:—

"In the course of reporting the cases in these hospitals for my clinical lectures on military medicine, I was surprised to be informed, in February, 1817, by Mr. Kenning, resident-surgeon of the Ordnance medical department, that a practice similar to that which I was following in syphilitic cases, had been employed for a considerable period, (I have reason to believe even some time previously to my appointment to the Depôt Hospital,) by Mr. Rose, Surgeon of the Coldstream Guards, and I was happy to learn that the results of his practice were similar to mine."

It would appear, from a paper published in the eighth volume of our *Transactions*, that Mr. Rose's experiments were made in the year 1815, and the results were communicated to this Society in August, 1817.

These investigations, especially as they related to specific diseases of the skin, led Dr. Thomson's mind to the discussion of another subject of great interest to all of us, I mean the subject of varioloid diseases, the true pathology and habitudes of which he first pointed out, and presented their history to the profession in an intelligible and perspicuous form.

It is well known that for several years after the great discovery of Dr. Jenner, such was the laudable anxiety of medical men to establish generally the practice of vaccination, that it was difficult, even in the face of undoubted proofs of its occasional but obvious failure, to persuade the profession not to consider every case of varioloid disease occurring after vaccination to be chicken-pox and not small-pox: hence there arose a cloud of discussion and dispute, naturally founded on the ingenious attempts of Dr. Heberden, and afterwards of Dr. Willan, to establish the true diagnosis between varicella and variola, involving the attempt to show that the exanthema of the former was always vesicular, whilst that of the latter was of a true pustular character. But it was soon found that this distinction would not stand the test of careful observation, for that vesicles and pustules were found so mixed together in these cases, as to make it impossible to avoid the suspicion that variola and varicella were the same disease, and that the latter was merely a modification of the former.

This masterly conclusion cleared away at once the whole mystery, and shed a broad daylight on all the obscurities which had previously perplexed the question, leaving the minds of most men at rest on the subject; and although the explanation marred a little the simplicity of the doctrine of the complete immunity from subsequent variola bestowed by vaccination, yet it cannot be said to diminish its real value, inasmuch as it showed that if it sometimes failed in perfectly defending the individual from subsequent contamination of variola, yet that, in this respect, the exceptions to the law of immunity occurred only in cases in which the prevalent variolous poison was unusually intense and virulent; and that, under such circumstances, the previous occurrence of small-pox itself did not preserve the individual from being again affected by it, but that even in these very cases the previous vaccination had an extraordinary power of shortening the stages and modifying the severity of the secondary disease.

Having thus concisely exhibited to you some of the claims of Dr. Thomson to the gratitude of the profession for his contributions to our pathological improvement during his long and useful life, I would fain have concluded our notice of him by expressing our sincere admiration of his talents and industry, and his uniform endeavour, on every occasion, to promote the cause of learning and liberality. I cannot, however, allow one point to escape our observation, involving an error in professional ethics, which is important, as it attaches to a man so eminent in his generation as Dr. Thomson, and which therefore, on the principle laid down by the poet,

> "Omne animi vitium tanto conspectius in se
> Crimen habet quanto major qui peccat habetur,"—

renders that which might seem scarcely a noticeable error in judgment appear very important, as pointing out an example of unfairness to his brethren of considerable weight. And I am the more anxious to touch (however leniently) on this point, because his biographer in the *Edinburgh Journal* has related the anecdote without expressing any disapprobation of this offence against professional candour and propriety.

It appears that during the illness which terminated the life of George IV., Dr. Thomson was induced to write the following letter to a non-medical friend, Lord Lauderdale:—

"My dear Lord,—I am glad to perceive, from the bulletins and the newspaper accounts, that there seems to be some little mitigation in the severity of his Majesty's complaint; and the mention of the fact, that this relief has succeeded to punctures of his limbs, shows that the complaint is now acknowledged to be dropsical. In these circumstances, I cannot help repeating to your lordship in writing, what I dare say I may have mentioned to you in conversation—viz., the remarkable effects which, during the last few years, I have had occasion to see produced in dropsical affections — hydrothorax, ascites, and anasarca, whether single or combined, dependent upon organic affections, or arising from other causes—by the use of elaterium. My experience entirely coincides with the account which is given of this medicine by the late Dr. Ferriar, of Manchester, in his 'Medical Histories and Reflections.'

"I state this to your lordship in perfect ignorance of his Majesty's present condition, and of the remedies which may have been or are at present employed; but I have now so often found the elaterium succeed, after all the usual diuretic and hydragogue medicines had failed, in dropsical affections, that I consider it as the most powerful of all the remedies for the cure of dropsy that are as yet known to us."

(Here follows a very commonplace description of the mode of using elaterium, and its effects.)

"It is more than probable" (he proceeds to say) "that his Majesty's medical attendants are as well or better acquainted than I am with the use of elaterium; but I feel that I should not discharge my duty towards you without giving you my testimony in its favour. I should like that you read the passages in Dr. Ferriar's work to which I have referred, and make such use of them, or of the information contained in this letter, as you may judge proper. I need hardly add, that I trust you will say nothing of this communication.—I am ever, my dear Lord, &c."

It will be seen that in this letter Dr. Thomson lets us know, first, that his only knowledge of his Majesty's malady was founded on conjecture; that he was ignorant of the king's actual state; and that he had no means of knowing what treatment had been already adopted by those who were in attendance, yet thought it necessary to suggest through a

layman, with great ceremony, a drug to be prescribed in the case, that drug being in common use, (I may say almost in universal use in dropsy,) and perfectly well known to every tyro in physic; so well known, indeed, and so common, that to a medical ear it sounds nearly as preposterous as if, in the nineteenth century, he had solemnly mentioned jalap, or scammony, or senna, as excellent medicines for emptying the bowels.

I have mentioned this anecdote, not so much with reference to the inconvenience of such an interference to the professional men employed in the case, (though this point ought not to be disregarded,) but because the general rule that forbids such interference is framed as much for the comfort of the patient as of the physician.

The physician, loaded with the weight of such a responsibility as this, is called on to exercise the most impartial and unembarrassed decision as to the choice of the means which are best adapted to the existing emergency; and if his judgment is to be disturbed by trivial and unnecessary interruptions, whilst he is determining this question, his power of benefiting his patient is in the same proportion impaired as his credit is endangered.

Having thus, I trust impartially, discharged my duty to the memory of this learned and eminent individual, who has indeed already secured to himself a lasting name and reputation amongst the scientific philosophers of Europe, I will proceed to notice the loss we have sustained from the decease of others who have filled no mean place amongst our departed associates. Of these, I would name, with deep regret, the name of Honoratus Leigh Thomas, a distinguished member of the College of Surgeons, as well as of the body I am now addressing. In early life he became well known as attached, in a medical capacity, to Lord Macartney's embassy to China in 1792, having obtained that appointment at the recommendation of John Hunter, under whose tuition he acquired those habits of accuracy and diligence which essentially assisted him throughout his subsequent career, when, having returned to England after the unfortunate campaign in Holland, he became associated, in 1799, with Mr. Cruickshank, (whose daughter he married,) and joined his father-in-law in the lectures he delivered at the School of Anatomy in Windmill-street; and about this time was elected a Fellow of the Royal Society, and became a contributor to its *Transactions*.

He acted also for many years as one of the Council of the College of Surgeons, and a member of the Court of Examiners of that learned body, and was remarkable throughout for the kindness and consideration with which he performed its important duties. At length, however, he became the subject of a most painful malady, which although treated with great success by Baron Heurteloup, (a large calculus having been pulverized and removed,) yet left him with some apprehensions of a relapse of his complaint, which induced him at once to retire from his labours to enjoy the repose of domestic society, and to look forward, in comfort and tranquillity, to his departure, as "kind Nature's signal for retreat," from an active, useful, and beneficent life.

Next in our list of our deceased associates stands the name of Charles Wingfield, Esquire, surgeon to the Radcliffe Infirmary at Oxford, and an eminent practitioner in that city. He was the son of a clergyman in Shropshire, and was educated at the grammar-school of Shrewsbury, which was so long distinguished by being presided over by Dr. Butler, afterwards Bishop of Lichfield, and by having sent forth into the world a list of eminent scholars which would have done honour to larger and more renowned seminaries. He owed his professional education, under Mr. Naylor's tuition, to the Gloucester Infirmary, and to St. Bartholomew's Hospital, where he was known and cherished by the best men of his times. He did not, however, fix himself at Oxford till he had spent several years in the pursuit of medical and scientific instruction in the East Indies. On his return, he attached himself to Mr. Tuckwell, at Oxford, and in the year 1816 became, as before mentioned, surgeon to the Radcliffe Infirmary, and continued practising many years, in conjunction with that gentleman, whose death preceded Mr. Wingfield's by a few months only. I cannot give you his character more concisely, and, at the same time, more ably, than in the words used in an abstract from a letter written by one who knew him well, and was well able to appreciate his talents and acquirements. He says, "although they (Messrs. Tuckwell and Wingfield) were thus practising together for many years, Mr. Tuckwell had the chief fame, Mr. Wingfield's reputation was a good and sound one—he did the great operations of surgery, was respected, and had considerable business on his own reputation. He has left no writings, and has added nothing to surgery; but he served his own generation whilst he lived, and each day saw him usefully employed in a profession which he really loved. He was free from all avarice in money matters, and he had many very intimate friends. In a few words, he was an active, good surgeon, without any great peculiarity, and very kind to the poor. He died during the past year, after an absolute suppression of urine, which terminated his life within two days of his seizure.

I must not close my memoir of this day without mentioning two names of honorary fellows of this Society whom we have lost since the last anniversary meeting, both men, in their respective provinces, of considerable eminence and reputation, and both reflecting much credit on the Society. These were, Professor Tommasini and Mr. Charles Hatchell.

Tommasini, the celebrated professor of clinical medicine in the university of Bologna, was well known, chiefly by his ardent espousal of the opinions of Rasori of Milan, who first introduced to the notice of the profession the practice of administering large doses of antimonium tartarisatum as a powerful antiphlogistic agent in the treatment of acute inflammation, in which he followed the track first pointed out by Rasori, and afterwards warmly supported, with some important modifications in detail, by Laennec, in whose work on auscultation, under the head of Treatment of Peripneumony, the doses in which it was usual to administer the remedy are fully described, and the whole subject developed and discussed.

I have been favoured by one of our accomplished colleagues, who was in the year 1827 an eye-witness of Tommasini's practice, with a short sketch of the manner and character of this eminent physician, which I trust he will pardon me for reading to you in the very words of his memorandum. He says: "It was on the 14th of February, 1827, that I made acquaintance with Tommasini at Bologna, and spent ten days there in regular attendance on his practice. He was at this time professor of clinical medicine at the university of Bologna. He appeared to me popular as a teacher, careful in the investigation of his cases, and most courteous to many foreign students, especially Englishmen, who followed him round the clinical wards. He told me that he occasionally carried the doses of tartar emetic to twenty or thirty grains in the twenty-four hours. He relied greatly upon this remedy, which had been employed in a similar way by Rasori of Milan before Tommasini adopted it. I saw several cases of acute pulmonary diseases successfully treated by Tommasini on this plan.

"Tommasini was an ardent patriot, and lamented over the degraded state of his country, and was more than once displaced from his professorship on account of his liberal ideas. He was a great admirer of England and her institutions; and I remember hearing it said in his presence by his friend, the celebrated Professor Conti, that England was the only country in Europe in which there were men, and where there was a government fit for men. Tommasini appeared to be much respected and popular in a circle of distinguished professors at Bologna, amongst whom were, besides Conti before mentioned, Orioli, the celebrated mathematician, and Mezzofanti, the great linguist.

"Tommasini visited England at the time of Queen Caroline's trial, and on his return to Italy, he published a work, entitled, 'The Methods of Cure, and of Clinical Teaching in some of the Public Hospitals of England and Scotland.'"

He died at length at the advanced age of seventy-seven, in his native city of Parma, where he was much esteemed by his sovereign, the ex-empress of France. He was of middle height, and of most courteous and friendly manners.

The other accomplished individual to whom I alluded was Charles Hatchett, Esq., who, although not strictly belonging to us in a professional point of view, has a claim on our affectionate remembrance, from having been selected as a Fellow of this Society, in reward for his devotion to the science and profession with which we are particularly associated—a tribute, indeed, we most readily and gratefully accord to him. His very recent decease, however, has precluded me from preparing materials as fully as I could have wished, for doing justice to his interesting character and preëminent merits.

Mr. Hatchett was born in London, in the year 1775, in a station of high respectability. From his earliest years he enjoyed a competency, which relieved him from the necessity of pursuing any professional occupation. This competency he devoted to the pursuit of science, and mainly to a department of science which was particularly allied to medicine. His admission into the Royal Society gave him a ready opportunity of communicating to the scientific public the results of his

chemical and physiological labours; and, as was natural in the midst of these researches, he became much interested in everything appertaining to our profession, the members of which he seemed peculiarly to cherish; and in combination with some of the most distinguished of them (amongst whom I must mention the name of his son-in-law, Mr. W. Brande, one of our most valued members) stood forth, as it were, the father of the science of animal chemistry.

For the details of his commentaries on these subjects, I would refer you to the volumes of the *Transactions* of the Royal Society, published at the commencement of the present century.

The later portions of his life were spent in comparative retirement, but still in the society of a few learned and scientific friends, to whom his good sense, urbanity, and cheerfulness, made him exceedingly acceptable, until natural infirmities crept over him; and at the advanced age of eighty-two years closed a satisfactory life in honour and peace.

To conclude: I would remind you, in performing to the best of my power this annual duty of the president, although I may appear at first sight to have been occupied in executing a mere formal, and perhaps, as far as my audience is concerned, a tedious duty: a little consideration, however, will satisfy us that if it is discharged with unaffectedness and simplicity, it is calculated to serve a most important end.

It is impossible, I think, to gird ourselves to the task of contemplating in the retrospect the circumstances and characters of our predecessors, and watching their conduct in the various phases in which our own may hereafter present themselves to our successors, not to please ourselves, or at least to feel deep interest in,—observing, as it were from afar off,—the manner in which they have been able, whether successfully or unsuccessfully, to contend with the difficulties which they have encountered, and by the assistance which their moral energies have afforded them, to escape, perhaps altogether, from the perils of the great ocean of life which they have traversed.

> Suave mari magno turbantibus æquora ventis
> E terra magnum alterius spectare laborem;

and above all, to be able to indulge ourselves with the satisfaction of believing that in our own profession, (which has, after all, nothing to exhibit to the world of what is dazzling or brilliant,) we can place in our front so large a proportion of men capable of illustrating preëminent learning and talents with irreproachable reputation.

## Academy of Medicine of Paris.

*Sitting of February the 23rd*, 1847.

### ON THE INHALATION OF ETHER APPLIED TO CASES OF MIDWIFERY.

By BARON PAUL DUBOIS,
CLINICAL PROFESSOR OF MIDWIFERY AT THE FACULTY OF PARIS.

(*Reported by* Ch. Campbell, Esq., *late Interne at the Maternité, Paris.*)

This highly-interesting communication first announced to come forth in the Academy of Medicine, on February the 9th, then on February the 16th, had been, at the learned professor's special demand, definitively postponed until the present day, for the purpose of further elucidating certain facts which, during this interval, had occurred to his notice. Its author's well-known circumspection in the due examination of facts, his superior judgment, which impresses the highest authority on his eloquent words, had excited throughout our medical world that degree of confidence and curiosity which very justly attends the result of well-conducted researches on a new and important subject.

It was before a most complete meeting of the learned body, and in the presence of a most densely crowded attendance, that the learned professor was called to the tribune, whence, his presence alone having commanded unusual silence and deep attention, he proceeded to lay before the Academy the object and result of his inquiries.

As it is known that the Baron Dubois intends, at a future period, to publish a Memoir on the subject of "Ether applied to Midwifery," the French medical papers have not as yet given to his remarks and observations the development they are entitled to. Having personally expressed the desire of drawing up, for the English medical press, a few pages of detailed notes I gathered at the Academy as the words fell, our learned professor most obligingly consented to give them a perusal, making what changes and adding what remarks he thought proper. Those pages I now have the honour of addressing to The Lancet, hoping they will be found to be the expression, however inadequate in the form, of Professor Dubois' spirit throughout the careful investigation and judicious appreciation of those singular phenomena which, of late, have come to astonish the minds of the most learned, and for the elucidation of which it will, no doubt, be found necessary that the light partially thrown on them by the divers provinces of the scientific world should not remain in isolated rays, but be gradually brought to one centre through the medium of the press.

I now proceed to the *compte-rendu* of Professor Dubois' important communication to the Academy on February 23rd.

Professor Paul Dubois:—"Although the subject I have the honour of bringing before the Academy to-day be intimately connected with those questions that have taken up your attention during the latter meetings, I am confident, nevertheless, it will bear, in presence of the scientific world, a certain degree of importance and novelty arising from the special nature of the facts I shall have to communicate to you.

Allow me to recal to memory, that at the period of the first application of ether in this country as a means of preventing pain during surgical operations, two of our colleagues—M. Bouvier in this Assembly, and M. Velpeau at the Institute—did express the opinion that midwifery would, according to all probability, find in ether a very useful agent. It may be believed that our two colleagues did not go further than suppose the happy results arrived at by the inhalation of ether during surgical operations, equally transferable to operative midwifery. However, M. Velpeau, if I do not mistake, had so far extended his own opinions on the matter, as to conjecture that, independent of the advantage of preventing pain under the above circumstances, ether might also possess that of weakening and even annihilating a certain muscular resistance that takes such an active part in the difficulties attending some cases of the obstetric art—the turning of the child, for example.

In another and less scientific world than ours, it has even been thought that ether might be efficient in suspending the physiological pains which accompany natural parturition. This opinion, however correct its principle may have proved to be, must still be taxed with exaggeration.

The intent of those researches, the result of which I am now going to lay before the Academy, is essentially to elucidate the two points I have just been alluding to—viz.

Whether ether can be the means of preventing pain in operations of midwifery?

Whether it can suspend and annihilate the physiological pains of natural labour?

The Academy will certainly perceive the intimate connexion between those questions and many others, therefore admitting that I was forcibly led by the nature of things to comprise the latter within my researches, that I might endeavour to throw some light on them as we advanced.

When I conceived the idea of this inquiry, I experienced, I must confess, no small amount of difficulty and hesitation. The surgeons who for the first time in this country performed operations on patients placed under the influence of ether, had before them, when they entered the field of experiment, numerous precedents and examples of similar operations being performed in America and in England; thence they drew a certain degree of security for the patient, and more assurance for themselves. For an accoucheur, at the eve of beginning his inquiries on the subject, the conditions were entirely different. There were published but very few cases of inhalation of ether during parturition; for us, therefore, the instruction and the security derived from precedent facts proved very scanty indeed. Was it not, then, very natural, that under similar circumstances my mind should entertain a certain amount of scruple and hesitation? Even at this very moment, now that experiments have done away with the greater part of my fears and doubts, I nevertheless feel myself bound, to lay them bare before the scientific world, just as I felt them, in order that they may dwell in the minds of those whose intentions it might be to go through a similar series of investigations.

Thus it was that I deemed it necessary and important to inquire—

Whether ether could be prejudicial to the mother primarily? if it could hurt the child primarily? also,—

Whether this agent, after having exerted a stupifying action over the cerebro-spinal nerves, could not induce paralysis of the muscular element of the uterus?

Whether, being innoxious primarily, ether might not, consecutively, act on the constitutions of mother and child?

As to the action of ether on the child, who can doubt that

a substance so easily diffused as we know ether to be,—who can doubt that when this substance is introduced into the mother's system through a surface large and active, like that of the respiratory organs, but it may pervade the child's system also by the means of those vascular communications existing between the mother and itself, and affording to absorption a surface which certainly does not yield in extent to that of the whole respiratory organs themselves? It was natural to examine the very delicate question of the possible amount of this influence, and you will undoubtedly acknowledge, from some of the facts I shall relate, that my previsions have been realized in as far only as relates to the penetrating of ether through the system, and not in the least, I am happy to say, as to the danger I had apprehended.

On examining the question of the effects of ether on the mother, we find arguments of a special nature, drawn from facts already noticed during the inhalation of ether in other circumstances. Cases have been known in which the precursory signs of ebriety have consisted in an involuntary, disorderly, and convulsive agitation of that muscular system subservient to volitions; in some cases also, the ebriety from ether has been itself characterized by a semi-epileptic, a semi-cataleptic state, and has either been preceded by, accompanied with, or followed by, convulsions. Of this fact I have lately witnessed a very remarkable instance.* Now if through life we look for a physiological condition in which there may exist a predisposition to phenomena of that kind, we shall find that pregnancy itself, but too commonly, indeed, predisposes women to that sort of nervous excitement which is sometimes carried so far as to be fatal to them; I allude to the fact of puerperal convulsions. Therefore we must agree that ether, during the pregnant state, cannot be exhibited with too great circumspection. In the course of this communication I shall have to relate a case which came under my own notice, and which partially confirms the natural apprehension that ought to be entertained on this subject. This apprehension is, moreover, corroborated by facts observed in medical practice. Thus Professor Piorry brought before the Academy, in the last meeting, cases of hysterics, in which he had administered ether as a sedative, and in which the fits, instead of being modified for the better, were, on the contrary, rendered more intense, epileptiform phenomena having been induced. Another example, illustrative of a similar effect, is to be found in the fact of a physician, acting according to the same preconceived idea of the sedative powers of ether, having administered this agent to patients labouring under epilepsy, and the attacks having been thereby renewed with far more intensity and rapidity than before. And again, it appears that ether was tried in England, in a case of tetanus, for the same apparently logical purpose of subduing nervous irritability and muscular contraction, but without any successful result. It fortunately happens, however, that in our cases these apprehensions have not been realized by accidents of this nature.

Thus, having laid before the Academy the scrupulous considerations I laboured under for some time, and which I still desire to be maintained in the minds of the profession, on account of the very small number of experiments hitherto made on the subject, I now proceed to the consideration of the following questions:—

*Does ether prevent pain during obstetrical operations?*

Case 1.—A woman, aged eighteen, primipara, entered the Hospice de la Maternité on February the 5th. Labour had already lasted thirty-eight hours; the uterine contractions were feeble, slow, and of an intermittent nature. I thought I should probably accelerate the pains by perforating the membranes. I did so, but no change taking place, ergot of rye was given, and this again without any result. It was then I decided on applying the forceps, having previously placed the woman in a state of insensibility by the inhalation of ether. Inhalation was difficult, on account of the woman feeling no necessity for it. She was tormented by the process itself, which she complained of as being very disagreeable. However, after six minutes' inhalation, the woman fell into an apparently insensible state. I then attempted to introduce the first blade, but at that moment she gave a short sudden motion of one thigh. Seeing this, I postponed the introduction of the instrument, and caused the woman to resume inhalation for two minutes, after which there came on a sort of stertorous repose, and the first blade was then introduced: the placing of the second blade, the prehension of the child's head, the locking of the forceps, and the extraction of the child, proved very easy. During *all the manœuvre there absolutely was not the least pain.* The expanding of the perinæum, and the dilatation of the vulva were so rapidly effected, that I was enabled to terminate the labour in a shorter space of time than Nature generally takes to complete ordinary labour arrived at the same stage. The child was living. The cord beat 160 times per minute; but within a few minutes after birth the pulsations of the child's heart fell down to their normal state—from 136 to 130 per minute. Here we may inquire whether the child had suffered from long labour, from the applying the forceps, or from ether. I shall presently allude to another case, where the same derangement in the fœtal circulation took place, without its being attributable to long labour, or to an operation, the case being a natural one. In the present case, the woman very soon came to her senses again. I now put to her the question —"Are you delivered?" She then stretched both her hands down across her abdomen, and answered:—"Why, I see I am, Sir." "Did you suffer at all?" "No, Sir. Although," she said, "I felt as I were surrounded by attendants who were there to deliver me." This woman had evidently been in a state of complete insensibility, though of imperfect consciousness. The dull perception she expressed of what had been going on may be attributed to her having witnessed, before inhaling ether, the preparatory dispositions made for her delivery.

Case 2.—A woman, aged nineteen, having reached the term of pregnancy, came to the Maternité with lingering pains, that had lasted for thirty-six hours. She felt greatly fatigued. I deemed this a very proper case for applying the forceps. The patient was made to inhale ether during ten minutes, a few interruptions having necessarily taken place, after which apparent insensibility came on. I began the application of the instrument, but the motion and loud cries of the woman at that moment induced me to resume inhalation. We did so for five minutes, when stertorous sopor came on, during which the forceps was easily placed. The patient then began to be somewhat agitated, and uttered cries; delivery was, however, rapid. The perinæum appeared to stretch out with greater facility than usual. The woman then seemed to become conscious of what was passing around her. I then said to her,—"Are you delivered?" She answered, "Yes." "Did you suffer?" "Not in the least, Sir." "Do you remember being delivered?" "No." "Do you remember having felt any pain? Do you remember having uttered loud cries?" "No, Sir; I can remember nothing of the sort."

The Academy will notice that in the above two cases ether produced different effects,—sensibility having been annihilated without consciousness being destroyed in the first case; while in the second, sensibility was affected to the same degree as in the first, with the difference of consciousness being entirely abolished. Facts of this nature have so often already been presented to the attention of the Academy, that I do not deem it necessary to dwell on them any longer. The only thing I wish to observe is, that both cases, but principally the first, tend to affirm that ether may be employed in the practice of midwifery, as it has hitherto been in surgery—that is, to prevent pain during obstetric operations.

Now, to give every one their due, I must say that the abovementioned facts are not the first of the kind that have been observed.

Dr. Fournier Deschamps, some time ago, applied the forceps in a case very similar to those I have related, and ether had succeeded in bringing on a complete state of insensibility, during which extraction of the child was effected.

Professor Simpson, of Edinburgh, has performed turning of the child in a case of mal-formed pelvis; and he remarked that during the operation energetic but painless contractions continued in the uterus.

Mr. Skey, of Bartholomew's Hospital, London, on 25th Jan. last, performed the Cæsarian operation after making the woman inhale ether during six minutes. The operation, performed in the usual manner, lasted six minutes. The incision of the skin produced no pain. We remark, that in this case prolonged exhibition of ether was not allowed, lest it might possibly interfere with the contractions of the uterus.

Here the second question presents itself to our examination, which is—

*Can the inhalation of ether suspend the physiological pain attending natural labour? and can it suspend the contractions of the uterus and abdominal muscles?*

These questions are not only of a vast experimental and physiological import, but they give rise to practical views, the value of which no one will be tempted to doubt.

The physiological point of the question is, to ascertain whether the stupifying action of ether on the cerebro-spinal

* One of Dr. Hamilton's experiments on himself, at the Parisian Medical Society meeting of February the 17th, 1847.

axis, and the paralysis of the muscular system under the dependence of the latter, will extend or not to the uterine parietes. At this period, the question of uterine innervation is still an unsolved problem. Scientifically speaking, it stands thus:—The uterus receives its nerves, perhaps exclusively, according to Dr. Longet, from the system of the sympatheticus maximus nerve, on which, however, the spinal cord may bear certain influences arising from the communications between the two. Nevertheless, it remains an evident fact, that the uterus is an organ, the contraction of which can neither be suspended, nor in any way modified by volition; and this fact implies that this organ does receive its nerves from the sympathetic system; and if even we admit the latter to be influenced in its action by that of the cerebro-spinal axis, it would probably be found that the origin of that influence is not direct. If those anatomical considerations be true, ether would appear to be called on to act exclusively on the voluntary organs of animal life, and therefore ought not to influence the state of contractions which take place when prompted by organic vitality. I am aware that a distinguished physiologist, M. Brachet, is of a contrary opinion. He thinks the uterus undergoes the direct influence of the spinal cord. He brings forth in support of his views certain experiments on animals, and one morbid case observed in the human species.

The experiments consist in vivisections performed at divers lengths of the spinal cord, after which, M. Brachet says, the uterus becomes inert. The pathological fact is one of paraplegia observed in a pregnant woman.

I am not prepared to control the physiological facts; but for the case of labour in the paralytic woman, it is far from having the value M. Brachet would wish to impart to it, as it is asserted that an application of the forceps became necessary to help labour at a moment when the dilatation of the orifice could allow the operation to be performed without danger. Now, I will only say this, that if in the alleged case the orifice was dilated, that dilatation could not have taken place by any cause but from the sole influence of uterine contraction. It is probable, notwithstanding, that M. Brachet's opinion has in some measure prevailed among the scientific world; for many learned medical men have inquired of me lately, whether ether did suspend uterine contraction? I am far from pretending in any way to decide these difficult questions. The facts I am about to lay before the Academy have appeared to me of such a nature as to elucidate these questions, inasmuch, at least, as the effects produced on the nervous system of the brain and spinal cord may be considered as a trustworthy criterion. Let this, however, be as it may, these cases will not prove the less curious and interesting under various other points of view.

I have already mentioned, and I now recall to mind, a remark I made in the first forceps case I related—namely, that at the very moment I attempted to introduce the first blade, there had been made by the woman a kind of sudden effort, which had succeeded in impeding the introduction of the instrument. I now proceed to far more conclusive facts.

Case 3.—On the 5th of February, at ten o'clock A.M., I saw, in the amphitheatre of Maternité, a woman pregnant of her first child, and having reached the term of pregnancy. She had been in pains since two o'clock that morning. The membranes were not ruptured; the dilatation of the orifice measured somewhat more than one inch. Uterine contraction caused pains of an intense nature, and rapidly succeeding each other. To this woman we offered an immediate and total removal of pain: she immediately consented to inhale ether. The process of inhaling was now and then interrupted by the woman becoming unmanageable during the moment of contraction; it lasted in all twenty-five minutes, after which she collapsed into a state of complete insensibility. At this period, we witnessed a most curious, instructive, though highly perplexing, phenomenon. Ruptures of blood to the head, the face becoming intensely red, the looks were set, the eyes being fixed upwards and outwards; the conjunctiva was congested to that degree, that I really could imagine blood on the point of springing from its surface. The underlip was hanging, the tongue turgid, and squamous saliva issued forth from the mouth. This state lasted for three minutes. Squeezed and pricked during this period, the woman felt nothing. During the state of insensibility, I remarked that the contractions continued, the uterus becoming globular and hard under my hand laid on the abdomen, while per vaginam my finger felt the tense bladder of membranes protruding through, or rather against, the orifice: these contractions were not painful in the least degree. Rather pre-occupied with the above-described unnatural state of the woman, I let, no doubt, a few contractions escape my notice; but there were two contractions I perfectly observed and felt. After three minutes the woman recovered her senses, and told me she had not experienced the slightest pain. During the period of insensibility I had laid my ear on the abdomen, and counted the fœtal heart beating 160 times per minute. Very soon after the woman had recovered her senses, I found but 140 pulsations, and two or three minutes later, they had come down to 136, the normal rate; so that in this case, as I have already said, in alluding to it, the modifications of fœtal circulation could not be attributable to any other cause but to the simple fact of this patient having inhaled ether.

Case 4.—A woman, aged nineteen, multipara, with child for the second time, and arrived at the end of pregnancy, had been in labour since morning, when I saw her, at three o'clock P.M. She experienced very intense pains, and uttered very acute shrieks, and that to such a degree, that she could not be made to understand that it was in her power, if she liked, to restrain in some measure her piercing tone of voice, and that it seemed as if her physical powers alone could fix a limit to her wild and frantic shrieking. To this woman, also, we offered ease and insensibility to her violent pains; to this she lent a ready ear, took the ether, and in three minutes fell into a deep soporous state; the eyes were open and set. She then gently turned her head towards the female attendants who surrounded her bed, and beckoned to one of the midwives to draw nearer and kiss her. During the period of insensibility, the contractions continued violent and energetic; they came and passed away in the deepest silence on the woman's part. The bag of liquor amnii protruded against the finger introduced per vaginam; the fundus uteri hardened under the hand placed on the abdomen; and, nevertheless, there existed a calm, death-like state of the woman, that offered, when contrasted with the energetic process going on, one of the most striking and unusual phenomenon ever witnessed in the practice of midwifery. I then ruptured the membrane, and instantaneously a muscular effort was made, by the means of which the head plunged deep into the pelvic cavity. At this advanced period of labour the patient awoke, and parturition very soon ended, amidst the ordinary series of painful phenomena. After expulsion of the fœtus took place, the mother thanked me mildly for the relief I had afforded her. When I asked her how she felt, and if she remembered what had passed, she answered, she felt very well, and that she had dreamt. "What did you dream of?" was my question; but the patient turned her face aside with a smile, the peculiarity of which having drawn my particular attention, I renewed my question; but on her having again refused to let me know the nature of her dream, I had recourse, in order to ascertain it, to the intermediary communication of a respectable person of her own sex, and who was present at the operation of inhaling ether. To the same question being renewed, she answered, she had dreamt she was beside her husband, and that he and herself had been simultaneously engaged, going through those preliminaries which had led her to the state in which we now beheld her.

It now remained for me to ascertain whether this kind of ebriety, the effect of which had hitherto been to prevent pain without interfering with uterine contraction, could impede or not the action of the abdominal muscles.

Case 5.—A woman, aged eighteen, primipara, came to the Hôpital des Cliniques a few days ago. Labour was in an advanced stage; the bag of waters had given way; dilatation was complete; the head deep in the pelvis. The uterine contractions in this female were very painful indeed. She easily consented to be etherized. After ten minutes, she became soporous, complaining of ringing in her ears, and saying she felt herself dying. Uterine contraction, and also the action of the abdominal muscles, continued throughout in a most evident manner; the uterine actions becoming more and more frequent, the head and body of the child very easily and promptly cleared all the obstacles to passage, and that without producing the slightest manifestation of pain in the woman.

In this case, I remarked the singularly collapsed state of the lower extremities, which had been placed, before etherization was resorted to, in the semi-flexed angular position, according to our custom. The moment insensibility was brought on, and the knees no more supported by the hands of the assistants, the two legs fell outwards, flat on the bed, and in such a collapsed state that they had a tendency to rotate still farther had not the coxo-femoral joint proved an impediment to this unnaturally exaggerated twist. The child was living, and it was its first cry that awoke the poor woman, whose first thought and words were—"Is it a boy or a girl?"

The patient assured me she had not suffered in the least, only that it had appeared to her that she had been in the act of letting go the fæces.

I here must subjoin a fact I have commonly observed throughout my researches on the action of ether in those special cases: it is, the extreme apparent laxity induced in the muscular layers of the perinæum. With primiparæ, even, dilatation of those parts has been so rapid, that in those cases where parturition took place during the state of insensibility, the duration of which never exceeded fifteen minutes, the expulsion of the child has been painless; and we must note as worthy of notice, that one of those women bore a child weighing eight pounds, and that in her case the perinæum was not damaged in the slightest degree. I must also make the very important remark, that, after delivery, the uterus, in all the cases, has constantly and immediately resumed the firm, contracted state of its retracted parietes.

A last and very important question shall conclude my researches on this subject; I allude to the *consecutive effects of etherization on those patients.*

None of the women who inhaled ether have experienced any bad effects attributable to ether. One of them felt her fingers benumbed for twenty-four hours; another complained of one of her legs being slightly benumbed also, and for about the same length of time, after which this feeling entirely disappeared in both cases. We noticed no cephalalgia whatever, no bronchitis, no nervous accidents of any kind.

However, two of these women died of metro-peritonitis, precisely those two who underwent the application of the forceps. I have put to myself the question, whether the adhibition of ether did in any way contribute to the fatal result in these two cases. Notwithstanding that in questions so imperfectly elucidated as those of the influence of ether on the animal system, and of the etiology of puerperal disease, all kind of hypotheses may be introduced, it nevertheless appears to me very proper that, after having allowed an adequate share of uncertainty to the doubts we may still entertain on these important subjects, we should investigate whether any other circumstance were present, independent of the inhalation of ether, that might in a more natural and satisfactory manner explain the serious results I have just mentioned. Should we not inquire, for instance, whether the difficulties of parturition in both cases did or did not bear any fatal influence over the result? then, are we not bound to ascertain what may have been at that moment, the sanitary state of the hospital? whether the unetherized patients were at that period equally subject to puerperal fever? whether mortality prevailed, and to what extent, in all these cases? and last of all, whether the post-mortem appearances in these two females were similar to those observed after the generality of deaths? In answer to these questions I will say:

That the delivery of the two women who died did take place under circumstances that may easily account for death. The application of the forceps, in itself, was prompt and easy; but one of these patients had been in labour during 40 and the other during 38 hours; such, we are well aware, are very unfavourable preliminaries to delivery, and in these cases they proved the more unfavourable still, from the circumstance of the Maternité being at that period under the influence of a slight epidemic of puerperal fever.

That the disease was equally prevalent among those patients who had not inhaled ether;

That mortality prevailed too, in a general manner, and to a severe amount;

Lastly, that the morbid lesions found on the post-mortem examination of these two cases were precisely and exclusively the same as those observed and recorded on the examination of the other unetherized patients, who died about the same period.

We need not therefore hesitate between the choice of gratuitous hypotheses and of well authenticated facts. We are bound to judge ether, up to this moment, with the utmost impartiality.

From my foregoing observations on the subject of ether, considered in its application to cases of midwifery, I feel myself justified in drawing the following conclusions:—

1st. That the inhalation of ether has the power of preventing pain during obstetric operations;

2nd. That it may also momentarily suspend the natural pains of labour;

3rd. That the state of ebriety induced by the inhalation of ether does not suspend uterine contraction when the latter is decidedly set in and takes place at short intervals; and that it does not impede the synergetic action of the abdominal muscles.

4th. That the state of ebriety appears to lessen the natural resistance which the perinæal muscles oppose to the expulsion of the head.

5th. That the inhalation of ether has not appeared to exert any bad influence over the life or health of the child.

Now, after hearing the foregoing conclusions, it may appear natural to suppose that the inhalation of ether being a process to which so many advantages are inherent, it might hence be considered as a precious expedient, and be frequently resorted to by the obstetric art. Such, however, is not my opinion. The very proposal of such a thing, having no other ground but the very few facts I have communicated to the Academy, would not only appear very bold, but should be considered as extremely imprudent. In beginning this communication I related the apprehension under which I laboured at first. Well, the cases I have brought before the Academy may have lessened my fears, but have not yet altogether erased them from my mind.

You will remember that one of the women who inhaled ether went into a state bordering on that we design under the name of epileptiform. Two other women have died. Now, although the morbid occurrences in the first case were but of a short duration—although the fatal result in the two other cases rose far more probably from the influence of the epidemic than from any other cause—the Academy must feel that, in a question of so serious a nature, the recollection of these facts must still leave on my mind impressions of doubt and timidity. Later, perhaps, these hesitations may disappear; but even then I shall not forbear thinking that the very nature of things will tend to render very uncommon the adhibition of ether in cases of midwifery. First of all, it is evident that inhalation of ether can never produce a painless labour from beginning to end; it is to be doubted whether insensibility could be made to last long enough for such a result; and it is more doubtful still whether such a thing could be tried without running positive danger, and without being liable to the charge of guilty temerity. Therefore, there only remains for employing ether but the last period of labour, as in the cases where I have used it; and even then, this last period where its adhibition has appeared the most effectual, is the one, according to all mothers, the least fatiguing, the least painful of the whole labour.

As to the use of ether during obstetric operations, I will only observe that these operations are often rendered necessary by unforeseen circumstances, and that when it thus happens, they are of a very urgent nature. It is not necessary to give further development to the proposition I lay down here, in order to show that in a great number of these cases inhalation of ether cannot be resorted to. As to the remaining cases, it may be asked whether they prove to be generally of such a painful nature as to justify the common use of a process, which even, in conditions unconnected with the puerperal state, is not free from disadvantages, and which, when used under those special conditions, seems to me still less free from the same charge. My profound feeling on the subject is, that inhalation of ether in midwifery should be restrained to a very limited number of cases, the nature of which ulterior experience will better allow us to determine. (Long applause.)

## Hospital Reports.

### ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

The last two cases were intended to illustrate the lingering convalescence which may follow after apparently slight symptoms; and the case immediately preceding them was to show what serious disturbance might be taking place in either the solids or fluids of the body under those slight symptoms. The subject of protracted convalescence is of sufficient interest to require further examination, but this time from another point of view,—to see what has been going on, when, after all, convalescence has not been established. The two cases which seem to possess most interest, considered in this way, terminated about fifty and one hundred days, respectively, from the date of the commencement of the disease.

FEVER; DEATH BY GRADUAL EXHAUSTION, WITH PULMONARY SYMPTOMS, ON THE FIFTIETH DAY; DISSECTION.

Case 45.—Elizabeth B——, aged twenty-three, admitted Oct. 23, 1846, into Mary front ward. Full made; dark com-

plexion; face flushed; manner hurried; tongue moist, with a thick fur on the dorsum; the tip and edges clean; skin warm and moist, generally very red; pulse 120, with some power; bowels relaxed; abdomen rather tender on pressure; has headach and general uneasiness of twelve days' duration.

*History.*—She is a nervous, excitable person, and has been in the hospital before for hysteria. She states that she had always good health till twelve months ago, when she received a blow on the left side, and to this accident she has always referred her subsequent ailments—namely, occasional severe pain in that side, and slight hæmoptysis. In September last, she suffered from the epidemic diarrhœa. Twelve days ago, the catamenia, which should have appeared, were replaced by epistaxis, which has continued, accompanied by headach. She has been treated at home by purgatives, and nothing was thought of her illness till just before admission, when she had a violent attack of hysteria, or delirium. She was ordered to have her hair cut, to take five grains of compound mercury and chalk pill thrice a day, and to be put on milk diet, with arrow-root.

Fourteenth day.—Her face is paler, except when she is excited by being spoken to; tongue cleaner, moist; pulse 84, small, soft; bowels not open; skin warm and moist, without rash; her sleep was interrupted by headach. Ordered to continue the pills; to take a saline draught every four hours.

For the next five days there is but little difference in the tenour of the daily note, which runs, on the nineteenth day, that she sleeps well at night, and is always drowsy during the day. Her face is flushed and dusky; skin mottled, but presenting no distinct rash; pulse 120, small and soft; bowels requiring the occasional use of purgative medicine; urine free. She had been taking five grains of mercury in chalk at nights, and a saline draught with camphor mixture every four hours.

On the afternoon of the twentieth day, she became very dusky, her tongue at the same time dry, her pulse very small and soft. These symptoms passed off in a few hours; her skin then became hot, and she complained much of thirst, the condition of the alvine evacuations being quite natural. This state of things having occurred twice more, was the indication for her being placed on the daily use of four ounces of wine on the twenty-second day.

Again, the notes from the twenty-second to the fortieth day have little to record beyond the occurrences of single days, which apparently had little influence on her general condition, as neither could they be plausibly referred to any particular changes in it. The twenty-third day finds her receiving great comfort from the daily use of the small quantity of wine. The twenty-seventh has a remark, that a few ounces of blood have passed from the bowels, mixed with the evacuations, which, having hitherto been loose and passed unconsciously, were for some time following this note natural, and not again marked with blood during the remainder of her illness. The note of the forty-third day reports the occasional occurrence of vomiting, and her continuance in the same dull, heavy state she had been in all along. She lay in bed regardless of everything, being made to understand with great difficulty, and never calling to express any of her wants. All this time little else was done but to support her with nourishing diet and stimulants.

The forty-sixth day finds her more willing to take her food, less dusky, and more cheerful. Tongue with a moist fur. Pulse 120, small and soft. Bowels confined; abdomen tolerant of pressure. Skin warm and perspiring, with a scattered miliary rash. This amendment was but temporary; on the forty-seventh she is lying lower in bed, and her face is again dusky. Pulse above 132, very small and soft. On the forty-ninth she is in a profuse perspiration, and a troublesome cough is the source of a good deal of suffering. The condition in which she had lain so long ended quietly in death, on the fiftieth evening.

*Body examined, fifteen hours and a half after death.*—Neck relaxed; limbs rigid; blood firmly coagulated and separated. Brain not examined. The pericardium contained about six ounces of clear serum, with a flock or two of fibrin floating in it. Heart healthy. The right pleura was free, the left universally adherent, in front by loose, easily separable agglutination of the two layers, behind, by a firmer medium, which, as a thick, tough layer of fibrin, spread over the left apex, and a space of about seven inches by three inches and a half, on the outer and posterior surface of the lung, separated from the lung below by a thicker layer of gelatinous-looking fibrin, infiltrated with serum, which coated much of the posterior part of the lung, but did not enter into the interlobular fissure, which was closed by adhesions.

The apices of both lungs were very œdematous, the bases consolidated, so as to sink in water; hard, and rather darker than the rest of the lung, but yet not so dark as common healthy lung. The combined result of œdema and pneumonia. In the left this consolidation was uniform; in the right were numerous white points, composed of mucus and pus, collected in the ends of the bronchial tubes. The larger bronchi, excepting some degree of injection, were healthy. Some small granular opake tubercles were scattered throughout the right apex. The bronchial glands were slightly enlarged, but not tuberculous.

The stomach and small intestines, to within about three feet of the ileo-cæcal valve, were healthy. Here Peyer's patches began to be visible; then, a little below, in a few of them, were small ulcers, with dark edges, and some white films, as it were, of commencing cicatrization; some, however, were still red, and the edges sharp, as if cut with a punch. One in particular of this kind had its long diameter transversely placed, and extended beyond the limits of the patch. The ileo-cæcal valve was dark, and marked with cicatrices of two or three imperfectly-healed ulcers. The solitary glands were generally enlarged, the mesenteric not notably so.

The colon presented numerous small ulcers, all more or less advanced in cicatrization, extending as far as the sigmoid flexure; they were situated chiefly on the transverse rugæ and the longitudinal bands of the intestine, of an oval form, the long axis transverse, about 0.25 long by 0.125 inches broad. The transverse colon was so long as to hang down almost to the pubes. The other viscera, including the spleen, were all healthy.

Whether we regard the symptoms singly or as a whole, there are probably few who have not seen cases equally severe, as judged of by these symptoms, get well; and indeed had she died at an earlier, period probably the lesions in the abdomen would have been found much more considerable. She apparently then did not die of the amount of disease produced by the fever, but failed to rally after the fever had passed over. Just at the last her back became sore from constant lying, with whatever care she was turned; but no bed sore, as sometimes happens, was the local injury which impeded convalescence at the time when it usually begins. The immediate cause of her death as of Case thirty-seven, was pneumonia, but the cause that detained her so long in a condition liable to attacks of this character anatomy tells us nothing of.

Deferring some other considerations which the case suggests to the examination of the following case, it is worth while to call attention to a few peculiarities to be noticed in the course of the above narrative. Fever coming on in a weakly, nervous subject, marked by no severe premonitory symptoms, attended throughout by no reaction, is a history that is not all unreasonably ended by a simple statement of the death of the patient. In connexion with the replacement of the catamenia by epistaxis, the remarks of Chomel (*Clinique Medicale*, tom. i. p. 15, Paris,) 1834 are of interest, who, allowing fully for the fallacy arising from the patient being liable to epistaxis at other times, enforces the importance of the occurrence of long continued slight epistaxis, as a diagnostic character of the first week of continued fever. Epistaxis, however, it must be acknowledged, has been very rarely observed accompanying continued fever in the patients treated in this hospital of late years, certainly not more than once in thirty cases. The chronic thickening of the left pleura is probably correctly referred to the blow which she had received on that side a year before; and, it would appear, to the blow itself, independent of any fracture of the ribs; the tubercles in the lungs are to be looked on in connexion with the hæmoptysis to which she was occasionally liable; and the single discharge of blood from the bowels is probably referable to the ulcers existing there. This same phenomenon was noticed to a much more alarming extent in a case presently to be detailed, on whose further favourable progress, the hæmorrhage, however, seemed to exercise no influence.

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FEVER, WITH PAPULAR RASH; DEATH BY EXHAUSTION; PERFORATION OF THE INTESTINES; ABSCESS IN THE PERITONÆUM.

Case 46.—Caroline W——, aged twenty-eight, admitted Oct. 16th, 1846, Faith front ward. Middle sized; dark complexion; face flushed and anxious; skin hot, profusely perspiring; tongue moist, red with prominent papillæ; pulse 100, soft; bowels much relaxed; abdomen distended, tender; has pain in the abdomen and limbs generally, following a sudden attack of fainting and giddiness six days ago.

*History.*—A servant, single, deaf from childhood. She has been attending a family, one of whom lately died of fever. Six days ago she was suddenly taken ill with fainting and cold shivering; then came headach and diarrhœa, and, the

same day, delirium. Her deafness precludes any exact history of the farther progress of her symptoms. Ordered an aromatic draught at once.

Eighth day.—She slept quietly, and her bowels have only been open twice. Face still flushed; skin hot and perspiring, with a scanty papular rash on the abdomen. Tongue moist, red. Pulse 115, full and soft. Abdomen less full, but very tender in both iliac fossæ. She has a slight cough. Ordered, a saline draught, with camphor mixture, every six hours.

Ninth day.—She slept well, and is now drowsy. Face less flushed. Tongue red, inclined to dry. Pulse 112, with more power. Skin hot and moist, with a very abundant papular rash all over the front of the abdomen and thorax. Two dark, relaxed motions; abdomen softer, but very tender. She has some pain in the chest, and still cough, but feels more comfortable. Ordered to have eight leeches applied to the abdomen, to take an aromatic draught immediately, two grains and a half of mercury with chalk thrice a day, and to continue the saline draught.

Tenth day.—The leeches drew a good deal of blood. She was restless and wandering during the night; now, she is drowsy, with a dull expression. Skin hot and perspiring; tongue red and dry; two relaxed, yellowish motions; abdomen very tender. Ordered to have four leeches applied to the right iliac fossa; to take five grains of compound powder of ipecacuanha to-night; to continue the saline and the aromatic draught.

Eleventh day.—She slept well, her face is less flushed, and she is more intelligent. Pulse 116, full and soft; tongue dry and red; three relaxed motions of a more natural colour. Ordered to continue as yesterday; to have six leeches applied to the abdomen.

Twelfth day.—Good sleep, without delirium; tongue pale, dry; pulse 120, with power; skin cool; the rash continues visible; three relaxed, ochry motions; abdomen still tender. She has occasional muscular subsultus. Ordered to continue the powder and the aromatic draught; to have a poultice applied to the abdomen, and to take four ounces of wine daily.

Thirteenth day.—She slept well; now, she is drowsy; pulse 120, small and soft; tongue clean, dry; skin warm and dry; one evacuation from the bowels; abdomen a little tender. Ordered to continue.

Fourteenth day.—Good sleep at night, dull and heavy condition by day, is entered in the daily report till the nineteenth day. Skin hot and dry; tongue dry, chapped; pulse 110, full, soft; bowels relaxed; motions passed unconsciously; abdomen tender. She takes her food willingly, and says that she feels better. Ordered, an aromatic draught, with ten minims of tincture of opium, immediately; five grains of compound mercury and chalk pill thrice a day; the wine to be increased to eight ounces daily; and a blister plaster to be applied to the abdomen.

Sixteenth day.—She lay yesterday in a heavier state than before. Since the addition at that time of some beef-tea to the other nourishment, to-day's note records a more lively condition: she hears better, and declares herself free from pain; her tongue is dry and glazed; bowels relaxed, but the evacuations more healthy. Ordered, an aromatic draught immediately; continue.

Nineteenth day.—There is little in the intermediate notes to attract attention, except the greatly improved expression of her face, remarked on the seventeenth day. Last night, however, she was noisy, and complained of pain in the abdomen. Now, she has headach; her face is flushed; pulse 130, sharp; two dark, shiny evacuations; abdomen tender on pressure; tongue clean and dry. Ordered to have her hair cut; to continue.

Twentieth day.—Her face is less flushed; she has relapsed into her deaf, drowsy state; pulse 120, smaller, and soft; tongue clean and dry; skin warm and moist, with abundant miliary eruption. Continue.

Twenty-first day.—She slept well. At nine A.M. was raised for a few minutes while her bed was being made. At half-past eleven A.M. she had a severe rigor, followed in about an hour by heat. Now, at one P.M. she is restored to her usual condition; pulse 120, small, soft; tongue moist, slightly furred; bowels relaxed. The miliary vesicles over the nates are becoming opaque. By four P.M., her skin was moist and cold; her cheeks dusky; she had slight muscular subsultus, and some cough. Ordered, sesquicarbonate of ammonia, five grains, out of camphor mixture, every four hours; five grains of compound mercury and chalk pill twice a day; to continue the wine and beef-tea; and to have a large blister applied to the front of the chest.

Twenty-second day.—She slept well; the blister drew well; face less dusky, more cheerful; pulse 120, soft; one healthy formed evacuation; she has a difficult, dry cough; respirations 36. Continue.

Twenty-third day.—A slight rigor occurred this morning; otherwise she is the same as yesterday.

Twenty-fourth day.—A small sore, which was noticed on her sacrum two days ago, is spreading; bowels much relaxed; motions dark and offensive; tongue clean and dry; mouth touched by the mercury. Ordered, beef, two pounds, for tea; wine, eight ounces daily. An aromatic draught, with tincture of opium, ten minims, thrice a day.

Twenty-fifth day.—She slept well; vomited once this morning; pulse 132, small and soft; tongue with a thicker fur; two more healthy evacuations from the bowels. Ordered to substitute four ounces of brandy for the wine; to add half a drachm of tincture of catechu to the aromatic draught.

The notes of the next five days speak of constant vomiting. The treatment has chiefly relation to this symptom, consisting, for the most part, of changing the various articles of diet according as the caprice of her stomach retained one or other of them. Meanwhile, the sore on the back continued to spread; and on the thirty-fourth day, the ligaments of the sacrum were exposed.

On the thirty-fifth day, she assumed the condition in which she lay during the remainder of her life. Face dusky; tongue clean, dry, and very red, with aphthæ scattered over it; pulse 144, small and soft; healthy evacuations from the bowels; abdomen very tender. The incidents which marked the rest of her life are few. She lay on her back or side, as she was placed, on a water-bed, sensible of her wants, and very thankful for all attentions paid her. The abdomen always exceedingly tender; the alvine evacuations natural. There appeared on the front of the body, about the fiftieth day, two small swellings of a character intermediate between that of abscesses and simple boils; but nothing particular was noticed in her general symptoms coincident with their appearance. The treatment consisted, for the most part, in supplying her with the most nourishing articles of diet, and varying them so as to tempt her appetite; in the use of quinine and opium to procure her rest at night, with the occasional exhibition of purgatives. Blisters and poultices were applied to the abdomen from time to time, guided by the indications of pain on pressure.

On the sixty-fifth day she was observed to be jaundiced, and this tinge continued till death. One sore appeared after another, the large one on the sacrum, however, healing favourably the while, and she died, worn to a skeleton, on January 11, three months after the beginning of her illness.

*Body examined, fifty hours after death.*—The scalp was quite dry; the brain and its membranes generally healthy, only on the right side of the pons Varolii, pushing the sixth nerve a little to one side, loose in the cavity of the arachnoid, lay a small body, about as large as an almond-kernel, looking like wet sawdust, pulpy and friable. There were no traces of increased vascularity near it; indeed, by its presence it had emptied the small vessels lying beneath. It slightly indented the pons, and extended a short way up by the side of the right crus cerebri. The right pleura was free, the left adherent, except in the interlobular fissure; the right lung was a little emphysematous; the bronchi generally contained some pus and mucus; the heart was healthy, with about two ounces of fluid in the pericardium; the stomach, duodenum, and jejunum were healthy, the ileum lay low down in the cavity of the pelvis, being firmly fixed there by adhesions which united to form a cavity, bounded behind by the rectum and sacrum, in front and above by the coils of small intestine, below by a flooring, out of which rose the fundus of the uterus and part of the bladder: this cavity contained a few ounces of deep-grey, fluid, fœtid pus; the walls were intensely livid, with flocks of fibrin and purulent matter adherent here and there. Within, the ileum was healthy to about a foot distant from the cæcum, except that there were a few dark-grey Peyer's patches, which exhibited, however, no traces of ulceration. There were a few places from which the mucous membrane appeared to have been simply punched out, exhibiting no marks of any attempt at reparation. In the cæcum itself were two distinct oval apertures, about two lines in diameter, with thick rounded edges, surrounded by a good deal of injection, communicating, apparently, with the circumscribed collection of pus already noticed in the pelvis; for about its upper half, the mucous membrane of the colon was marked with ulcers, like those in the ileum, as if a piece had been cleanly cut out in an elliptical form, the long axis placed transversely but the ulcers near the cæcum were larger and

of a less definite form; the solitary glands of the ileum were generally slightly enlarged; the mesenteric glands healthy; the liver was of the colour of withered leaves, wrinkled into the form of the neighbouring hollow viscera, on section, dry; the hepatic duct pervious; the gall-bladder full of dark bile. Under the microscope, the hepatic cells appeared gorged with fatty matter. The spleen, kidneys, and pancreas were healthy; the ascending cava and femoral veins, the portal, with the hæmorrhoidal and mesenteric veins, were all found healthy.

The remarks which this case seems to call for will be subjoined in the ensuing paper.

## Original Papers.

## THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

*(Fourth Series of Experimental Researches.)*

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

*(Continued from page 224.)*

### III.—EMBRYO AND ADULT TEXTURES.

The microscopical researches of Dr. Martin Barry and others have established the fact, that the first texture of the human embryo and its appendages is corpuscular, or incoherent cellular—that is to say, a texture composed of cells or corpuscles, which have exceedingly thin walls, are very soft and brittle, having but a slight coherency. These cells have many analogies with the cells of the embryo textures of vegetables, —with the protoplasma cells of Mohl, in preceding all the solid formations, and containing a viscous colourless mass, mixed with granules or molecules, and with the incoherent chlorophylle cells of a leaf, in containing a material essential to the growth of the future and more important parts of the structure, in both cases, the material being a secreted or elaborated one.

When the embryo is growing, the transparent membrane or amnion formed around it is first corpuscular, then coherent cellular, and then fibrous; and the walls of the bloodvessels ramifying upon it undergo the same changes; they are first corpuscular, then cellular, and lastly fibrous. This, then, is the order of the morphology, in respect of the membranous envelopes of the embryo—viz., first corpuscular, then cellular, and then fibrous. In the embryo itself, a month or five weeks old, and half an inch in length, several textural groups, representing the head, eyes, and extremities, the spinal column, liver, and heart, may be discriminated. All these groups, when examined with the microscope, (700 linear,) are found to consist wholly of incoherent cells or corpuscles, soft, and easily separable from each other; and they are all filled with a protoplasma, a viscous colourless matter, mixed with molecules. At this early period, nothing resembling a coherent cellular texture can be found; all is soft, pulpy, and brittle; there are neither bloodvessels nor fibres, nor can anything hard or coherent, resembling cartilage or bone, be detected. When the embryo is four months old and seven inches long, the brain, liver, &c., are groups of corpuscular texture—soft, brittle, and incoherent. In the lungs, nothing resembling the adult pleura can be dissected, even with the utmost care, from their surface; and the thinnest section that can be made, gives (with a microscopic power of 700) a coherent cellular texture, mingled with the isolated cells of an incoherent texture. The skin, both epidermis and cutis, viewed with a power of eighty diameter, exhibits a great number of small dots or granulations, and so likewise does the pericardium and the other (will-be) fibrous membranes. These granulations, when more highly magnified, (700,) are found to be groups of coherent cellular texture, and the whole texture exhibits the same character. The young hair upon the head is very clearly a coherent cellular texture; the heart is a mass of elongated coherent cells; and it is only in the pericardium and other analogous strong membranes that waved fibres have yet appeared. The muscular fibrillæ are more advanced, and have their transverse markings; but nothing resembling nerve fibres (properly so called) can be detected, though cells with long projecting tubes, filled with a molecular matter, may be seen mingled with others, especially in the embryo texture of the spinal cord. In the bones of the cranium, the nascent osseous cylinders exhibit small, bony, or hard, cell-like particles, dispersed in a semi-transparent matrix, surrounded and enveloped on all sides in a very vascular fibro-cellular texture.

In the fœtus at birth, the soft corpuscular textures have assumed nearly their permanent characteristics; but this is far from being the case either with the fibrous, cartilaginous, or osseous textures, corpuscles or cells being still the most abundant elements in the fibrous textures, and largely mingled with the young fibres of the walls of the bloodvessels.

During infancy and youth all the later-formed textures are undergoing different phases of metamorphosis, until the adult period or permanent form is established. At the adult period, the permanent textural form of the grey portion of the brain, of the liver, the intestinal villi, and the plexus choroides, &c., is corpuscular,—a soft, brittle, tender, and incoherent cellular texture. The parenchyma of the lungs is coherent cellular. The areolar textures, the dura mater, pia mater, pericardium, &c., are fibrous; and, without making special reference to nerve-tubes and muscular fibrillæ, there are also fibro-cartilaginous, cartilaginous, and osseous textures.* But, as all these textures were at first soft, brittle, incoherent, and corpuscular, the permanent form of some textures; then coherent cellular, the permanent form of other textures; then fibrous, fibro-cellular, and cartilaginous, the permanent forms of others; and then osseous; so therefore it is concluded, that the law of the metamorphosis in the human structure is from soft, semi-fluid, incoherent, corpuscular textures, to the coherent cellular; from these to fibrous, fibro-cellular, and cartilaginous; and lastly to bone.

I am not aware that there is any difference of opinion among physiologists as to the general order in which the textures of the human structure appear, and I presume they are ready to admit that soft and but slightly coherent cellular or corpuscular groups precede the coherent cellular textures; that the cellular precede the fibrous and cartilaginous, and the cartilaginous precede bone. They are at least agreed upon the analogous fact in vegetable structure, "cells containing a viscous colourless mass, mixed with granules everywhere," as Mohl observes, "preceding the first solid formations."

In the human embryo, then, the primary metamorphoses, out of which the future textures arise, take place in groups of corpuscular texture, before any circulating blood or any bloodvessels can be detected; and the singular variety of the metamorphosis, even in a single organ, may be judged of from the structures of the eye. At this early period it is, by investigations with the microscope in the midst of these corpuscular groups, that the primary changes must be sought; but when bloodvessels, or rather blood-channels, are visible, and there is blood, a cellular or corpuscular fluid, circulating through them, it is then along the inner margins of their walls that the nature of the subsequent metamorphoses—those which establish the form and quality of the adult organs—must be looked for.

The growth of the textures of the human embryo prior to the circulation of a current of blood-cells is in every respect analogous to the growth of the vegetable embryo prior to the formation of a green leafy parenchyma. And as in the human structure the blood-current is essential to continued growth and future textures, so likewise in the vegetable structure is the leafy parenchyma, and moreover, as vegetable structures are disposed to revert to a leafy parenchyma, so an analogous disposition will be shown to exist in animal textures.

### IV.—STRUCTURE OF BLOODVESSELS.

The anatomical or structural elements of the adult bloodvessels, as long as their course lies embedded in a fibro-cellular or areolar texture, and whilst merely transmitting the current of the blood, although varying a little in different places, still uniformly consist of sundry layers of fibrous and fibro-cellular textures, the fibres in some of the layers being disposed longitudinally, parallel with the course of the vessel, others circularly, passing around the vessel. The fibres are thick and strong, especially the outer layers, in proportion to the size of the vessel, or of the column of blood it conveys; and they inclose in their interstices, and are firmly united with, the nuclei of cells, and with a vast amount of granular and molecular matter, sometimes mingled with globules of oil or fat. In the very small branches of the bloodvessels, those which are on the point of leaving the fibro-cellular texture interposed between the lobular subdivisions of the various organs, and which are therefore approaching the scene of the nutritive function, the vascular walls or coats of the vessels are less fibrous; and it is evident from a careful examination,

* These are the broad distinguishing types of the textures, but there are many of a mixed character; the pleura is fibro-cellular, and the mucous texture of the air-tubes is fibro-corpuscular.

that they more and more partake of forms that are identical with those which constitute the parenchyma or special texture they supply; until at length in the true nutrient or capillary channels it appears to be impossible to discriminate (certainly it is impossible to observe any practical distinction) between the elements of the parenchyma and the walls of the vessels. Two textures easily examined may be instanced in illustration:—In the pia mater the walls of the vessels are fibrous, a transparent fibrous parenchyma or membrane; in the plexus choroides they are corpuscular, a corpuscular parenchyma.*

But as all the various textures, from the beginning in the embryo up to the period of birth, and from birth to puberty, are gradually ascending to their permanent forms, some reaching it soon, others later; so, therefore, the elements of the walls of the bloodvessels, and particularly those of the nutrient vessels, vary not only in the different organs, but in the same organ, *pari passu*, with the morphological evolution—that is to say, in other words, they vary with the age of the organism, differing in the same place in the infant from the embryo; in the child from the infant; and in the adult from the child.

### V.—STRUCTURE OF THE LUNGS.

The air-cells of the lungs are not indiscriminately thrown together in the interior of the organ; on the contrary, they are symmetrical with the branches of the air-tube, and collected or associated in numerous small communities or groups, each group forming what is termed a lobule; many lobules grouped together form a lobe, and five lobes form the two organs called the lungs. A pulmonary lobule is a perfect respiratory organ in itself, the whole lung being but a series of reduplications of the same structure—an aggregate of lobules. At one of the corners or angles of a lobule, a division of the air-tube and an arterial bloodvessel enter into its interior, and at the same place a vein comes out, and by these three cylindrical structures the lobule is connected with its fellows. The membrane which forms the walls of the air-cells constitutes the parenchyma or proper texture of the lungs, and the capillary vessels so densely distributed upon it have no other coats or boundaries than those furnished by this parenchymatous texture. The practical point to be insisted on, with a view to the correct understanding of the pathology and diseases of the lung, is that involving the relation of the walls of the air-cells to the extremities of the air-tube on the one hand, and to the bloodvessels on the other.

The air-tubes and bloodvessels, before entering into the interior of the lobules, run in the spaces between them, and here, cushioned as it were upon an areolar texture, they have severally their own distinctive elements and structures; but within the lobules, after sundry subdivisions, they all terminate in, and their textures become continuous with, the walls of the air-cells—that is to say, with the parenchymatous texture; and here it is impossible, even with the microscope, to discriminate between the elements continuous with, or prolonged from, the coats of the bloodvessels and those continuous with, or prolonged from, the air-tubes—that is to say, in other words, the outer surface of the thin transparent wall of every air-cell is in close relation with the interior of the bloodvessels, and its inner surface is as closely related to the air-tubes.

The parenchyma of the lung is usually described by anatomical writers as a mucous texture—that is, a secreting texture; but it has none of the anatomical characters of a mucous texture, its perfect transparency and elasticity resemble much more the characters of a fibrous or serous texture; moreover, it is well-known that its capillaries have a special function, and no analogy whatever exists between them and the capillaries of a secreting texture. In the adult lung the parenchyma is coherent cellular; the areolar texture interposed between the lobules is fibrous and fibro-cellular; the pleura which covers the whole lung, and lines the interior of the cavity of the chest, is both cellular and fibrous—cellular on its smooth free surface, and fibrous beneath. The mucous texture of the interior of the air-tube is fibro-corpuscular—that is, composed of fibres intermingled with incoherent cells, and the blood is a corpuscular fluid, flowing in streams over the walls of the coherent cellular parenchyma. But in the embryo, all the pulmonary textures are composed of soft, and but slightly cohering cells; in the fœtus they are partly corpuscular, and partly coherent cellular; and during infancy and youth, the walls of all the nutrient vessels, even of those which have become fibrous, are largely charged with incoherent corpuscles or cells. Hence, then, the morphology of the textures of the lung is corpuscular, cellular, and fibrous; and there is nothing, except in the larger branches of the air-tube, of a cartilaginous or osseous texture.

### VI.—PHYSIOLOGICAL ANALYSIS OF THE CORPUSCULAR, CELLULAR, AND FIBROUS TEXTURES.

Keeping in view the distinctions insisted on between the corpuscular and the cellular textures, it is evident that the corpuscular are the secreting textures, and the cellular non-secreting ones—that is to say, the cells or corpuscles of the corpuscular textures, with their thin walls and elaborated contents, are temporary and evanescent elements, while the cells of the coherent cellular textures, with their strong elastic and transparent walls, are comparatively durable and permanent; and as the rapidity of the changes and displacements which the elements of a structure undergo is in a direct ratio with their importance in the functions of nutrition, secretion, and life, so, therefore, the cells or corpuscles of the corpuscular textures are more active or energetic than the cells of the cellular.

Again, contrasting the corpuscular with the fibrous textures, the latter perform the comparatively mechanical offices of separating, investing, and limiting in bulk the different groups of the various corpuscular textures engaged in the more active functions of life, transmitting the larger columns of blood to and from them. These functional distinctions are indicated by the anatomical fibrous element, and by the species of vascularity observable in the texture. The corpuscular or secreting textures are everywhere traversed by multitudes of nutrient vessels, specially disposed in different organs; whereas the fibrous non-secreting ones, although in some instances extremely vascular, in consequence of having to transmit a multitude of small vessels, have yet comparatively few nutrient capillaries, and these variable and irregular in their disposition. The dura mater and pia mater are both fibrous membranes, surrounding, supporting, and protecting in bulk the whole brain or central organ of the nervous system. The dura mater, as its name I suppose implies, is an exceedingly strong and coherent texture, transmitting immense columns or streams of blood to and from the brain, yet is itself scantily supplied with nutrient capillaries. But the arterial currents traversing the dura mater, and those still larger ones arising from other quarters, before they can be admitted into the soft corpuscular texture of the brain, must be divided and subdivided many times into the smallest possible streams, and the force of the heart's action subdued by sinuous turns and windings. For these ministerial purposes, the much more fine and delicate fibrous texture of the pia mater is interposed, which not only affords space and area for the subdivisions of the blood-current, thereby becoming extremely vascular, but dipping down between all the lobular subdivisions of the organ, (here termed convolutions,) it enters into the recesses, supporting and limiting and conveying vessels, through which the blood reaches and returns from all parts of the soft and tender parenchyma of the great organ of life and being. Lastly, the cellular parenchyma of the lung is not tender, opaque, and brittle, like the corpuscular parenchyma of the liver, but is, on the contrary, exceedingly coherent, elastic, and transparent, these anatomical characters indicating, as before observed, that the parenchyma of the lung is not a place of active nutrition or cell-elaboration—not a secreting texture; and although eminently vascular, more so, perhaps, than any other texture of the body, still the vascularity is not a nutritive vascularity, the analogies of the texture being altogether with the fibrous non-secreting, and not with the corpuscular and secreting, textures. This corresponds with facts: the only outlet and inlet to the lungs is by the windpipe; and if the air-cells, which have been computed to number 1,744,000,000 in each lung, or if an expanse of membrane, equal in area to 1500 square feet, were a secreting membrane in the ordinary and proper acceptation of the term, persons would be always swallowing, or spitting, or coughing, which we know in health is not the case. The fine transparent texture of the pulmonary parenchyma allows the finer and vaporous elements of the blood to transude its walls, but it does not, I conceive, in the proper sense of the word, give rise to a secretion.

*(To be continued.)*

* The increasing importance of the elements of the walls of bloodvessels, as the vessels diminish in size, is indicated by the fact, which may be demonstrated in the vessels of a transparent texture, that the thickness of the wall is, as a general rule, inversely proportional to the diameter of the column of blood it conveys. In a large vessel, 1-100th of an inch, the thickness of the coat visible on each side as viewed through the microscope (700), is not more than one-third or one-fourth the diameter of the column of blood; whereas in a small vessel 1-500th or 1-1000th of an inch, the reverse proportions are frequently seen; the thickness of the wall of the vessel being three or four times greater than the diameter of the blood-stream. Hence there is no difficulty in clearly seeing the stages of nutrition hereafter pointed out.

## ON GRANULAR DISEASE OF THE KIDNEYS.

By R. H. SEMPLE, Esq., M.R.C.S.E.

I have long believed that granular disease of the kidneys is a far more common affection than is generally supposed, and that it is really the cause of a great number of maladies, such as pleurisy, disease of the heart, &c., which are often considered and treated as idiopathic diseases. When we consider the dreadful fatality of granular degeneration of the kidneys, and the train of secondary affections which it entails, it appears to me that the study of renal disease has been most unwarrantably neglected in this country, notwithstanding the able researches of Dr. Bright, Dr. Christison, and others; and as I think it the duty of the members of our profession to add whatever information they possess to the general stock of knowledge, I am induced to offer a few remarks, illustrated with cases, upon the disease in question.

In making post-mortem examinations of persons who have died from visceral disease, it is most common to find that the kidneys deviate from the healthy structure, being sometimes larger, sometimes smaller, sometimes softer, sometimes harder; the prevailing character, however, being a deposition of granular matter, mingled with, or entirely obliterating, the cortical and tubular structure of the organ. Even this character, however, is not universal, for in the early stages the granular appearance is not perceptible, and congestion is the only morbid indication. Various as are the appearances of the kidneys after death, the symptoms during life are still more various and more obscure, the general indication being an anasarcous condition of the body, with a vague and undefined sensation of uneasiness; or, more commonly, the disease is at first wholly latent, and its existence is only discovered after death has taken place from secondary disease. Such being the obscurity of this very common affection, it is interesting to inquire whether there exist any means of ascertaining its presence during life; and I think that we may answer the question, with tolerable certainty, in the affirmative, the albuminous condition of the urine indicating pretty clearly the existence of granular disease of the kidney. I am quite aware that albuminous urine may exist without such disease; but the causes are then transient, and the urine ceases to present the albuminous character. Hence, I make it a rule never to infer the disease from one or two examinations of the urine, but to test it repeatedly; and if I find that the albuminous deposit constantly takes place, I have very little hesitation in determining the existence of granular disease. On the other hand, I have repeatedly tested the urine of sick persons labouring under dropsy, and other diseases, and have found no albumen, and the absence of renal disease has been proved by post-mortem examination, or by the complete and permanent recovery of the patient. The discovery of the albumen in the urine is not difficult; a small test-tube and a spirit-lamp will suffice to produce a coagulum, if albumen be present; and the addition of nitric acid to another portion of urine will produce a copious white precipitate. These two tests, taken together, are conclusive evidence of the existence of albumen, but without such tests, it is wholly impossible to form any opinion; for albuminous urine presents no appearance whatever to the eye to distinguish its character; and in the early conditions of disease, even the specific gravity is nearly the same as in the healthy state. In Case 1, from the following cases, the existence of granular disease was suspected, but not proved, during life, owing to the short interval which intervened between the medical visit and the death of the patient. In Case 2, the disease was not even suspected, because I did not see the patient during life; but Case 3 is an excellent example of the origin, progress, and termination, of this insidious and fatal affection.

Case 1.—Mary L——, aged thirty-six, an inmate of the Islington Workhouse, was attacked with pleurisy about a month before the date of the present report, and recovered under the ordinary treatment. As I did not attend her myself, I am unable to state the exact nature of the symptoms. It appears, however, from her statement, that she never became quite well, having suffered ever since with a distressing cough. She has not menstruated for the last four or five months. She was brought into the infirmary on the 24th of April, 1846, with all the appearances of serious disease.

*Present symptoms.*—Her countenance is pale, and indicative of great suffering; the lips are livid; she has great difficulty of breathing, and is unable to lie in the recumbent posture. The abdomen is swelled, the feet are cold, and the ankles are œdematous. She complains of a cough, which is hard and dry, great pain in the chest, especially on the right side, and inability to lie on that side. She has no sleep; makes water with difficulty; bowels freely open; tongue furred; pulse 85, but hardly perceptible.

*Physical signs.*—On percussing the chest, there is a remarkable difference between the two sides, the left side giving a pretty clear sound, the right giving a dull one. On placing the hand over the region of the heart, no undue pulsation can be perceived. On percussing the abdomen, a dull sound is produced, and a distinct fluctuation may be perceived. The liver cannot be felt below the edge of the ribs. On auscultation, it is found that the respiration over nearly the whole of the left lung is puerile; but on the right side, the respiratory murmur can be heard only towards the apex of the lung; lower down, the respiration becomes bronchial, and ægophony is heard about midway down the lung. Over the lower part of this lung, no respiration whatever can be heard. On auscultation of the heart, no morbid sounds can be perceived, nor is the impulse of the heart much increased.

*Diagnosis.*—Pleuritic effusion on the right side; lung compressed by the fluid; tubercles at the apex; left lung tolerably healthy; heart generally healthy; effusion of fluid in the abdomen; liver not increased in size. Disease of the kidneys was also suspected; and as the patient's urine had not been preserved, the nurse was requested to keep it for the next visit, but she died before any could be collected.

This patient was ordered to have beef-tea and common tea to drink; to apply a blister to the right side of the chest; and to take the following medicines: blue pill, five grains; opium, a quarter of a grain—a pill to be taken every four hours; nitrate of potash, twenty grains; tincture of digitalis, ten minims; tincture of squills, twenty minims; peppermint-water, one ounce; to be taken every four hours.

She died the next morning, before the visit, and a post-mortem examination was made twenty-three hours after death, when the following appearances presented themselves:—The head and neck were exceedingly livid; the swelling of the abdomen had subsided considerably, and the œdema of the ankles had disappeared. The interior of the head was not examined.—*Chest:* On removing the sternum, it was found that the cavity of the right pleura was filled with serous fluid, which was removed, and measured a quart. There were flakes of coagulable lymph floating in this fluid. The surfaces of the pleura were smooth. The lung on this side was very much compressed, but was otherwise healthy. The cavity of the left pleura contained a very small quantity of serous fluid, which was probably only a post-mortem appearance. The left lung was rather congested, but not otherwise diseased. The heart was generally healthy; the parietes of the left ventricle were slightly thickened, but the valves were all sound.—*Abdomen:* There was a considerable quantity of serous effusion in the cavity of the abdomen, amounting to about a quart. The liver was not increased in size, but it was congested, and its cut surface presented the nutmeg appearance. The stomach and intestines were generally healthy. The kidneys were very much diseased; they were both very small and flabby, and their proper coat was very readily detached, exhibiting a highly granular appearance on the surface of the kidney. The same granular appearance was exhibited upon making an incision into the substance of the kidney; and, indeed, this granular structure occupied nearly the whole of both kidneys, obliterating the tubular appearance, and presenting one uniform mottled structure. The bladder contained a small quantity of urine, which, upon the application of heat, exhibited flakes of coagulated albumen.

Case 2.—Hannah W——, aged fifty-six, a thin, emaciated woman, who had suffered for a long time from cough and difficulty of breathing, but not to such a degree as to prevent her altogether from following her usual avocations. She had not applied for medical advice during her illness till Wednesday, June 3, 1846, when a lady, who took an interest in her case, procured the attendance of a medical gentleman. When he saw her, late at night, he found her labouring under symptoms of bronchitis, with want of sleep, difficulty of breathing, and cough; she had also some difficulty in passing her water, and the bowels were confined. She did not, however, appear to be dangerously ill, nor did she represent herself to be so. As she laboured under great debility and exhaustion, she was ordered the following:—Compound spirits of lavender, twenty minims; nitrate of potash, eight grains; sulphate of magnesia, half a drachm; infusion of senna, one ounce; to be taken every four hours. Ten grains of Dover's powder to be taken immediately. She became much better, and went to sleep; her son sleeping in the same room with her. She woke at two o'clock in the morning, and her son woke also, and gave

her some medicine. In two hours afterwards he woke again, and found that his mother was dead. The post-mortem examination was made twenty-seven hours after death, when the following appearances presented themselves. The head was not examined.

*Chest:* There were a few adhesions existing between the costal and pulmonary portions of the pleura. The heart was perfectly healthy, and all the valves presented a perfectly normal appearance. The lungs did not present any remarkable appearance externally, except that the bronchial glands were somewhat enlarged, and a few deposits of calcareous matter were found at the apex of each lung. The bronchial tubes contained a large quantity of frothy mucus; but were not remarkably thickened.—*Abdomen:* The liver was rather large, and its internal structure presented a nutmeg appearance, being the first stage of cirrhosis. The spleen was very small, and its structure dense. The kidneys were large, flabby, and rather pale; their investing coat was torn off rather easily, leaving the surface beneath scabrous and granular. On examining the internal structure, it was found that the right kidney presented a granular appearance in the cortical part; but the rest was pretty healthy; in the left kidney, the middle third of the organ, as well as the cortical part, were entirely converted into an homogeneous granular mass, the tubuli uriniferi in the former part being wholly absent.

As there was a little urine in the bladder, a portion of it was heated in a spoon, and a coagulum of albumen was speedily formed.

It is to be regretted that the head in this case was not examined; but the inspection took place in a very small, dark room, amidst many interruptions, and was performed necessarily in a rather hasty manner.

Case 3.—William G——, aged forty-six, formerly a teacher of the French language, and mathematics, was admitted into the Infirmary of the Islington Workhouse on the 26th of December, 1846. This poor man states that he has undergone a series of misfortunes; but denies having ever been addicted to drinking, although he admits that he used to drink a glass or two of spirits every day while residing in Guernsey, where liquors are very cheap; but that for the last two years he has ceased drinking spirits altogether. Having latterly become greatly reduced in circumstances, so as to be unable to procure the common necessaries of life, he has been exposed to wet, cold, and hunger, being often compelled to sleep in the streets. About a month ago, after continued exposure to wet and cold, he perceived that his legs began to swell, and at the same time he observed that his perspiration was checked, and that the secretion of urine was very scanty. At that time, he did not suffer any pain; but only experienced a general feeling of languor and listlessness; but since then, he has suffered considerable pain in the back, loins, and shoulders. He applied for admission into St. Bartholomew's Hospital; but could not be admitted, as the hospital was full; and he was therefore sent into the Islington Infirmary.

*Present state.*—He presents a bloated and anasarcous appearance, the legs, scrotum, and face, being swollen; the œdematous parts are pitted on pressure. He suffers occasional pain in the neck, and experiences a sensation of tightness about his limbs. Tongue tolerably clean as to colour, but dry and rough; great thirst; appetite pretty good; skin dry and harsh; no perspiration; pulse 100, very weak, but regular; no pain on pressure in any part of the body. He complains of occasional cough; but without any difficulty of breathing. There is no morbid sound whatever either in the heart or the lungs, when those parts are examined by percussion and auscultation. The urine is now rather copious and clear. At this visit, a small quantity of nitric acid was added to a portion of urine, and a copious precipitate was formed. As the other chemical tests were not in readiness, the farther examination of the urine was deferred until the next day, and in the meantime, a little saline medicine was administered, containing small doses of tincture of henbane. The bowels are open, and he sleeps pretty well.

Dec. 27th.—Much the same. The urine was subjected to the action of heat, but did not give any coagulum—a circumstance I find it difficult to account for, as on many subsequent occasions a dense coagulum was produced. Nitric acid again gave a copious white precipitate; nitrate of silver gave a curdy precipitate; sulphate of copper gave a light-blue one; corrosive sublimate a white one; and ferrocyanuret of potassium, acidulated with a little vinegar, gave a whitish precipitate. To avoid unnecessary repetition, it may be stated that the urine was frequently tested on subsequent occasions, and always with the same results. The diagnosis was granular disease of the kidneys, and the following treatment was adopted:—He was directed to be kept warm by additional blankets; to have full diet; to drink as much as he pleased of tea and cream-of-tartar water, and to take the following:—Dover's powder, fifteen grains, to be taken every night. Tincture of henbane, spirits of nitric ether, of each twenty minims; nitrate of potash, twenty grains; solution of acetate of ammonia, camphor mixture, of each half an ounce; to be taken every four hours.

29th.—Is rather better; has passed a good night; tongue moist and soft; has had, for the first time, profuse perspiration; urine as before. To continue the medicines.

Jan. 2nd.—Pulse full; tension of the skin; pain across the back and loins; urine still exhibiting a highly albuminous character; bowels confined. In order to relieve the pain and tension, a small bleeding was ordered, but only a few ounces of blood could be drawn. To continue the medicines, and to take, in addition, one scruple of jalap, and two scruples of cream-of-tartar, twice a day.

4th.—Has perspired freely, and the tension of the skin has disappeared; feels altogether better. To continue the medicines.

6th.—Still continues to improve. The improvement went on gradually; he passed good nights; his urine was copious, and his perspiration was abundant; the œdema was daily diminishing; his tongue was moist and clean, and he relished his food. Thus he continued till Jan. 21st, when his pulse rose to 168, and he felt generally uneasy, but without describing any particular symptoms.

23rd.—Says he feels very ill and low-spirited. The pulse is 144; he has a hard cough, and pain in the chest, with a little gluey expectoration. On examination by auscultation, the right lung gave a crepitant rattle throughout. *Diagnosis:* Pneumonia of the right lung. To apply a blister to the chest, and to take the following: calomel, two grains; opium, one-third of a grain, every four hours; tartarized antimony, one-third of a grain; tartrate of potash, twenty grains; liquor of acetate of ammonia, and camphor mixture, of each half an ounce, every four hours.

24th.—Much worse; pain in the chest, cough, and difficulty of breathing, all increased; blister has not risen; pulse 152 respirations 40 in a minute; tongue dry, rough, and furred; sordes about the lips, teeth, and gums; very low-spirited, but intellectual faculties entire; urine gives a copious precipitate when heated.

He died on the morning of the 25th of January. A post-mortem examination was made twenty-four hours after death, when the following appearances were observed. The body was generally anasarcous.

*Head:* The scalp and skull presented no unusual appearances. On removing the latter, and the dura mater, the arachnoid membrane presented an opaque pearly appearance. This membrane was much thickened, and a considerable quantity of serous fluid was effused beneath it.

*Chest.*—There was a large quantity of serous fluid in the cavity of each pleura, and also in the pericardium. The heart was healthy throughout, and all its valves were perfectly sound. The surface of the pulmonary portion of the right pleura was partially covered with a layer of recent coagulable lymph, of about the thickness of ordinary leather, easily detached from the subjacent pleura. Shreds and patches of the same coagulable lymph were scattered over other portions of the pleura, or remained floating in the serum. The upper lobe of the right lung was completely hepatized, and its cut surface exuded a dirty kind of pus. The lower lobe was much congested. The left lung was carnified, but did not exhibit appearances of recent disease.

*Abdomen.*—A considerable quantity of serous fluid in the cavity of the peritonæum. There were a few flakes of coagulable lymph on the surface of the liver. This organ presented a mottled appearance on the outside, and, when cut, the incised surface presented a nutmeg appearance. The kidneys were both diseased, and as both were alike, a description of one will be sufficient. The size was much greater than was natural, by about one half; the proper membrane was readily detached; the colour was dark, and the consistence flabby; the appearance was mottled; when cut through, the cortical and tubular structure were found almost entirely absent, and their place was supplied by granular matter of a grey colour; each kidney was sliced and cut in various directions, and the same appearances were everywhere exhibited in the cortical and tubular portions; but the ureters, pelvis, and calices, presented the ordinary structure.

## Reviews.

*On Indigestion, and certain Bilious Disorders connected with it: with short Notes on Diet.* By George Chaplin Child, M.D. London: Churchill, 1847. pp. 219.

Dr. Child's treatise on indigestion is well written, minute, and clear, with regard to what is already known; evincing a good acquaintance with the literature of the subject, and an acute observation of the ordinary phenomena of the disorder. But there is no mark of originality, and no attempt at grappling with any points except those which have already been discussed again and again by writers on dyspepsia. There is considerable care displayed in the arrangement of the different points, and many minor topics are well and lucidly argued. As far as personal observation is concerned, Dr. Child gives, in various places, a reference to 200 cases; and apparently the observation of these cases forms the basis of the essay.

There is one point we cannot avoid pointing out as injurious to the book as a piece of professional writing—namely, that the author "ventures to offer it" "to the public;" and we say this, fully convinced that the popular study of "indigestion, and certain bilious disorders often conjoined with it," would only tend to render the dear public dyspeptic, instead of curing the disorder. We dislike, too, the translation of many professional terms, as an indication of a popular aim which is prejudicial to medical literature. Thus, certain chapters are headed, "cephalalgia, *or* headach;" "pyrosis, *or* water-brash," "rumination—a rising of food into the mouth," &c. With the hygienic portion of dyspepsia, the public may have some concern; but the hygienic and strictly medical divisions of the subject should be kept separate, or it becomes a fruitful source of self-tampering and of weakened faith on the part of the sick. Though we make these remarks, we give Dr. Child the full benefit of a quotation from his work, which displays a sound spirit on the subject of empiricism generally. He is speaking of those thousand aches and pains occurring in the nervous, and which imitate more serious disorders.

"It may be observed that the term pseudo-disease, or mimosis, is far from unobjectionable as a name for the cases now being considered, because, although they accidentally resemble other and more serious disorders, they are not the less on that account real diseases in themselves, and often of a very distressing character. When their exact nature is mistaken by the medical attendant, it usually happens both that the remedies employed are more severe than what the case demands, and that the friends of the patient are made to suffer much needless alarm. The diseases here alluded to—the mimoses—are the mine which the quack works easily and with success. There is undoubtedly a strong propensity in the mind to magnify dangers incurred, and this observation applies to disease not less than to other things: hence, one person expatiates on the perils of a crisis in sickness happily passed through, with as much zest as another on the dangers of a voyage. With this tendency, the notions, or at all events the interests, of the quack chime in admirably; accordingly, with him and his patients there *never are any imitations.* The mimosis without danger passes for the formidable or generally fatal complaint which it resembles, —consequently wonderful cures abound. He can point to a hundred instances of disease against which the greatest physicians must admit they seldom can contend, wherein he triumphs nearly every day, and a host of grateful and right-minded patients are ready to back his assertions out and out. Who can feel surprised that quackery should prosper? and where is the remedy for it to be found, except in seeking to elevate the attainments, both scientific and moral, of all permitted to practise in the profession?"—p. 186.

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*Medicines; their Uses and Modes of Administration.* By J. Moore Neligan, M.D. Second edition. Dublin: Fannin and Co., 1847. pp. 485.

Dr. Neligan has already acquired a solid reputation as a writer on materia medica and therapeutics. This, the second edition of his work, has received a large addition of new and important matter, many of the former articles having been entirely re-written, and a full account introduced of all the newest remedies. The work includes the preparations of the three British pharmacopœias. In the arrangement, an alphabetical order is followed, both for the different classes of remedies, and for their various specimens, as antacids, anthelmintics, antispasmodics, &c. The remarks on the therapeutic classes of remedial agents are brief and succinct, and the individual agents, and their various preparations, are treated with great fulness and perspicuity—a separate consideration being given to the botanical characters, preparation, physical properties, chemical properties, adulterations, therapeutic effects, dose and mode of administration, and incompatibles. Altogether, the work will be found useful both to the student and the practitioner; while it is indispensable to the library of the special cultivators of therapeutics.

The following quotation is a very good specimen of the sagacity and practical character of the work:—

"Antacids are medicines which correct acidity of the stomach and digestive organs, by combining chemically with the free acid existing there, and neutralizing it. Their action is manifestly only temporary and palliative, as they do not correct that peculiar state of the digestive organs which favours the formation of acid; their protracted use, indeed, produces a precisely similar disease of the alimentary canal; and few individuals can bear the continued use of free or carbonated alkalies, a state of general anæmia usually attended with oxalic acid deposits in the urine being caused by it. Antacids should therefore be prescribed in combination with *vegetable tonics;* and in no case should their administration be long persisted in without occasional interruptions. One or two circumstances, relating to the particular remedy of this class which ought to be employed, require to be noticed:—Where the acid exists in the stomach in the gaseous state, ammonia and its carbonate should be preferred, as, in consequence of their volatility, a gaseous acid, which would elude the action of the fixed alkalies, will be neutralized by them. If the acidity be present in the lower bowels, as in the cæcum or colon, magnesia or lime ought to be administered, as being less likely than the other antacids to be neutralized or absorbed before they reach that portion of the intestinal canal. Where the acid exists in the urinary organs, the alkalies will be found best adapted, as they have a tendency to act more directly on the kidneys; and where it is *lithic acid* that predominates in the urine, the preparations of potash should be preferred to those of soda, as the salt formed by the combination of the former with the acid in question is much more soluble than that formed with the latter."—pp. 1, 2.

This will be sufficient to show our high appreciation of the book. There is, however, one point which we consider a blemish; but which we have no doubt escaped the consideration of the author—namely, the introduction of formularies for quack medicines, and of medicines taking the names, whether truly or falsely, of medical persons. We conceive quack medicines should be banished from legitimate medical writings altogether, or never referred to, except for special condemnation,—certainly not for the sake of ascertaining and mentioning their constituents; and so much lying, knavery, and barefaced quackery, has grown out of the habit of affixing the names of medical persons to particular preparations, that we had rather see the point reformed altogether. In Dr. Neligan's otherwise exemplary work, we find reference made to a very heterogeneous mixture of quack and semi-quack and legitimate articles, christened after this fashion:—Such as, Albespeyrre's Paper, Hoffman's Anodyne, Caustic of Filhos, Recamier's Caustic, Cazenave's Paste, Turner's Cerate, Donovan's Solution, Dzondi's Pills, Roche's Embrocation, Gowland's Extract, Franks' Solution of Copaiba, Gondret's Ointment, James's Powder, Gregory's Powder, Heberden's Ink, St. John Long's Liniment, Whitlaw's Tincture of Lobelia, Murray's Solution of Magnesia, Brandish's Solution, Mindererus' Spirit, &c. So many quackish evils have, as we have said, arisen from the barbarous custom of affixing the name of a medical man to any pill, powder, ointment, or solu-

tion that appears, that we should prefer the total abolition of such a form of nomenclature. The less direct quack medicines are introduced, even by name, into a scientific treatise, without the full reprobation and exposure which would be well nigh impossible in a systematic treatise on therapeutics, the better. We trust Dr. Neligan will take these remarks in good part, and more especially if his work should reach, as we cordially hope it may, a third edition.

As a further quotation we give his account of a new and highly useful preparation:—

"Hydrargyri Nitras Acidum. *Acid nitrate of mercury.*

"Preparation.—Take, of pure mercury, 100 parts; commercial nitric acic, (Dens. about 1380,) 200 parts: dissolve the mercury in the acid with the aid of heat, and evaporate the solution until it is reduced to 225 parts.

"This preparation contains about seventy-one per cent. of nitrate of mercury with an excess of nitric acid. It is a powerful caustic, and is very much employed in the present day on the Continent to destroy malignant ulcerations, particularly when of a cancerous character. It is applied by means of a camel's hair pencil, and the parts are then covered with lint."—p. 122.

We also quote an account of another new remedy, which is somewhat extensively used by the first authorities:—

"Preparation.—Take of the bruised root of valerian, two pounds; water, eight pounds; sulphuric acid, three ounces, one drachm: macerate for two days, and distil until the liquid no longer reddens bibulous paper. Let the distilled liquor be then exposed to the air for a month, at the end of which time, put it into a mattrass, with half an ounce of recently precipitated, perfectly pure, hydrated oxide of zinc, and digest for from eight to ten hours on a sand-bath, heated to 176° F., stirring occasionally. Filter the warm liquor, evaporate it to three-fourths of its volume, pour into porcelain capsules, and expose to the heat of a stove until crystals are formed, which are to be dried with filtering paper.—Brun Buisson."

"Therapeutical Effects.—Valerianate of zinc is a tonic antispasmodic of much power, and as such is peculiarly adapted for the treatment of neuralgic affections, which are so generally dependent on loss of tone in the system. It has been found especially useful in the treatment of facial neuralgia and of vertigo; but I have seen it prove equally beneficial in most of the Protean forms of hysterical neuralgia. In short, I look on it as one of the most valuable modern additions to the materia medica; and I fully agree with the observations of Devay, that the chemical combination proves much more beneficial than the oil of valerian and oxide of zinc prescribed together.

"Dose and Mode of Administration.—The dose of it is from three-fourths of a grain to one grain twice or three times a day; it may be prescribed in the form of pill made with a little mucilage or conserve of red roses, or in solution in orange-flower water, or in distilled water flavoured with syrup of orange-flowers. The compounder must bear in mind that the crystals of valerianate of zinc do not dissolve readily in cold water, floating on the surface in consequence of their lightness; they should therefore be first incorporated with a few drops of water in a mortar.

"Incompatibles.—All acids; the soluble carbonates; most metallic salts; and astringent vegetable infusions or decoctions."—pp. 32—34.

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*Essay on the Great Prevalence of Venereal Diseases in Great Britain.* By Alfred Hall, M.D. Glasgow: Lang, 1847.

This pamphlet is a well-executed attempt to set forth the wide-spreading evils attending upon the uncontrolled spread of syphilitic contagion, and the necessity of improved sanitary regulations, specially directed to the diminution or extermination of this evil. The facts which are used as the basis of Dr. Hall's reasoning are mainly derived from the labours of Mr. Acton, and our own articles in furtherance of the same views. The subject is handled in a careful and spirited manner, and cannot fail to be of service in the cause of improvement to which it is devoted. No long time will elapse, we are convinced, before the necessity of rescuing the guilty, as far as may be, from the results of their vices, and of warding off disease from the innocent, will ensure the adoption of sanitary regulations upon this subject.

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Feb. 23.—Dr. Copland, F.R.S., in the Chair.

Case of Elephantiasis. By George Southam, Surgeon to the Safford Royal Hospital and Dispensary, Manchester.

(*Communicated by* Mr. T. B. Curling.)

The patient, an unmarried female, first came under the author's notice in the autumn of 1843. The disease had then existed about twenty years, and commenced when she was in her eighteenth year, on the dorsum of the foot, having been preceded by attacks of deep-seated pain. As the œdema extended, the pain became more severe, and the integuments became the seat of frequent erysipelatous attacks. A large ulcer formed on the inside of the thigh, and three others near the ankle. The only cause assigned for the disease was the sudden cessation of the catamenia from cold. A drawing of the disease, taken in 1845, was exhibited to the Society; the measurement round the calf of the leg was two feet nine inches; above the knee, three feet four inches; and at the upper part of the thigh, including the nates, five feet six inches. Owing to the integuments having yielded unequally, the leg had a somewhat lobulated form; there was neither indentation nor pain on pressure; the sole of the foot was the only part of the limb not implicated. She was able to go about the house, and assist in household duties, until within a few weeks of her death, which took place on the 21st of November last, from an attack of dysentery.

On examining the body, the enlargement was found to have been caused by the deposit of a dense, white, lardaceous substance, interspersed with fat, in the subcutaneous cellular tissue. The principal venous trunks were much larger than natural, and when divided transversely, were patulous. The coats were thickened and converted into a fibrous substance, disposed round the vessel in laminæ. All the smaller vessels, when divided transversely, resembled arteries filled with coagula. The disease in the veins had not extended beyond the groin; those of the pelvic cavity were sound; the viscera were healthy; nothing beyond slight hypertrophy of the epidermis and cutis was detected in the skin.

The author remarks, that he has been informed by several medical friends who saw the patient, and who had witnessed elephantiasis as it is met with in the natives of South America and the West Indian Islands, that the tumefaction seldom attains so great a size as was observed in the case now related. From the appearances found on dissection, it is evident that the disease originated from repeated attacks of subacute or chronic inflammation of the venous capillaries, which caused the pain and febrile symptoms. The author is of opinion, that the immediate cause and pathological changes of elephantiasis bear an intimate relation to those of phlegmasia dolens and the induration of the cellular tissue, in new-born children; the apparent differences depending on the degree of venous obstruction and on the remote influences which have originated it.

Dr. Copland said that the case before the Society was more fully detailed, both as regarded its history and progress, than any previously published. It was an interesting question, whether the disease was one affecting the veins only, or the lymphatics, or both.

Mr. Curling would mention a case, because it had been probably overlooked by the author of the paper. It was quite as remarkable an instance of the disease, and was recorded by M. Chevalier in the second volume of the Society's *Transactions*. The limbs in each case were nearly of the same dimensions. In M. Chevalier's, the enlargement commenced after an attack of phlegmasia dolens. The original drawing of the leg and the foot were in the museum of the London Hospital, having been purchased at Mr. Heaviside's sale. He had at the present time a case of this disease under his care in its early stage. The patient was a boy nine years of age. The disease affected the right lower extremity, which was as large again as the left. The greater enlargement was in the leg, but the thigh was much thickened. It originated in a blow on the leg, given by a schoolmaster. The boy was improving under treatment, and he hoped to effect a cure by supporting the limb, and administering the liquor potassæ. In answer to a question, Mr. Curling said that he had not been able to detect any obstruction in the femoral or other large veins of the lower extremity; but this would be difficult,

owing to the thickened state of the skin. The glands were enlarged on both sides, but more so on that in which the disease was situated.

On Tubercular Pericarditis, with Pathological and Practical Remarks. By George Burrows, M.D.

After alluding to the rapid advances made in our knowledge of diseases of the heart during the past twenty years, the author refers to the paper of Dr. Taylor, on the Causes of Pericarditis, published in the twenty-eighth volume of the Society's *Transactions*, where that physician assigns rheumatism, granular disease of the kidneys, and extension of inflammation from contiguous parts, as the chief causes of pericarditis. To this opinion the author assents, but invites the attention of the Society to another form of that disease, which he designates tubercular pericarditis. After taking a review of the statements of different pathologists who have described tubercular deposits in the pericardium, more especially of the descriptions of Baillie, Laennec, Andral, Louis, and Rokitansky, and of the opinion expressed by the latter, that tubercular diseases of the pericardium are the consequence, and not the cause, of chronic inflammation of that membrane, the author proceeds to detail three cases of tubercular pericarditis.

Case 1.—A young Italian was admitted into St. Bartholomew's Hospital, labouring under the symptoms of incipient phthisis. After three weeks' residence in the hospital, the appearance of blood in the sputa caused a careful examination of the chest by the stethoscope to be made, when the physical signs of unsuspected pericarditis were detected. The friction-sounds of pericarditis were heard through fifteen consecutive days, and then subsided, leaving no cardiac murmur. At the expiration of two months, a fresh accession of fever, and examination by auscultation, indicated the presence of double pleurisy, which continued during nineteen days, when the man died. The post-mortem examination revealed the existence of abundance of effused lymph in the pericardium, of copious serous and fibrinous exudations in either pleura as well as in the peritonæum. Numerous opaque, yellowish tubercles were found disseminated throughout the self-coagulable lymph effused on these membranes. The lungs also contained numerous tubercles in the crude state scattered throughout the different lobes; the bronchial glands and spleen also contained tubercles.

Case 2.—A young man in Milbank Prison, when convalescent from chronic dysentery, was attacked with the symptoms of incipient phthisis, but auscultation detected no signs of extensive tubercular disease. The young man sunk, and upon examination after death, both lungs were found thickly studded with yellow tubercles, varying in size from a millet-seed to a small pea. The pericardium contained a large quantity of firm lymph, intensely stained with blood; and upon separating the layers of lymph towards the base of the heart, several small yellow tubercles were distinctly recognised in those portions which were most carefully examined. A coloured drawing of this heart was exhibited to the Society.

Case 3.—A young man, who had been imprisoned in the Hulks and at Milbank, became the subject of dysentery in the latter prison, from which he was convalescent, when he exhibited the symptoms of phthisis. Upon auscultation, Dr. Baly detected the presence of pericarditis, and he was forthwith removed to St. Bartholomew's Hospital. The physical signs of pericarditis were manifest during twenty consecutive days, and then disappeared, leaving the heart exempt from all murmurs. This young man quitted the hospital, convalescent, a few days after the cessation of the pericarditis; and although his recovery prevented the verification of the diagnosis of pericarditis, still the history of the case, so closely analogous to that of Case 2, and the absence of the usual causes of pericarditis, induced the author to regard Case 3 as one of tubercular disease of that membrane. The author then points out the class of cases in which this rare affection may be suspected —viz., in those persons who, having been long exposed to the most powerful exciting causes of tubercular cachexia, exhibit symptoms of incipient phthisis; and yet the auscultatory signs of tubercles in the lungs are inconclusive. In such persons, tubercular affections of serous membranes and of the pericardium should be looked for. The author then considers the pathological question, whether the tubercles are to be regarded as the cause or the effect of these chronic inflammations of the pericardium. After quoting the opinions of Laennec and Rokitansky, who appear to regard the tubercles as the result of a change taking place in the layers of fibrin, consequent upon acute inflammation, and which tubercles then cause the inflammation to become chronic, the author endeavours to show that it is more in accordance with our present knowledge of the history of tubercle, to suppose the tubercles to be deposited on the pericardium in the first instance; and that these foreign bodies acting as exciting causes of inflammation there as elsewhere, keep up chronic inflammation. A similar train of phenomena may be observed in chronic tubercular peritonitis. The author concludes by pointing out how inapplicable the usual remedies for pericarditis are in the tubercular variety. Large losses of blood and the lavish use of mercury should be abstained from; while counter-irritation over the chest, saline diuretics, with combinations of iodine, and the speedy removal of the patient from the influence of depressing causes, are the means most likely to arrest the progress of chronic pericarditis produced by the irritation of tubercular deposits.

## MEDICAL SOCIETY OF LONDON.

Monday, February 22, 1847.—Mr. Dendy, President.

### GONORRHŒAL? BRONCHITIS.—TREATMENT OF BRONCHITIS.

The President related the case of a gentleman, aged forty-five, whom he had just left, labouring (for the second time within the year) under symptoms of severe bronchitis. The breathing was difficult—often laborious; the expectoration muco-purulent—often very profuse; there was constant languor, which was much aggravated immediately after severe paroxysms of coughing; there is a sense of constriction across the chest; and the mucous râle is audible at some distance from the patient. There is, however, no fever or permanent excitement; the pulse, naturally about 65, varying little in its character. The disorder has not appeared to be altogether influenced by atmospheric causes, as much caution has been observed since the former attack, but is evidently associated with some remote sympathies, especially with the chylopoietic viscera, as purgatives usually brought away dark, fœtid evacuations, with a constant and immediate relief of symptoms. The patient himself associates the disorder with a gonorrhœa contracted three years ago. In the first attack, which was protracted when I saw him, I adopted a combined mode of treatment, unloading freely the alimentary canal, and employing counteraction on the surface: a seton was introduced on the thorax; blue pill, taraxacum, and conium, with emulsion, were administered, and concentrated nutrition enjoined, with modified temperature of the chamber. After a few weeks he began to recover from the emaciation, which had been extreme, and residence in the country completed his convalescence. A superficial view of these attacks would induce a very unfavourable prognosis; but the absence of heat, thirst, and continued pain, and above all, the state of the pulse, prompt me to refer the disorder mainly to the causes above alluded to, and to regard the case without much anxiety. There were occasional remissions of the symptoms, and it was curious to note that each favourable change in the progress towards convalescence was preceded by black specks in the sputa.

Mr. Hilton had seen inflammatory rheumatism coming on during the presence of gonorrhœa, and after lasting five or six weeks, give way to remedies; and was succeeded again by the gonorrhœa, which required the usual treatment.

Mr. Headland saw no reason to doubt that Mr. Dendy's patient would do well, bearing in mind that his pulse was but 60. He believed that the connexion of bronchitis with gonorrhœa was not unusual. Bronchitis also existed in connexion with rheumatism and ophthalmia, similar to the ophthalmia denominated "gonorrhœal," making it appear as though the mucous membranes were influenced by some cause independent of the atmosphere. Were not special remedies likely to be of service in cases of this kind? Would not colchicum, for instance, in Mr. Dendy's case, be of service? He threw out a suggestion that bronchitis might originate in causes quite irrespective of cold, and having reference to some disturbance of the pneumogastric nerve. He then made some observations on the value of special remedies in cases of this kind.

Mr. Linnecar thought that the treatment by colchicum in Mr. Dendy's case would be too depressing. He thought it of service only in cases of acute bronchitis. Would not the balsam of capivi be better? He thought that expectorants and brandy might be employed.

Mr. Headland made some observations on the value of opium in the treatment of bronchitis, which, not yielding to

ordinary antiphlogistic treatment, was often to be removed by the combination of opium and tartar emetic.

Dr. Todd considered that depletion was not often required in bronchitis. In judging of the symptoms that might seem to require this remedy, we should always bear in mind how soon depression supervened in this disease. In cases where there was much debility after the more acute stage was over, quinine and iron might be required. In other cases, large quantities of opium might be given with advantage, and in other cases again, brandy-and-water.

Dr. Clutterbuck said that the name bronchitis, as indicating the presence of inflammation of the lining membrane of the air-passages, was as correctly defined under its old title of "catarrh." The subject was at the present time interesting from the prevalence of the affection. He considered that there was nothing peculiar in the inflammation of this part, and that it must be treated on general principles. In the prevailing epidemic, he thought that generally little or nothing need be done, because the tendency of the complaint was to subside spontaneously. He believed that we often did much that we might dispense with. The complaint seemed to follow the same course under various remedies. If unusually active, affecting the general system, and attended with much fever, depletion might be resorted to, but this was the exception. Opium was only useful as a palliative for the cough; he had no faith in tonics, but much in counteraction, as in emetics and purgatives.

## WESTMINSTER MEDICAL SOCIETY.

Saturday, February 27, 1847.—Mr. Hancock, President.

Dr. Sayer, the retiring president, was elected an honorary member. Prior to the adjourned discussion being renewed,

Dr. Snow put a green linnet under the influence of ether, by placing it in a glass jar with a few drops of that liquid. In about a minute it fell down insensible, and although kept in the jar about a minute longer, and until it had almost ceased to breathe, it gradually recovered its sensibility on being withdrawn, and in about ten minutes was as active as before.

Mr. Hale Thompson considered that it made little difference what kind of instrument was used for the exhibition of vapour of ether, provided it were carefully used. He preferred the temperature of the apartment, whatever that might be, and spoke of the necessity of this valuable but powerful agent being confined to the hands of the medical profession.

Mr. Harding considered that the inhalation would be dangerous in persons inclined to apoplexy, and in patients having disease of the heart, and that it would be injurious in bronchitis.

Mr. Norman said that the child of which he had spoken at the previous meeting, as having been put under the influence of ether for the operation for nævi, was recovering satisfactorily. He mentioned a case in which the vapour had been administered on two occasions to a lady threatened with premature labour, with the effect of removing the symptoms of it.

Mr. Greenhalgh stated that the vapour of ether had been given in two cases of bronchitis, in Middlesex Hospital, with the effect of producing great relief.

Dr. Snow, in his reply, spoke of the necessity of being able to regulate the proportion of ether vapour and of air. With an apparatus consisting of glass and sponges, the quantity of vapour could not even be ascertained, for the air was very much cooled in passing through such an inhaler by the evaporation of the ether. The use of hot or even warm water was very improper about an inhaler, as by it a risk was incurred that the patient might get all vapour and no air.

## Foreign Department.

At the meeting of the Society of German Physicians in Paris, on Jan. 15th, it was resolved that experiments upon the inhalation of ether should be made, and that those members who were willing should be the subjects of them.

The following is the result of the first experiments, the subjects of which were in the prime of life, in a good state of health, and unprejudiced in their opinions. The apparatus used was of simple construction, but perfect in its action; and whenever the respiration seemed to be carried on through the nostrils, they were closed. The time of day chosen for the performance of the experiments was about two hours after breakfast, which meal consisted chiefly of coffee or chocolate; but in no case meat or wine formed a portion of it.

The temperature of the room in which the experiments were made was about 68° Fahr., never above 73° Fahr. The table shows the duration of the experiments, and the alterations, every minute, in the pulse and respiration.

| Number of the Experiment. Age of the subject. | Before Inspiration. | | Duration of Experiment. | | Total of the Inspiration. | During Inspiration. | | Observations. |
|---|---|---|---|---|---|---|---|---|
| | Pulse. | Resp. | min. | sec. | | Pulse. | Resp. | |
| No. 1, aged thirty-three. | 81 | 20 | 3 | 17 | 92 | 1st min. | 92 | Had breakfast two hours before the experiment. |
| | | | | | | 2nd ,, | 97 | |
| | | | | | | 3rd ,, | 105 | |
| | | | | | | 5th ,, | 92 | |
| | | | | | | 7th ,, | 81 | |
| No. 2, aged twenty-four. | 86 | 27 | 1 | 25 | 32 | 1st ,, | 94 | not observed. Had breakfast one hour before; slight hypertrophy of the left ventricle. |
| | | | | | | 2nd ,, | 100 | 21 |
| | | | | | | 6th ,, | 116 | |
| No. 3, the same individual, one minute afterwards. | 86 | 27 | 1 | 20 | 11 | 1st ,, | 111 | |
| | | | | | | 2nd ,, | 88 | |
| | | | | | | 6th ,, | 72 | |
| No. 4. | 104 | 27 | 1 | 15 | .. | 1st ,, | 107 | Cough prevented counting of inspirations. |
| | | | | | | 20th ,, | 96 | 26 |
| No. 5. | 80 | 16 | 3 | 40 | 40 | 1st ,, | 86 | 11 Breakfasted one hour and a half before. |
| | | | | | | 2nd ,, | 87 | 10 |
| | | | | | | 3rd ,, | 85 | 11 |
| | | | | | | 4th ,, | .. | 8 |
| | | | | | | 30th ,, | 90 | 20 |
| No. 6. | 77 | 18 | 2 | 10 | 32 | 1st ,, | 106 | 15 Breakfasted 3 hours before; pulse scarcely perceptible. |
| | | | | | | 2nd ,, | 112 | 14 |
| | | | | | | 10th ,, | 98 | 17 |
| No. 7. | 112 | 18½ | 1 | 17 | 23 | ..... | 148 | 16 Pulse intermittent; hypertrophy of left ventricle. |
| No. 8, the same, half min. later. | 112 | 18½ | 1 | 3 | 20 | ..... | 148 | 18 |
| No. 9, the same, ten min. later. | 112 | .. | 5 | 40 | 96 | 1st ,, | 150 | 19 |
| | | | | | | 2nd ,, | 120 | 18 |
| | | | | | | 3rd ,, | 115 | 17 |
| | | | | | | 4th ,, | 117 | 17 |
| No. 10, aged twenty-five. | 76 | 22 | 8 | 0 | 206 | 1st ,, | 108 | 18 Breakfasted 2 hours before. |
| | | | | | | 2nd ,, | 96 | 22 |
| | | | | | | 3rd ,, | 102 | 24 |
| | | | | | | 4th ,, | 104 | 26 |
| | | | | | | 5th ,, | 108 | 26 |
| | | | | | | 6th ,, | 104 | 28 |
| | | | | | | 7th ,, | 108 | 30 |
| | | | | | | 8th ,, | 102 | 32 |
| No. 11, the same. | .. | .. | 2 | 35 | 51 | 1st ,, | 112 | 25 |
| | | | | | | 2nd ,, | 104 | 26 |
| | | | | | | 3rd ,, | 106 | 28 |
| No. 12. | 106 | 22 | 5 | 40 | 128 | 1st ,, | 124 | 21 Breakfasted 2 hours before. |
| | | | | | | 2nd ,, | 116 | 16 |
| | | | | | | 3rd ,, | 112 | 21 |
| | | | | | | 4th ,, | 104 | 24 |
| | | | | | | 5th ,, | 115 | 25 |
| | | | | | | 6th ,, | .. | 21 |
| No. 13, aged thirty-three. | 78 | 20 | 13 | 0 | .. | 1st ,, | 80 | Is fasting. |
| | | | | | | 6th ,, | 76 | |
| | | | | | | 11th ,, | 84 | |
| No. 14. | 84 | 24 | 9 | 30 | .. | 1st ,, | 86 | Breakfasted 2 hours before. |
| | | | | | | 6th ,, | 84 | |
| | | | | | | 12th ,, | 90 | |
| No. 15, aged twenty-four. | 89 | 16 | 8 | 25 | 184 | 1st ,, | 84 | 20 Breakfasted 2½ hours before; slight hypertrophy of left ventricle. |
| | | | | | | 2nd ,, | 94 | 26 |
| | | | | | | 3rd ,, | 94 | 20 |
| | | | | | | 4th ,, | .. | 22 |
| | | | | | | 5th ,, | 90 | 25 |
| | | | | | | 6th ,, | 80 | 25 |
| | | | | | | 7th ,, | 96 | 26 |
| | | | | | | 8th ,, | 108 | 27 |
| No. 16. | 112 | 20 | 6 | 35 | 140 | 1st ,, | 140 | 26 Breakfasted 1 hour before; pulse intermittent, slight hypertrophy of left ventricle. |
| | | | | | | 2nd ,, | 136 | 25 |
| | | | | | | 3rd ,, | 143 | 24 |
| | | | | | | 4th ,, | 144 | 20 |
| | | | | | | 5th ,, | 140 | 19 |
| | | | | | | 6th ,, | 134 | 18 |
| | | | | | | 7th ,, | .. | 18 |
| No. 17. | 104 | 22 | 3 | 40 | 62 | 1st ,, | 122 | 19 Breakfast two hours before. |
| | | | | | | 2nd ,, | 128 | 16 |
| | | | | | | 3rd ,, | 119 | 15 |
| | | | | | | 4th ,, | .. | 12 |
| No. 18, aged thirty-five. | 88 | 19 | 9 | 0 | .. | 1st ,, | 80 | 17 Breakfast two hours before experiment; interrupted at the 5th and 6th minute. |
| | | | | | | 2nd ,, | 72 | 20 |
| | | | | | | 3rd ,, | 74 | 17 |
| | | | | | | 4th ,, | 82 | 16 |
| | | | | | | 6th ,, | 92 | 18 |
| | | | | | | 7th ,, | 86 | 17 |
| | | | | | | 9th ,, | 87 | 16 |
| No. 19. | 98 | 25 | 2 | 8 | 93 | 1st ,, | 122 | 36 Breakfast 1½ hour before. |
| | | | | | | 2nd ,, | 174 | 57 |

In these experiments, we see that the pulse was accelerated during the first three minutes of the experiment, and that

then a marked retardation took place, though it still remained above the natural standard. Towards the termination of the experiment, about the sixth or eighth minute, an evident reaction commenced, and the contractions of the heart, which had lost something of their intensity, became stronger and more frequent. The same resulted from a prolongation of the inhalation, as seen in experiments 13, 14, 15. In the 10th experiment, the same effect was not produced, probably because the nostrils were not closed. The greatest frequency of the pulse was observed in experiment 19, in which 174 pulsations took place per minute. The mean of the pulse in these experiments was about 106.

The frequency and fulness of the respirations were found to be in relation to the frequency of the pulse. During the first three minutes, when the pulse was accelerated, the respirations were strong and continuous. A little later, when the action on the nervous system commenced, and the pulse had become slow and thread-like, the respirations resembled that of persons threatened with asphyxia.

In the greater number of the experiments, insensibility to pain was obtained. Punctures made on the fingers, ears, scalp, and face, and cauterization with ignited amadou, were unperceived. In experiments Nos. 7 and 8, this complete result was not obtained; but in these the inhalation was continued for a very short time only.

The duration and intensity of the action of the vapour seemed to depend, in a great measure, upon the exactness and duration of the inhalation. In experiment 1, the insensibility continued for one minute and three seconds. In experiment 4, for one minute and thirty seconds. In experiment 5, for one minute and fourteen seconds. In experiment 13, for above ten minutes.

There appears to be three stages in the action of ether. At first, sensibility is exalted at the time of the acceleration of the pulse and respiration: then the perception of pain diminishes with the modification in the circulation, and injuries are only feebly perceived. In the third degree, all feeling vanishes, and the individual is as devoid of sensation as a corpse.

At the Meeting of the Académie Royale de Médecine, on the 12th of January, 1847, M. Piorry read a paper on intermittent fevers. His views are,

1st. In an accession of perfect fever, there is shivering, followed by heat and sweating, and an accession of progressive neuropathy, proceeding from the abdominal or thoracic plexuses, and especially from those of the spleen, the kidneys, and genital organs. This affection of the nerves travels over, successively, different parts of the cerebro-spinal apparatus; starting from nervous plexuses, it passes towards the centres, and then spreads itself towards the circumference: it reappears in the skin, and causes shiverings, in the same manner as other neuralgias.

2nd. The accessions of fever, which renew themselves in a periodic manner, can have their primary origin, either in the renal, spermatic, or ovarian plexuses; in such cases, the neuropathy spreads towards the splenic nerves.

3rd. These periodical accessions, whether quotidian, tertian, or quartan, have their true point of departure, in the ramifications of the splenic plexus.

4th. The various lesions of the splenémia, splenitis, and hypertry of the spleen, can give rise to this neuropathy.

5th. It is (splenémia) friability of the spleen, along with augmentation in bulk, that most frequently causes true intermittent fevers.

6th. This lesion of the spleen is generally produced by marsh miasmata.

7th. The first effect of this agent is a direct poisonous action upon the blood.

8th. This alteration in the condition of the blood causes a sanguineous engorgement and hypertrophy of the spleen, which produces that periodical neuropathy characteristic of intermittent fevers. Here is a local lesion, followed by effects analogous to those on the bladder and the heart, produced by the presence of cantharidin or digitalin in the blood.

9th. Reciprocally, this disorder of the spleen has an influence over the blood, manifested by that peculiar complexion, by the general weakness, &c., found in persons afflicted with intermittent fevers of long standing.

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Paris.—The Royal Academy of Sciences, Paris, has just elected M. Civiale, the distinguished lithotritist, to the place of free academician left vacant by the death of M. Bory de Saint Vincent.

# British Medical Journals.

### ABSCESS IN THE ABDOMINAL PARIETES.

Mr. Thomas relates a case in the *Provincial Medical and Surgical Journal*, which is so far interesting as to afford an opportunity of pointing out the means by which such superficial tumours may be distinguished from the more deeply-seated—viz., percussion. A hollow resonance may be obtained by this means in almost every case of swelling *in* the parietes of the abdomen. Had it been made use of here, the abscess could not have been confounded with a distended bladder.

"Mr. Thomas detailed a case of abscess of the abdominal parietes, which simulated distention of the urinary bladder, in a boy, aged five. His health had been very good until about sixteen months ago, when an abscess formed in the perinæum, which, on being opened, discharged a small quantity of pus, and soon healed. Last month he suffered from an attack of measles, and since then, a tumour formed in the hypogastrium; the scrotum became œdematous; has had great pain about the region of the bladder, and some difficulty in passing urine. His medical attendant suspected that there might be a calculus. On his admission into the infirmary, he was in very great pain, and the hypogastric tumour completely resembled a distended bladder. Mr. Thomas finding an abscess existing in the perinæum, opened it, and evacuated a considerable quantity of purulent matter, on which the hypogastric tumour entirely disappeared, and the patient is now rapidly recovering."

The subject of which the following observations treats is of sufficient importance to entitle them to consideration. It were very desirable to repeat the experiments before the question is considered at rest:—

### ON THE POSSIBILITY OF PRODUCING BURNS AFTER DEATH RESEMBLING THOSE PRODUCED DURING LIFE.

"A reference to any work on forensic medicine will show the reader that the distinction between burns inflicted prior to and after death is considered to be sufficiently precise. It would appear, however, from the experiments of M. Champouillon that vesication, which is considered to be characteristic of burns occurring during life, may be exactly imitated under certain circumstances after death. 'It is not,' says M. Champouillon, 'by the immediate contact of a heated body with an infiltrated limb that it is possible to induce phlyctæna in a corpse: we may in this manner induce vesication, it is true, but the elevated epidermis encloses air and not serosity.' The number and size of the vesications, according to him, depend upon the temperature of the heated body, its distance from the skin, and the length of time the latter is submitted to its influence. 'If,' he adds, 'a heated body, such as a red-hot bullet, be placed at a few centimetres distance from an anasarcous limb, no appearance of vesication is produced.' If, on the contrary, it be placed within a convenient distance, one or more vesications are constantly produced. An attentive study of the causes which give rise to this phenomenon have shown him that it is due to the effect of caloric upon an œdematous part—a tissue charged with serosity. The action is no other than the rarefaction produced by the calorific body on the circumambient atmosphere, which rarefaction is proportioned to the degree of heat and the radiating power of the heated body. In anasarca, the effused fluid diminishes the force with which the different laminæ of the cutaneous tissue cohere together; and it happens, therefore, that when, by the rarefaction of the air near the heated body, the atmospheric pressure is removed from the subjacent part of the corpse, the fluid accumulates there in virtue of a well-known physical law, and thus induces an elevation of the epidermis. M. Champouillon remarks, that these phlyctenæ do not appear instantaneously, but require the application of heat for six hours as a mean. As regards the red circle which Christison so strictly insists upon, as a proof of burning during life, Champouillon states that he has in no case failed to produce it in the corpse; but he allows, that however closely the red circle thus produced resembles that produced during life, the semblance is only superficial, and a difference is at once perceived by incising the skin. In the first case there is but a simple injection of the cutaneous capillaries; in the other there is evidence of vital reaction, in a concomitant extravasation of blood.

"The results of the author's researches tend to establish that there is no sufficient apparent difference between burns before and burns after death, and thus the question can only be determined by a dissection of the skin, and that the distinction laid down by Christison fails in the case of an œdematous corpse."—*Idem.*

# THE LANCET.

LONDON, SATURDAY, MARCH 6, 1847.


THE recent contest for the Chancellorship of the University of Cambridge has drawn our attention to the state of an academic institution, in which the medical profession is specially, and the public generally, interested—we mean the University of London. At the elder Universities of Cambridge and Oxford, we see from time to time elections to the great offices and places of honour carried on in a spirit of the most democratic freedom; the graduates being the electoral body, and the undergraduates contributing an influence extra-electoral, but still having a powerful bearing on disputed points. This spirit of election and discussion, descending as it does from remote times, when such privileges scarcely had an existence except in seats of learning and art, is an important element in their prosperity. No one can doubt that the elective principle has always exerted great power over the fortunes of the two great Universities, keeping up the spirit of attachment to their institutions, both among their alumni and their full-grown men.

In the University of London, founded through the exertions of some of the most learned and liberal spirits of this age, it might be expected that the provisions for its government and its charters would offer some reflection of their own free and liberal principles; or, if that was, from the nature of things, impossible at the first, at least some germs or latent powers capable of self-development in this direction. But the charters granted by WILLIAM IV. and her present Majesty may be searched in vain for anything of this kind. The principle of election is confined within the narrowest limits—limits, indeed, which are nowise capable of future growth or devolution, unless new charters are to be obtained.

The governing power of the University of London is committed to a Chancellor, a Vice-Chancellor, and thirty-six Fellows, comprising together, the Senate. According to the present constitution of the University, the Chancellor is to remain for ever the nominee of the Crown; the Vice-Chancellor is to be elected annually from among their own body, by the thirty-six Members of the Senate; and, from time to time, the Fellows are to elect new Members into the Senate, so as to maintain the number of thirty-six. No provisions are made that the new Fellows shall even be Members of the University; the only regulation is, that they shall be "fit and proper persons," according to the judgment of the remaining Members of the Senate, without any reference to their belonging to this University.

Thus, then, the University of London may go on—a nominated and self-elected corporation, granting degrees in arts, medicine, and laws; and unless some alterations occur, of which there is as yet no promise, there will be a powerful University—powerful as conferring degrees acknowledged everywhere to be of the highest value; and there will be also a powerful body of graduates, the children of the said University. But what will come in time to be lamented, is the absence of any common bond between the two—between the University on the one hand, and its graduates on the other. As far as its present organization is concerned, the University may go on without in any way taking cognizance of her graduates, and the graduates may go on without possessing anything more than the slightest interest in the lasting weal of their University, and utterly without that attachment to her which it is the pride of all schoolmen to cherish for their educational home. When the LL.D., the M.D., or the M.A., has been obtained, the graduate may turn his back upon the door of the University which has occupied his cares, anxieties, and ambition, for years; and he will never be called upon to enter it again. His university life ends with his college life. His Alma Mater dies to him as soon as he can walk alone: she is no Nourishing Mother, to whom he may look for honour, and to whom he may afford aid as long as he can give or receive either. This is not as it should be. And this is not the way in which Cambridge or Oxford have maintained their scholastic glory through so many centuries. They have, the one her Senate, and the other her Convocation, which preserve the sympathies of those who issue from their portals long after their academic years have passed away.

We can suppose that in this spirit of the ancient seats of learning, the great and good Dr. ARNOLD, one of those to whom the first charter was addressed, would have acted. We may also suppose that, upon the fitting occasion, the eminent members of the University of Cambridge who are now members of the senate of the University of London, and who are familiar with scholastic discipline, would desire so to act.

We are quite sure, that to give the members some lasting connexion with the University, beyond the mere reception of its degrees, would contribute an element of strength and permanence to the institution itself. That the graduates in arts and laws are worthy of favour from the University we have no doubt; and we are sure that the medical graduates will confer lustre upon the University. Neither is the number of graduates even at the present time to be despised, and it promises to increase, so as in time to rival the older establishments. Degrees have now been conferred for seven years, and the number has amounted to 375: in medicine, 135; in arts and laws, 240; while the undergraduates—those who have passed the first examination in medicine, or the matriculation examination—amount, in the present year, to 472. In medicine, the graduates of the University have already contributed to make a reputation for their Alma Mater. In the provinces, many of them stand very highly, and though such a short time has elapsed since the first degrees were conferred, there is scarcely a medical school in the metropolis in which its graduates have not been lecturers. In the present session, there are fifteen recognised teachers in the London schools holding the degrees of the University of London—namely, Drs. ARLIDGE, Aldersgate-street; AYRES, Charing-cross; BALLARD, University College; R. BARNES; HALL DAVIS, School of Midwifery; GARROD, Aldersgate-street; GULL, Guy's Hospital; G. JOHNSON, King's College; LETHEBY, London Hospital; MERYON, St. Thomas's Hospital; ALLEN MILLER, King's College; POTTER, University College; SEWELL, Aldersgate-street; TYLER SMITH; and SNOW, Aldersgate-street; In the present day, everything points to London as the great theatre of medical education; the tide has set in this direction, and the organization of this University must exert a great influence upon its medical reputation. If it should fail to exert all the good influence it is capable of, it will not be from want of strength and energy in the schools and

Colleges here or in the provinces. For capabilities of imparting instruction, Bartholomew's, Guy's, King's College, or University College, may either of them fairly vie with any of the old medical universities in their best days—Padua, Montpelier, Leyden, or Edinburgh. The University, then, can only, as we conceive, fail of becoming eminent and durable,—of conferring important services upon science and learning, and honour upon the nation,—by a faulty organization, or a total want of community or cohesion between the University and its graduates.

By the terms of the charter, not many years can elapse before the Senate will have to elect twelve new Fellows. The original number of Fellows was thirty-six, and when twelve of these have vacated, by death or otherwise, twelve others are to be elected by the twenty-four remaining Fellows. Already six places at the Senate-table are void; those held by the late Bishop of Chichester, Dr. Arnold, of Rugby; Dr. Dalton, Professor Hewett, Dr. Somerville, and Dr. Sims. It will be perhaps right, when the requisite numbers have lapsed, that the election should, as the charter provides, rest with the Fellows, but they will owe it to the University to elect men of the University, if these can be found of sufficient weight and eminence in the several departments in which degrees are granted by the University. But as regards the election of the Chancellor, and some other high officers that may be required as the University increases in numbers, and as regards the management of certain of the affairs of the University, we contend, and shall contend, that the graduates of a certain standing ought to form an electoral body, and to have a University voice, as at the Oxford Convocation and in the Cambridge Senate. These are questions which must come under the consideration of the Senate sooner or later; and which ought to be provided for whenever the Fellows apply for any modification of the present charter. What we maintain is, that the constitution of the University will be imperfect unless every one connected with it, from the Chancellor to the youngest matriculated student, shall have some common bonds by which all may be united together. The Chancellor, the Senate, the distinguished Members of the different schools and colleges, as the Fellows of University College, and the Associates of King's College, and all graduates of a certain standing, should have definite functions to perform, with a view to uphold and strengthen the interests of the University at large. Unless this is eventually the case there will be something positively ridiculous about the proceedings of the Senate. For instance: they have given the order for cap and gown for the different graduates, but as yet the latter know not what to do with these academic ornaments; they have no hall of convocation, no senate-house in which to display their silk and velvet; and mere decorations, insignia without power, are things quite out of date. When it was time to settle the academic *dress* it was also time to settle the academic *duties*.

With all their faults and restrictions, a slight examination is sufficient to show the wide-spreading roots of the Universities of Oxford and Cambridge. There are, first, the two Universities, the centres, or *foci*, towards which all the segments of the academic systems tend and converge. There are the houses, colleges, and halls, in the seats of the academies, the members of which constitute the universities. Then, the different cities and counties have their fellowships, scholarships, and exhibitions; and in various parts of the kingdom, there are great schools—Eton, Harrow, Westminster, Rugby, Winchester, Shrewsbury, &c.—always feeding the central colleges. These two systems are continually taking within them a great part of the intellect of every generation for cultivation and development; and during student life, the sympathies are powerfully called forth in behalf of school, hall, or college; while, after graduation, the membership of the universities imposes obligations, honours, and duties, which remain, and are generally accorded and acknowledged, through life.

Very different is the system marked out in our own University. Many persons have a difficulty in conceiving of the University of London as a real entity. It has no apparent life or transactions beyond the mere function of granting degrees. It bears the title of University, but its existence and vitality seem tied down to an Examining Board. The graduates being cut off, as they virtually are, from the University, it may be said to consist of thirty-eight persons, six of whom may form a quorum, and be for the time, *de facto*, the University of London. The different schools recognised by the Senate have no connexion with it, beyond the recognition of the certificates they issue. Between the parent university and the Colleges in connexion with it, such as University College, King's College, and Queen's College, Birmingham, no other bond than the presentation and reception of certificates subsists. In the theory and practice of the University of London there are three bodies—the university; the colleges who discipline and transmit certified students; and lastly, the graduates who have passed the examinations: but all three are in a state of separation from each other. Neither the colleges nor the graduates have any real, tangible existence within the University, nor any share whatever in its government. A strict *union* and *correspondence* has been the principle recognised at Cambridge and Oxford: in London, the principle which prevails is that of *isolation*.

Such a scheme of government can never produce lasting greatness. In the first instance, the University may acquire repute by the acknowledged stringency and superiority of its examinations; but ultimately it must come to depend upon the men it sends forth; its fame must be based upon the eminence of its graduates, and these should receive honour in return from their Alma Mater. The point upon which Oxford and Cambridge are most proud, and exhibit most rivalry, is in the possession of such names as Newton and Bacon, Milton and Locke, Harvey and Sydenham: every College has its names, which remain as presences to warm and animate its successive bands of students. The University of London can never be truly great until it can produce its roll of distinguished names. These will come in due time, there can be little doubt, if the Senate will but supply sufficient incentive and promise of honour. The slightest hint that this body intended at any time, however distant, to apply to the Crown for a charter which should make its graduates an integral part of the University, would give a great stimulus to education, and more particularly to medical education—a stimulus which would be felt among our most ambitious students, in all our schools, and among all the University graduates. It would raise up a faithful band of defenders in any emergency that might occur. It would tend to draw benefactions and endowments toward the infant institution, which might soon

spare her the humility of going to the State as a beggar year by year, for the paltry sum doled out with the miscellaneous estimates. It would soon give her strength enough to remove from her present location as a lodger in Somerset-House, with a side-bell, up two pair of stairs, and a council chamber in a second-floor back! But these things can hardly be accomplished, unless some scope for the affection and reverence of her children—some natural tie between parent and offspring, be permitted. Dr. RADCLYFFE would, probably, never have become one of the greatest benefactors of Oxford, and the founder of his magnificent library; and Dr. CAIUS would never have endowed the College at Cambridge which bears his name, if the connexion between these two eminent members of our profession and their Universities had been snapped asunder as soon as they had received their degrees.

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DR. CHAMBERS delivered the annual and his valedictory Address at the Royal Medical and Chirurgical Society, on Monday last; an address which was the essence of urbanity and kindness, tinctured with classical allusion and spirited opinion. The chief topics were, as usual, the doings and characters of the Fellows who had paid the debt of Nature within the year.

The late Dr. BOSTOCK was justly described as an amiable and excellent person, and as amongst our first systematic writers on physiology.

Dr. J. THOMSON, of Edinburgh, was the first, after Mr. ROSE, of St. George's Hospital, to point out the error involved in the mercurial dogma of JOHN HUNTER, and to show that true syphilis, in both its primary and secondary forms, is not intractable to the influence of other remedies besides mercury. To Dr. THOMSON we owe our present just views respecting the identity of varicella and of other forms of varioloid diseases. One event in Dr. THOMSON'S career was mentioned with just disapprobation. During the last illness of GEORGE IV., which all know to have been a form of dropsy, Dr. THOMSON wrote a letter to Lord LAUDERDALE, extolling the virtues of elaterium; a piece of meddling and a breach of medical etiquette and ethics equally injurious to the patient and embarrassing to his physicians, which we are glad to see put down by such authority. We think our own efforts in the cause of medical ethics has perhaps, in some degree, led to the notice of this important question.

Signor TOMMASINI, of Bologna, was celebrated as a clinical physician, and for his adoption and promulgation of the views of RASORI, of Milan, relative to the treatment of pneumonia by the tartrate of antimony. Signor TOMMASINI was an ardent admirer of England and its institutions, saying that it was the only country in which were to be found men, and a government fit for men. For further details we must refer to the Oration itself, given at p. 243.

The impression left on the mind by this Oration was one of the most grateful kind, and we do not wonder at the proud eminence to which Dr. CHAMBERS has attained. Without any pretensions to oratory, it was a display of high and good feeling, of classical attainment, of medical knowledge, and of just criticism, rarely combined in the same individual.

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OF course we must postpone our remarks on the "CRONIN case" until after the trial, which stands postponed to the next session. The grand jury have found a "true Bill" against the prisoner.

## THE ROYAL SOCIETY.

THE following documents relate to an assertion made by Mr. WHARTON JONES, respecting the honesty of the Report drawn up by Drs. SHARPEY and TODD, on Mr. BECK'S paper on the Nerves of the Uterus. Mr. WHARTON JONES'S words to the President, at the general meeting, were—

"The Report, my Lord, does not truly represent the paper; "the Report is not justified by the contents of the paper, but, "as your Lordship is aware, does, as I have stated in a com- "munication to the Council, contain allegations, some of which "betray ignorance on the part of the Physiological Committee' "whilst others are altogether inconsistent with common "matters of fact."

Unless these assertions, and the facts which the documents below furnish, are not controverted, the Physiological Committee must lie under the inference which the profession will not fail to draw respecting their proceedings.—ED. L.

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*Report of the Meeting of the Royal Society, April* 2, 1846.

At the evening meeting of the Royal Society, Mr. Beck's paper not having then been published, Mr. Wharton Jones availed himself of the opportunity offered by the reading of a paper by Dr. Lee, "On the Nerves of the Uterus," on the president's (now usual) invitation to a discussion, to express himself to the following effect:—

My Lord,—There is a point in the anatomy of the nervous system of the highest physiological importance, which, though not peculiarly belonging to the nerves of the uterus, has been lately brought under the notice of this Society in such close connexion with them, that I take the opportunity presented by the reading of Dr. Lee's paper to make some reference to it; and this I do in the hope of eliciting information regarding the discoveries on the point which it is hinted in the Report of the Committee of Physiology appended to your lordship's Anniversary Address, are contained in the paper, "On the Nerves of the Uterus," to which the Royal Medal in physiology was lately awarded.

The point to which I refer comprises the structure of the sympathetic nerve, and the nature of its connexion with the cerebro-spinal system.

In order to put the Society in possession of the question, I will, with your lordship's permission, briefly recapitulate the doctrine on the subject which is at present considered satisfactory by most physiologists:—

The sympathetic nervous cords, I would call to the remembrance of the Society, contain, like the cerebro-spinal nervous cords, coarser and finer primitive fibrils; but there is this difference between the sympathetic nervous cords and the cerebro-spinal nervous cords—viz., that in the sympathetic, the primitive fibrils of the finer kind are much more numerous than those of the coarser kind; whereas in the cerebro-spinal the primitive fibrils of the coarser kind are more numerous than those of the finer kind.

The so-called organic fibres of Remak, which exist in the sympathetic nerve, in addition to the primitive nervous fibrils which I have just mentioned, I need scarcely remind the Society, are now very generally admitted not to be nervous, and ought not to be confounded with the true nervous fibrils of the finer kind.

In regard to the source of the primitive nervous fibrils of the coarser kind, contained in the sympathetic, there has been no difference of opinion that it is in the central organ of the nervous system; but in regard to the source of the primitive fibrils of the finer kind, contained in the sympathetic nerve, there has been, for the last few years, a controversy between two of the most distinguished neurologists of Germany—viz., Professor Valentin and Professor Volkmann—a controversy to which the attention of all physiologists has been forcibly drawn.

Professor Valentin maintains, that all the primitive fibrils of the finer kind, contained in the sympathetic nerve, are, equally with the coarser fibrils, derived from the brain and spinal marrow; whilst Professor Volkmann, on the contrary, maintains, that though some are derived from the brain and spinal marrow, most of them have an independent origin in the ganglions of the cerebro-spinal nerves, but especially in the ganglions of the sympathetic itself.

Professor Volkmann's is the view which has been best

corroborated by the results of observation. To the facts originally adduced by Volkmann in support of it,—such as, for example, that the cords of communication between the sympathetic and the spinal nerves contain a great number of the finer kind of fibrils; that of these a very few only come from the spinal marrow, but that a considerable proportion come from the ganglions on the posterior roots of the spinal nerves, whilst the rest—the majority—come from the ganglions of the sympathetic; these latter turning into the trunk of the spinal nerves, to be distributed with them peripherally,—to such facts as these, I say, originally adduced by Volkmann, there have been added, by Professor Kölliker, the important one, that the fibrils which come from the ganglions have actually their origin from ganglionic corpuscles.

Such, my lord, in a very few words, is the present state of our knowledge on the subject of the sympathetic nerve, and the nature of its connexion with the cerebro-spinal system. Now, what I, in common with many others of the Fellows of this Society, desire to be informed of, by any member of the Physiological Committee who may be present, is, how far the results of Mr. Beck's investigations on the subject gainsay, corroborate, or extend this doctrine; for I must confess, that the statements on the subject, contained in the Report appended to your lordship's Anniversary Address, do not afford the desired information, but are as obscure and guarded as the statements of an oracle.

To this appeal no answer was given by any member of the Physiological Committee present. Dr. Sharpey (one of the authors of the Report) and Mr. Bowman, who were both within his view at the time, Mr. Wharton Jones particularly called upon by name, but without effect.

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*Copy of a letter addressed by Mr. Wharton Jones to the President and Council of the Royal Society:—*

35, George-street, Hanover-square, Dec. 8th, 1846.

My Lord Marquis and Gentlemen,—Before you proceed to reappoint the Committee of Physiology, as hitherto constituted, I would beg to direct your attention to certain allegations contained in the Report made by it last year, on the claims of Mr. Beck's paper to the award of the Royal Medal in Physiology, and to a comparison of them with the state of knowledge on the subject, and with what was actually contained in the paper of Mr. Beck at the time the Report was drawn up.

Your lordship and those of you who were present at the meeting of the Royal Society, on the 2nd of April last, will remember that I took the opportunity presented by the reading of a paper on the Nerves of the Uterus, by Dr. Lee, to ask for information from any member of the Physiological Committee present, regarding the discoveries as to the structure of the sympathetic nerve, and the nature of its connexion with the cerebro-spinal system, alleged in the Report to be contained in Mr. Beck's paper, but that no information was given. You will also remember that I briefly recapitulated the doctrine on the subject which was at the time considered satisfactory by most physiologists.

Mr. Beck's paper having now appeared in the *Philosophical Transactions*, I have been able to ascertain for myself what is contained in it regarding the sympathetic nerve, and its connexions with the cerebro-spinal system. Very little, I find, is said on the subject, and that little, so far from communicating any discovery, is, in comparison with what has been known for many years, imperfect and erroneous. The allegations in the Report, therefore, manifest ignorance on the part of the Physiological Committee; but, worse than this, they are not all consistent with common matter of fact.

The accuracy of what I affirm you will find proved by the following brief comparison between the allegations in the Report and the actual contents of the paper at the time the Report was drawn up.

To avoid mistake, I here insert the part of the Report in question, as it stands printed in the "Proceedings" of the Society.

"1. With regard to the sympathetic nerve, it is shown that there are both grey and white separate branches of communication between that nerve and the spinal nerves. This important fact has, it is true, been already pointed out in the recently published work of Todd and Bowman, but the author of the paper has nevertheless the merit of arriving at it independently, by his own observations.

"2. He has further shown, that the white and grey constituents of the nerve keep distinct from each other, not only in the so-called trunk of the sympathetic, but also in its primary branches, as far as the visceral ganglia, beyond which the white and grey parts become intermixed in the nerves distributed to the viscera.

"3. The precise mode of connexion of the white and grey communicating branches with the spinal nerves is also carefully investigated.

"4. These observations appear important, as tending to throw light on the constitution of the sympathetic nerve, and its relations to the rest of the nervous system."

In regard to the first allegation:—It is not a fact that of the cords of communication between the sympathetic and the spinal nerves referred to, one is altogether grey and the other altogether white. The grey cords contain white fasciculi, and the white grey. But the fact, even as thus modified, is not new—was not, for the first time, pointed out either by Dr. Todd and Mr. Bowman, on the one hand, or by Mr. Beck on the other. It is a fact which has now been well known for a number of years; besides, its importance has been fully appreciated, which it certainly does not appear to have been either by Dr. Todd and Mr. Bowman, or by Mr. Beck.

In regard to the second allegation:—Mr. Beck does indeed say that the white and grey constituents of the nerve keep distinct in the so-called trunk of the sympathetic; but he does *not* say, as is alleged in the Report, that the same thing is the case in its primary branches. But here again, the facts of the case, so far as they are facts, have been already pointed out.

In regard to the third allegation:—It is *not* the fact that the mode of connexion of the grey communicating branches with the spinal nerves is carefully investigated in Mr. Beck's paper. *Nothing whatever is said on the subject.* In regard to the mode of connexion of the white communicating branches with the spinal nerves, something is said; but not so much as has been already known for a number of years.

In regard to the fourth allegation, I think it sufficient only to observe, that it is in the highest degree a mockery and a delusion to pretend that such very imperfect observations as those in Mr. Beck's paper add anything to the knowledge of the structure of the sympathetic nerve, and of its connexions with the cerebro-spinal system.

The comparison which has now been made is, as above said it would be, between the Report and the paper as it stood at the time the Report was drawn up. Since then various additions have been made to the paper in the form of notes and a supplement; but as they are all of a date subsequent to the time when I publicly called the attention of the Society to the state of knowledge on the subject of the structure of the sympathetic nerve, and the nature of its connexions with the cerebro-spinal system, it is unnecessary at present to notice them.

On what I have now said, I am prepared to join issue with any or all of the members of the late Physiological Committee, either in writing, or *viva voce* in the presence of the Society.

In conclusion, my Lord Marquis and Gentlemen, I leave it to you to determine whether, until an examination of the charges I have brought against the Report on Mr. Beck's paper be made, you will be promoting the objects, and upholding the true interests of the Royal Society, by reappointing the Committee by which the Report was drawn up.—I have the honour to be, my Lord Marquis and Gentlemen, your obedient, humble servant,

T. Wharton Jones, F.R.S.

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## SELECTIONS FROM CORRESPONDENCE.

### ETHERIZATION.

*An Inquirer* asks the question, "Would not etherization be an excellent remedy in spasmodic and neuralgic diseases? and as it appears not to prevent muscular action, might it not be administered with great benefit in the passage of biliary and renal calculi?"

Respecting any supposed ill consequences from the inhalation of ether, *Mr. Goddard* (late assistant in Lord Wrottesley's Observatory) says, "During the last seven years I have been experimenting on the effects of the ether several hundred times, and inhaled, probably, a larger quantity than any person living. I compute that I must have inhaled from thirty to forty pounds weight of Howard and Huskinson's strongest; and if really there are ill effects produced by its use, I ought to have discovered it long ago, but I can with truth affirm, that I never experienced any, but was, and am, able to perform long algebraical and logarithmic computations, requiring much thought, with the same clearness as before the period mentioned. During the last three months I have discontinued

my practice of inhaling it, but have done so more with a view not to inconvenience my friends, than from any ill effects I myself experienced."

There can be no doubt of the advantages of simplicity and universality in the mode of using ether. Eventually some one mode of inhalation will, without doubt, come into general use to the exclusion of all others. *Dr. Smith* (*of Cheltenham*) is of opinion, "that the most simple contrivance for the effectual and safe administration of ether by inhalation, is to saturate a sponge with the following etherial solution, and apply it to the mouth and nostrils, so that the patient may breathe easily through it. The etherial solution which I recommend, and which, from its less irritating and more sedative properties, I have found to answer better than either sulphuric or chloric ether alone, is prepared by adding two drachms of etherial oil (ol. etherium) to six ounces of pure rectified sulphuric ether. I have now administered the ether in more than forty cases, and have tried a variety of apparatus, but am persuaded the above is the cheapest, safest, and best. In one case, operated on by Mr. Tibbs, surgeon-dentist, three teeth were extracted without pain, and the effects of the ether were kept up for nearly three quarters of an hour, by the continual application of the sponge, and without the slightest unpleasant after-consequences. Mr. Fricker, surgeon, and Mr. Percy, were present, besides Mr. Tibbs and myself, and expressed themselves highly gratified with the result."

*Mr. Tarrant* (*of the Westminster General Dispensary*) observes, that "the men who have to treat the more severe, urgent, and difficult cases of retention of urine from stricture, in the metropolis, are, I believe, the house-surgeons of hospitals, such cases usually being confided to their care by their superiors. I venture to suggest to house-surgeons to try the effect of the inhalation of ether, as at the 'small hours' in the morning its application may be more readily made, and its object sooner accomplished than by the warm bath, laudanum, &c.; the more especially where, as is too frequent in these cases, they have to contend with the false passages."

*Mr. Evans* (*of Wrexham*) forwards us a case of amputation of the thigh, performed by Mr. Dickenson, of that town.

"The patient, a young man, has been suffering from scrofulous inflammation of the knee-joint for the last seven years. Three years ago, he was recommended to undergo the operation, but would not consent. Mr. Dickenson having told him he could have it removed without pain, he consented to the operation. The patient inhaled the etheric vapour for some time without much effect, the stomach, during its administration, having several times ejected its contents. The mouth-piece of the apparatus being readjusted, and an additional supply of ether, its effects soon became perceptible, and in less than five minutes he became insensible. In less than two minutes the limb was removed, the patient having betrayed little or no symptom of pain. Upon being interrogated, he said he was aware of what was going on, but experienced no pain; remembered hearing the bone sawn through. The application of sutures to bring the flaps together caused slight symptoms of pain, but upon the reapplication of the vapour he almost immediately became insensible."

*Mr. Lewis Leslie* (*of Alton*) describes the removal of a tooth, to evacuate a collection of pus in the antrum. In less than five minutes, the patient (Mr. Leslie's assistant) was so far recovered as to become himself the operator upon a patient wishing to have a tooth extracted under the influence of ether.

*Mr. S. Hope Wraith* (*of Darwen, Lancashire*) had two cases in which the ether produced different effects. In one, a medical pupil, a tooth was extracted without pain; but the ether produced violent gesticulations, similar to those occurring after the nitrous oxide; consciousness remained, but the patient was unable to control his violence. In the other case, amputation of the leg was performed by Mr. Wraith.

"The patient had had a severe compound dislocation of the ankle. Mr. Bury, of Darwen, and Mr. Morley, of Blackburn, being present, the man commenced inhaling, and speedily became perfectly insensible; he continued inhaling about four minutes, and I then amputated his leg. He remained unconscious about three minutes after the operation, and on being asked if he had felt any pain, he said, 'I don't know that I did, but I thought I heard something like the saw going through the bone; but I must have been dreaming.' In this case the man was very much reduced by hæmorrhage. The accident occurred in a stone quarry ten days previous to the amputation; and during most of that time he had been under the care of a local 'bone-setter,' who had told him he could cure him, but who, when hæmorrhage came on, was very anxious that some 'doctor should take charge of him.' The man is progressing very favourably."

We find, from a communication received from *Dr. Collyer*, that he rests his claim to having preceded the Americans in the application to the following passages in a work said to have been published at Boston, U.S., in 1843. The book in question has not been forwarded:—

"The power to produce the nervous congestive condition of brain is not confined to the nervi-vital fluid from a second person. The same state of things may be brought about by mental excitement, accompanied with muscular action; also the inhaling of narcotic and stimulating vapours."

A distinguished physician of one of the great metropolitan hospitals addresses us as follows:—

"The greatest blessing vouchsafed, in these latter days, to those who live on earth, is, for the present, in the keeping of one class of men, and of that alone. The prevention of pain by the inhalation of ether vapour has been hitherto practised only by those whose business is with the healing art. As yet, this gift from Heaven to all is held by us of the medical profession in special and exclusive trust. It is time that we acknowledge the Giver. Let not this warrant of mercy pass from us to the world at large, without the stamp of worship and thanksgiving. It has been often said by the pharisee, that, as a class of men, physicians and surgeons are wanting in the sentiments of love and reverence to Him whose sentence is for life or death. Let us refute this idle and petulant slander now, while occasion serves, at once and for ever. Let the chaplain of every hospital in which these wonders have been witnessed, be invited BY THE MEDICAL OFFICERS of the establishment to offer up their humble and hearty thanks for the late mercies vouchsafed to the patients under their charge. Let every student in every class-room humble himself, with his teacher, in the presence of an agency which renews in suffering man the healing miracles of old. There should be public acts of thanksgiving throughout the land, for this signal favour to man present and to come. Let young and old be earnest for this privilege, with their clergy, and let physicians and surgeons be the first to bow the knee."

## Correspondence.

### THE ORIGINAL DISCOVERER OF THE APPLICATION OF ETHER TO SURGICAL OPERATIONS.

*To the Editor of* THE LANCET.

SIR,—I have lately had the pleasure of receiving a visit from Mr. Horace Wells, of Connecticut, United States, who, as will appear from the documents which I enclose, is the original inventor of the plan of producing insensibility by inhalation during surgical operations. Mr. Wells was introduced to me by my friend, Dr. Brewster, of Paris, who, along with all the Paris physicians to whom the facts of the case have been made known, is convinced of the justice of his claims to priority. Indeed, there does not appear to be any room for doubt on the subject, and it can only be a matter of regret that these claims should have been allowed to remain so long unknown to the medical profession in Great Britain.

Mr. Wells, however, explains his silence in the following manner:—He had left America for Europe before Drs. Jackson and Morton asserted a right to the discovery; and it was only some time after his arrival in Paris that he heard of these gentlemen having, in the most unjustifiable manner, assumed the credit of the discovery. He has since addressed a communication, asserting his claims, to the Academy of Science and Academy of Medicine of Paris, the substance of which will be found in the extract from *Galignani* given below, and intended to have personally brought them before the medical profession in London. Unfortunately, he is only able to remain a few hours in London, as he starts from Liverpool for America by Thursday's steamer, so that he has been obliged to leave in my hands the papers which I address to you.

I would draw the attention of your readers to the important fact, (testified by Dr. Marcy, of New York,) that Mr. Wells had resorted to the use of nitrous oxide and sulphuric ether to produce insensibility during operations, as far back as Oct. 1844, and that it was only several months subsequently that *he himself* communicated the results which he had ob-

tained to Drs. Jackson and Morton, results which Dr. Jackson then treated with incredulity. It is also worthy of notice that Mr. Wells' discovery was not an accidental one, but the offspring of a logical train of reasoning or phenomena long known to the profession; that he did not lay before the profession a "patented receipt," but, without any ideas of pecuniary benefit, brought before it a principle susceptible of being illustrated by different agents. The results, indeed, at which he arrived, were principally attained through the use of the nitrous oxide, which he preferred to ether, and which has not yet been tried, to my knowledge, in this country.

If this discovery should eventually prove as great a boon to humanity as many of the most eminent men in the profession believe it will, it is very desirable that we should know *to whom our gratitude is really due.* I am therefore, personally, most happy to have it in my power to communicate the following documents to you. They will tend to dispel the kind of mystery that has hitherto seemed to conceal the origin, in America, of painless operations. I may also add, that Mr. Wells has promised to forward me, on his arrival in America, other documents substantiating his claims, which I will not fail to communicate as soon as received.—I have the honour to remain, Sir, very obediently yours,

Cambridge-square, March, 1847. HENRY BENNET, M.D.

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THE DISCOVERER OF THE EFFECTS OF SULPHURIC ETHER.

(*From the Boston Medical and Surgical Journal, Dec. 16th,* 1846.)

"We find, by an advertisement in one of the papers, that Drs. C. T. Jackson and W. T. G. Morton have made an important invention, which has been patented. In justice to a fellow townsman, I will give its true history. The first announcement publicly made was by myself, more than a year since, in an article written for the purpose of establishing the doctrine that in disease the vital power is diminished, and suggested that, in all probability, pain was but a peculiar depressed state of the sensor nerves, and in proof stated that stimulants acting upon this system, and having a certain relation to it, would relieve or prevent suffering; and that the dentists of Hartford were in the habit of administering nitrous oxide gas, which enabled them to extract teeth without the consciousness of the patient. The original discoverer of this was Horace Wells, dentist in this city, and he tried the first experiment upon himself. After the idea suggested itself to him, he debated for some time which to use, the gas or ether, but preferred the former, as he thought it less liable to injure the system. Being now satisfied of its powers, he went to Boston for the sole purpose of introducing it to the faculty. He presented it to Dr. Warren, who laid it before his class, but the experiment first attempted partially failing, and no one seeming willing to lend him a helping hand, he ceased making any further personal efforts. He especially made known his discovery to Drs. Jackson and Morton, neither of whom had any idea of it until this moment, and must allow Mr. Wells the whole merit of the thing up to this point. We see by the Journal, that Drs. Jackson and Morton call their invention a peculiar compound. I was fully satisfied that sulphuric ether was *the* article, as it was known to be among the ingredients, and being there, nothing else was wanting to produce the desired effect. The claim, as published, sets the matter at rest; ether, and ether alone, is used, and the world will easily judge how much right Drs. Jackson and Morton have to patent it. Had they been the first to discover the fact that any gas would produce exemption from pain, and had made it known, they would have deserved commendation. They have not done this, nor justice to the true discoverer. Is there any merit in using ether in place of nitrous oxide gas? Certainly not; for the properties of the two things are so alike in this respect, that one is constantly used for the other, and for months I supposed our dentists were using both; and the idea of allowing any man a patent for the use of the one after the effects of the other were known, is preposterous. Mr. Wells' experiments were numerous and satisfactory. One fact discovered, is extremely interesting. It is, that however wild and ungovernable a person may be when taking the gas, simply for experiment, he becomes perfectly tranquil when it is inhaled before an operation: that the mind, being prepared, seems to keep control over the body, indisposing to any effort.

"Unfortunately, it is too true, that mystery, as of a nostrum, is frequently required to induce people, and sometimes the profession, to notice an improvement, and thus far, perhaps, thanks are due to Dr. Morton for compelling attention; yet we must give Mr. Wells the credit he justly deserves of making the discovery, spending time and money in its investigation, and then in nobly presenting it to the world. It is to be hoped every other gas and substance capable of exciting the nervous system may be experimented upon, but we hope no one will think of patenting any if discovered to be similar in its operation.

"P. W. ELLSWORTH.

"Hartford, Dec. 9, 1846."

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(*From Galignani's Messenger, Paris, Feb. 18th,* 1847.)

"M. Serres communicated to the Academy the details of several experiments with ether on rabbits, but as they add little, except in the way of confirmation, to what was stated in the last sitting by M. Gruby, we do not think it necessary to give them here. In direct connexion with this subject, however, we lay before our readers the following letter, which we have received from Mr. Wells, the first discoverer of the scientific application of intoxication as the means of rendering the body insensible to pain. We regret that at a moment when the question of the value of this discovery, and the extent to which it may be safely carried, is under discussion in the Academy of Sciences, Mr. Wells has not made a communication to that body. The facts stated by Mr. Wells are highly important, and are entitled to the more consideration as coming from such a source. He says:—'As you have recently published an extract from the *Boston Medical and Surgical Journal,* which recognises me as the discoverer of the happy effects produced by the inhalation of exhilarating gas or vapour for the performance of surgical operations, I will now offer some suggestions in reference to this subject. Reasoning from analogy, I was led to believe that surgical operations might be performed without pain, by the fact that an individual when much excited from ordinary causes may receive severe wounds without manifesting the least pain; as, for instance, the man who is engaged in combat may have a limb severed from his body, after which he testifies that it was attended with no pain at the time; and so the man who is intoxicated with spirituous liquor may be treated severely without his manifesting pain, and his frame seems in this state to be more tenacious of life than under ordinary circumstances. By these facts I was led to inquire if the same result would not follow by the inhalation of some exhilarating gas, the effects of which would pass off immediately, leaving the system none the worse for its use. I accordingly procured some nitrous oxide gas, resolving to make the first experiment on myself by having a tooth extracted, which was done without any painful sensations. I then performed the same operation for twelve or fifteen others, with the like results; this was in November, 1844. Being a resident of Hartford, Con. (U.S.), I proceeded to Boston the following month (December), in order to present my discovery to the medical faculty—first making it known to Drs. Warren, Hayward, Jackson, and Morton, the two last of whom subsequently published the same, without mention of our conference. Since this discovery was first made I have administered nitrous oxide gas and the vapour of ether to about fifty patients, my operations having been limited to this small number in consequence of a protracted illness which immediately ensued on my return home from Boston, in Jan. 1845. Much depends on the state of mind of the patient during the inhalation of gas or vapour. If the individual takes it with the determination to submit to a surgical operation, he has no disposition to exert the muscular system; whereas, under other circumstances, it seems impossible to restrain him from over-exertion; he becomes perfectly uncontrollable. It is well to instruct all patients of this fact before the inhalation takes place. The temperament and physical condition of the patient should be well marked before administering the vapour of ether; persons whose lungs are much affected should not be permitted to inhale this vapour, as serious injuries have resulted from it in such cases. Nitrous oxide gas or protoxide of nitrogen is much less liable to do injury, and is more agreeable to inhale, producing at the same time equal insensibility to all painful sensations. It may be taken without the least inconvenience by those who become choked almost to strangulation with ether; in fact, I have never seen or heard of a single instance where this gas has proved in the least detrimental. This discovery does not consist in the use of any one specified gas or vapour: for anything which causes a certain degree of nervous excitement is all that is requisite to produce insensibility to pain. Consequently, the only question to be settled is, which exhilarating agent is least likely to injure the system. The less atmospheric air admitted into the lungs with any gas or vapour the better, the more satisfactory will be the result of the operation. Those who have been accustomed to use much intoxicating beverage cannot be easily affected in this

manner. With cases of dislocated joints, the exhilarating gas operates like a charm; all the muscles become relaxed, and but a very little effort will serve to replace the limb in its socket, and while the operation is being performed, the muscles do not contract as when in the natural state, but are as easily managed as those of a corpse. Allow me to add that I have had no opportunity of reading any of the French professional reports or discussions on this subject. I shall remain in Paris until the 27th inst., and in the interval I should be pleased to impart such information as I may have acquired by a close observation of the various phenomena connected with this interesting subject. "HORACE WELLS.

"Rue d'Alger, Feb. 1847."

### SULPHURIC ACID, &c., IN SURGICAL OPERATIONS.

*(From the Journal of Commerce, New York, Dec. 30, 1846.)*

"MESSRS. EDITORS,—A number of articles have recently made their appearance in the medical and other journals of Boston, in relation to a discovery purporting to have been made by Dr. Jackson or a Mr. Morton, of that city. We learn also that a 'patent' has been procured upon the pretended discovery, and that it is now being hawked about as a nostrum. We refer to the use of the sulphuric ether in obviating the pain of surgical operations.

"Justice to the real discoverer of this agent demands that a statement of the facts in the case should be laid before the public, in order that a correct opinion may be formed, and the credit given where it belongs.

"In the month of October, 1844, a dentist of Hartford, Ct., Horace Wells, Esq., first made use of inhalations of the nitrous oxide gas in extracting teeth. The results of his experiments were, that teeth could be extracted without the slightest consciousness of pain to the individual operated upon. During the same month, the writer of the present article, while witnessing the experiments of the gas, suggested to Mr. Wells the use of the sulphuric ether as a substitute for the nitrous oxide gas. Being familiar with the effects of both of these agents, and knowing that other operations upon the system were analogous, I first urged upon him the use of the sulphuric ether, as being equally efficacious, and less troublesome to prepare. Upon reflection and more full discussion of the matter, I advised Mr. Wells to abandon the use of the ether and confine himself to the exhilarating gas. My reasons for this advice were: 1st, The effects of the latter continue for a greater length of time upon the system, and thus enable the operator to complete his operation with more facility; and 2nd. There seemed to me to be less danger of injurious consequences upon the brain and lungs than with the sulphuric ether.

"Some two months after the above circumstance transpired, Mr. Wells visited Boston and had interviews with a Mr. Morton (dentist) and Dr. Charles T. Jackson, to both of whom he communicated the discoveries and facts above named. We are informed by Mr. Wells that both of these gentlemen expressed the greatest surprise and incredulity at his statement, Dr. Jackson alleging that he could not conceive how an 'exhilarating substance could produce such an effect.'

"Mr. Wells further informed Dr. Jackson that he was sure, from facts which he had witnessed, 'that any agent which should stimulate the nervous system up to a given point, would render the body incapable of feeling pain from an ordinary surgical operation.'

"I also take the liberty of observing that about two years since, I made a communication to Professor Revere, of this city, upon this subject, requesting him to make it known to Professor Pattison, in order that he might test the thing. Whether any use was ever made of it, by either of these gentlemen, I am unable to say. That the subject was broached to them, however, previous to any knowledge acquired on experiments made by Dr. Jackson or Mr. Morton, of Boston, I entertain no doubt.

"My own opinion, in regard to the use of the nitrous oxide gas, the sulphuric ether, or any other stimulant, which acts upon the system in such a manner as to render the body insensible to external impressions, is, that it is decidedly unsafe, and that in no given case can we be certain that it will not cause congestion of the brain or lungs. I have known the use of both the first-named articles to give rise to temporary congestion of the brain and insanity.

"Another fact, in relation to the exhilarating gas, &c., is worthy of notice. Under ordinary circumstances, the person who inhales the gas has no control over himself; but if, previous to his taking the gas, he fixes his mind strongly upon some given purpose, and exercises his will steadily, in order to effect and carry out this purpose, he will, in nearly every instance, be able to control himself and remain quiet. Thus it is, that a man will inhale the gas, and sit statue-like during the performance of an operation. This fact may seem strange, but we have tested it in many instances, and know that it can, as a general thing, be relied upon.

"In regard to any opiates or other articles which may have been added to the sulphuric ether, they are, in my opinion, entirely useless and superfluous. It is the ether, and that alone, which produces the effect.

"In conclusion I would say, that for the performance of operations, the nitrous oxide gas will be found more valuable than any other agent. "E. E. MARCY, M.D.

"356, Broadway, New York."

## THE BIRKENHEAD HOSPITAL AND DISPENSARY.

*To the Editor of* THE LANCET.

SIR,—In your journal of Saturday last (Feb. 27th) appears an extract from a letter from Dr. Orpen, complaining of certain resolutions passed by the Managers of the Birkenhead Hospital and Dispensary, which require the medical officers of that institution to be general practitioners, engaged in dispensing their own medicines, and that the effect of such a by-law is, of course, to disqualify all physicians and surgeons who do not engage in dispensing.

I beg to say, Sir, that I am convinced the Doctor knows perfectly well that such is not the case, and I am surprised that he should have attempted to publish so glaring a misrepresentation. The printed copy of the laws of the institution relating to the qualification of the medical officers, will show, that no mention is made of dispensing, and the only qualification required is a surgical diploma from London, Dublin, Edinburgh, or Glasgow; and I may moreover mention, that two of the present medical staff do not dispense their own medicines.

Your correspondent, the Doctor, is a governor of the institution, and was present when the laws were enacted; and the only objection he then made to the nature of qualification was, that members of the College of Surgeons of Glasgow were not eligible, and he proposed this should be added to the rest, forgetting, in his wisdom, that no such college exists. He was himself a candidate for the office of surgeon to the hospital two years ago, but was defeated by a very large majority, and he then, in a letter addressed to your journal, complained that he was deprived of a chance of success by your editorial remarks, which you may remember were called forth by his disreputably puffing circular.

The Doctor is well known to be suffering from a confirmed attack of "cacoethes scribendi," and I trust you will find room for this letter in your columns, as it may prove a beneficial remedy for the Doctor's complaint.—I am, Sir, yours,

A GOVERNOR OF THE HOSPITAL.

## ETHERIZATION.

*To the Editor of* THE LANCET.

SIR,—It is essential to the perfection of the Letheonizing process, as referrible to surgery, that its several effects upon a patient, individually, should be accurately known at the time of operation, so that as little uncertainty as possible should attend its exhibition. For instance: a patient may be influenced after inhalation, in two or in twenty minutes, or scarcely at all, and the insensibility induced may continue in a like varying manner, independently of the difficulty many persons experience in inhaling upon a first attempt. Would there be any objection to a patient practising the inhalation on one or several distinct occasions previously to the operation? By this means a safe and simple procedure would be learned and understood by the oftentimes alarmed patient, and the operator would also become acquainted with the susceptibility of the constitution to become affected, and its power of receiving the required volume necessary to complete even a tedious operation.

The terrors that are now added (yet suppressed) to many afflicted with disease, requiring surgical interference, from the impression that they are to be experimented on previously to the operation, must, to a great extent, diminish not only the inhaling powers, but the necessary effects of the inhalation, acting sometimes, also, seriously on the health existing.

In cases of dislocation, the muscles might be disarmed, and during the application of the taxis, a free etherization might act more beneficially than the tobacco enema.

Yours, &c., CHARLES RAY, Surgeon.

Elizabeth-street, Eaton-square, Jan. 1847.

## Medical News.

The Anniversary Meeting of the Royal Medical and Chirurgical Society was held on Monday, the 1st of March. The largest number of fellows ever assembled on a like occasion was present. The Society is flourishing. The result of the ballot was as follows:—*President:* James Moncrieff Arnott, F.R.S.—*Vice-presidents:* Robert Ferguson, M.D.; Jonathan Pereira, M.D., F.R.S.; Robert Liston, F.R.S.; Richard Partridge, F.R.S.—*Treasurers:* George Burrows, M.D.; Benjamin Phillips, F.R.S.—*Secretaries:* George Cursham, M.D.; Fred. Le Gros Clark.—*Librarians:* William Baly, M.D.; Richard Quain, F.R.S.—*Other Members of Council:* George Budd, M.D., F.R.S.; W. F. Chambers, K.C.H., M.D., F.R.S.; P. N. Kingston, M.D.; Thomas Mayo, M.D., F.R.S.; James Arthur Wilson, M.D.; Henry Ancell; Richard Blagden; George Busk; Charles Hawkins; Benjamin Travers, F.R.S.

Nutritive Bread.—The wheat of England is inferior to that of the continent of Europe. It may, however, be improved by an admixture either with foreign flour or with oatmeal, barley, or beans, and in this state it will be found to form palatable bread. By mixing one third of Canadian flour with two thirds of maize, a very good loaf is produced; and when equal parts of flour and oatmeal, or of barley, or of peasemeal, are employed, palatable bread is the result. Beneficial results would probably follow from the admixture of two or three different kinds of grain, and many of these forms of bread might be substituted with advantage for pure wheat flour in peculiar conditions of the system. When it is proposed to make a loaf of oatmeal and flour, the common oatmeal should be sifted so as to obtain the finest portion of the meal, or it may be ground to the proper consistence. This should be mixed, then, with an equal weight of best flour, Canadian for example, and fermented. If we were to attempt to raise oatmeal (which it appears from the experiments detailed in this volume, is much more nutritive than English wheat) without an admixture of flour, in consequence of the absence of glutin, that principle which retains the carbonic acid of fermentation, we should obtain only a sad, heavy, doughy piece of moist flour. This form of bread, it appears to me, and to all who have examined it, would be a great improvement on the hard, dry oat-cakes, so much used in the more unfrequented parts of our country, where the inhabitants have scarcely as yet commenced to share in what are in other localities considered to be necessaries of life.—*Experimental Researches on the Food of Animals*, by Dr. R. D. Thompson.

Prescription Quackery.—A flagrant abuse in the profession, connected with this subject, is the adoption of secret formulæ, arranged between medical men and chemists, from mercenary motives. We sometimes see such forms as the following: Mistura rhei co., pilula stomachica, pulvis aperiens, &c. &c. These are strong indications of the per-centage system, which, for the credit of the profession, ought to be exposed and discountenanced. Some of our readers may probably doubt the existence of such a system, but we are in possession of evidence which admits of no dispute. A physician prescribes gratuitously for poor patients, directing them to take the prescriptions to a certain chemist, who agrees to hand over a per-centage on the amount received for the medicine. We understand the usual per-centage is one-half. In order to oblige the patients to go to the right shop, secret formulæ are adopted. But it sometimes happens that patients have a preference for some other chemist, who, on being applied to, is obliged to confess his inability to prepare the medicine. When this trick is played upon patients who have paid fees, they are naturally indignant, and consider it an imposition. Undoubtedly, if a patient pays a guinea for a prescription, he is entitled to receive one which can be prepared by any respectable chemist. In the case of the poor, the operation of the per-centage system is obvious, since the quantity of medicine ordered, and the amount charged for it, must be sufficient to remunerate both the prescriber and the dispenser; and this amount is obtained under the cloak of benevolence and gratuitous advice.—*Pharmaceutical Journal.*

Mesmeric Medicine.—The following rival to the mesmeric orator, and to the arsenic prophetess, has just appeared upon the quackery stage:—

"*Clairvoyance.* — The justly-celebrated somnambulist and clairvoyant, Madame la Marquise de San Milan Tecmen, having returned for the season to this metropolis, has taken up her residence at 6, George-street, Portman-square, where she may be consulted every day, from eleven until two o'clock."—*Newspaper Advertisement.*

The Recent Verdict.—Application was made on Friday last to the sitting judge at chambers (Mr. Baron Parke) to allow bail to be put in for the appearance before the sessions of "Dr." Cronin, who had been committed, upon the coroner's warrant, on the charge of manslaughter. "Dr." Cronin was brought up from Newgate by writ of habeas corpus, and the judge having examined the depositions at the inquest, consented to take bail; the accused in the sum of 80*l.* for himself, and two sureties in 40*l.* each. A true bill has been returned by the grand jury at the Old Bailey, but the trial of the accused has been postponed until the next session.

Homœopathy.—Madame Hahnemann, widow of the celebrated founder of Homœopathy, was summoned on the 20th ultimo, before the correctional tribunal at Paris, for having illegally practised the medical art. The prosecution was directed by the procureur du roi, on a complaint by M. Orfila, senior member of the faculty of medicine. Madame Hahnemann declared that she had received a diploma as Doctor of Medicine, in Pennsylvania. She also stated that she never received pecuniary remuneration. M. Delau, M.D., of Montpellier, confirmed the latter fact, and stated that he often consulted Madame Hahnemann. The court pronounced judgment thus: "Whereas, Madame Hahnemann had, without diploma or certificate available in France, illegally practised as a doctor, and at the same time compounded and sold, without legal authority, medical preparations, offences provided against by the law, the said widow Hahnemann be condemned to 100 francs fine, and to the expenses."

First Indictment under the Apothecaries' Act.—Ellis Flitcroft, agent for the sale of "Dr. Coffin's medicines," was charged at the Borough Court, Bolton, recently, under the statute 55 Geo. III., for the better regulation of the practice of Apothecaries, in which it is enacted—"That no person (except such as practised before the passing of the act) should practise as an apothecary without being duly qualified, and who should have a certificate authorizing him so to do." A penalty of £20 is enacted against persons infringing the provisions of this act. The offence is also indictable at common law as a misdemeanor. It was proved that the defendant had sold medicines, particularly in the case of George Greenhalgh, upon whom an inquest had been held; and the defendant was ordered to find sureties to answer the charge at the quarter sessions.

College of Surgeons.—The Microscopic Demonstrations, given every Wednesday, in the theatre of the Royal College of Surgeons, by Mr. Quekett, with so much satisfaction to the visitors, are discontinued for the present, in consequence of the lectures by Professors Owen and Paget: the former will commence the course on Tuesday next.

## CORRESPONDENTS.

*Bolton.*—Would any of our readers inform us respecting the prosecution by indictment said to have been commenced at Bolton against a quack.

*Mr. Butler.*—We thought every one in the profession fully apprized of the tricks of the person calling himself Professor Dewhurst. He had been advertised again and again by the Mendicity Society.

*Anti-quack.*—We have no doubt it is the same Lamb as the one already convicted.

*Dublin.*—We have received the specimen of mineral water quackery.

*Dr. Turnbull's* request shall be attended to.

After a careful search of the *Manchester Examiner* of the 6th instant, we have failed to discover the object of its transmission to our office. The same with regard to *Emery's Journal*, published at George Town, Demerara, Jan. 2nd.

*A. B.*—We are obliged to tell our correspondent that there is no royal road open to him. His best entrance to the profession would be by way of the College of Surgeons of England.

*Alpha.*—We must give our correspondent the same advice as that we have already given to "A. B." Both are under precisely the same circumstances.

*Mr. Lake's* paper will shortly appear.

*Ephemera Hitchinensis* shall not be disappointed.

*M.D.*, (Birmingham.)—We must refer our correspondent to the publisher, Mr. Highley, Fleet-street.

*Musa.*—Rupture of the vocal cords, or of the mucous membrane, might be produced.

Communications have been received from—A very Old Subscriber; Dr. Henry Bennet; Dr. Campbell; An Assistant-surgeon, Royal Navy; Mr. Gilbert Smith; S. H. B.; R. D. T.; Derbiensis; Mr. Balteo; Dr. Simpson's Pamphlet; Mr. Bottomley, (Croydon;) Mr. Hale Thompson; Alpha; Chemicus; Dr. Addison, (Malvern;) Anti-quack; Mr. John Thompson; Dr. Elliot; Medicus; Ephemera Hitchinensis; M.D., (Birmingham;) Musa; High Caste; Dr. Robert Dick; Mr. Bottomley; Dr. Greenhill.

TESTIMONIAL TO MESSRS. BIRD AND ANCELL.

## THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, & MIDWIFERY.

Hanover-square Rooms, Feb. 25th, 1847.

The Members of the Association, and of the Profession generally, are hereby informed, that at the last meeting of the Committee, held at the Hanover-square Rooms, on February the 24th, 1847, the following Resolutions were unanimously adopted:—

"1st. That this Committee cannot separate, at the close of their labours, without acknowledging their unqualified and most grateful thanks to their respected Honorary Secretaries, Messrs. BIRD and ANCELL, for their long-continued, zealous, and laborious services, as well as for the uniform urbanity, good feeling, and ability displayed by them on all occasions, and that, in order to record these sentiments, some suitable Testimonial be presented to each, by the Members of the National Association of Medicine, Surgery, and Midwifery, as a mark of the great esteem in which they hold both their official and private worth.

"2nd. That a Subscription of not more than one guinea be immediately opened for this purpose."

JOHN NUSSEY, Chairman.

*** Subscriptions by Post-office order made payable at the Branch Post-office, Old Cavendish-street, or otherwise, will be received by J. NUSSEY, Esq., 4, Cleveland-row; JOHN PROPERT, Esq., 6, New Cavendish-street; G. J. SQUIBB, Esq., 6, Orchard-street, Portman-square.

TO CHEMISTS AND DRUGGISTS.

TO BE DISPOSED OF, a rapidly increasing CHEMIST'S BUSINESS, in the immediate vicinity of Town, with a respectable and densely populated neighbourhood. It offers particular advantages for a medical man desirous of forming Practice through the medium of a Retail Establishment. The House low rented, very commodious, and a part of the premises let off to cover the rental. Coming in about £400.—For particulars, apply to Mr. Orridge, Medical Transfer Agent, 30, Bucklersbury.

TO SURGEONS, CHEMISTS, &c.

TO BE DISPOSED OF, in consequence of the death of the Proprietor, a PRACTICE, with good Retail, situate in the most fashionable and improving part of the West-end.—For particulars, apply to Ancell and Bryant, Wholesale Druggists, Old Swan Lane, Upper Thames Street.

A POTHECARY WANTED, to take Charge of an Establishment in one of the most healthy of the West India Islands. The duties will demand constant and personal attention. None need apply who cannot exhibit credentials of having been engaged three or four years in a surgery, and a certificate of the Apothecaries' Company. References as to good character will also be required. Liberal terms and a progressive increase of salary are offered.—Address, prepaid, stating age and other particulars, to Messrs. Elliott and Collins, Oxford-court, Cannon-street, City, and attend personally on Tuesday and Wednesday next from Twelve to Three.

A MEDICAL PRACTICE, in one of the Western Counties, having public appointments, TO BE DISPOSED OF, for one year's receipts, on the average of the last three years. Satisfactory reasons will be given for parting with the Practice.—Apply, between the hours of Ten and Three, to Mr. D. Holm, New Custom House Chambers, Lower Thames Street; or to Mr. C. P. Titt, Solicitor, 29, Coleman Street, London.

A SURGEON in extensive Practice in the South of Devon, has a VACANCY for a Youth of genteel connexions, as an APPRENTICE. For Address, apply at THE LANCET Office, 423, Strand.

MEDICAL PRACTICE—£700 annually—NORTH LINCOLNSHIRE.—In this elevated, gravelly, and picturesque spot, very many miles distant from all fens and other noxious influences, a truly respectable PRACTICE FOR DISPOSAL, with twelve months' introduction; and on a site where wealth, health, position, and no clubs or union, are the distinguished features. Price, £900.—Application to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

MEDICAL PRACTICE, DENBIGHSHIRE — £500 annually.—In this romantic county, a respectable PRACTICE of seven years' standing FOR DISPOSAL. A Gentleman, with corresponding habits and address, may retain the respectable families attached. £250 will cover everything. If required, £100 may remain on good security.—Apply to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

MEDICAL PRACTICE, WORCESTERSHIRE—£600 annually—Twelve months, by way of Partnership, if required.—A Gentleman, who can occasionally cross the country, play cricket, with a rubber at whist, will suit this opening, patronised as it is by the gentry and a nobleman of the district. £600, if purchase, or £700, if partnership.—Apply to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

MEDICAL.

A MEDICAL GENTLEMAN, in full practice, is wishful to meet with a SUCCESSOR, as he is about to retire to take up an M.D.-ship. The practice is situate in the vicinity of one of the most populous and rapidly increasing towns in the kingdom. It participates in the summer season in the practice of a most fashionable marine resort, and has an extensive and respectable residuary practice. Any gentleman of good address, talent, and application, (being duly qualified,) by embracing this opportunity, may at once place himself in a lucrative practice. No medical agent or other person need apply who cannot command from £500 to £700.—Address to J. W. C., Thos. Marsden and Son's, Queen Street, Cheapside.

SPONGE & SURGICAL BOTTLES.—CHARLES ROBINS begs to inform the Profession generally that he can supply them with the above articles on unusually advantageous terms.

CHARLES ROBINS, 16, Little St. Thomas Apostle, Queen-street, Cheapside, London.

## SOVEREIGN LIFE ASSURANCE COMPANY,

No. 5, ST. JAMES'S STREET, LONDON.

TRUSTEES.

| | |
|---|---|
| Sir A. Brydges Henniker, Bart. | Henry Pownall, Esq. |
| B. Bond Cabbell, Esq., M.P. | Claude Edward Scott, Esq. |

Assurances on Lives, and Annuities, both immediate and deferred, granted on favourable terms.

A new plan of Accumulative Assurance, by depositing, instead of paying, Premiums.

H. D. DAVENPORT, Secretary.

## STANDARD LIFE ASSURANCE COMPANY.

(Constituted by Act of Parliament, 1825.)

GOVERNOR.

His Grace the Duke of BUCCLEUCH and QUEENSBERRY.

DEPUTY-GOVERNOR.

The Right Hon. the Earl of ELGIN and KINCARDINE.

The TWENTY-FIRST ANNUAL GENERAL MEETING of the STANDARD LIFE ASSURANCE COMPANY was held within the Company's Office, 3, George-street, Edinburgh, on Monday, the 15th day of February, 1847, in the terms of the Act of Parliament by which the Company is constituted.

JAMES MONCRIEFF MELVILLE, Esq. in the Chair.

A report on the progress of the Company's business during the past year was submitted by the Directors, in which the following results were communicated:—

The new Policies issued from the 15th of November, 1845, to the 15th of November, 1846, the Company's business year, amount to 592, the number of proposals made to the Company during the same period being 763.

The amount of new Assurances covered by the 592 new Policies is £368,679 7s. 10d. (an average of £625 for each policy); the amount of Assurances applied for during the year being £476,135 17s. 9d.

The Revenue of the Company is upwards of £120,000 per annum.

The claims have been moderate, both in number and amount, and considerably less than shown by the mortality tables on which the Company's calculations are founded. The results in other branches of the business have been favourable.

The business of the Commercial Life Assurance Company of Scotland has been transferred to the Standard Company during the past year, being 398 Policies, covering about £200,000 of assurance, and being in addition to the new business of the year above reported.

The business of the York and London Assurance Company, which was transferred to the Standard Company in 1844, continues to exhibit satisfactory results in its progressive development.

The report then alluded to the great extension of the Company's business in Scotland generally, and to the rapid progress of the Company in England, also in Ireland.

The increasing success of the Branch Office opened by the Company in Glasgow was a subject of congratulation, and the establishment of Local Boards in Aberdeen and Inverness were reported.

The following new Directors were elected:—

David Smith, Esq., W.S., Edinburgh.
Eagle Henderson, Esq., Merchant, Edinburgh.
James Condie, Esq., Perth.
John Lindsay, Esq., Lawrence Pountney-lane, London.

By order of the Directors,

WILLIAM THOS. THOMSON, Manager.

The Standard Life Assurance Company is so constituted as to afford the benefits of Life Assurance to all who may seek its protection in that form which is best suited to attain the particular object in view; while to those who look to the advantage to be derived by way of bonus to their Policies from the favourable results of the business, there is every inducement to connect themselves with the Company.

The annual contributions demanded for Life Policies have been fixed on the most approved information as to the value of life, and the Company have published an extensive set of Life Tables, (eighteen in number,) setting forth its terms for all ordinary transactions; so that its principles are fully before the public.

Bonus additions to Policies have been declared on three occasions—in 1835, in 1840, and in 1845.

The following are examples of the additions made:—

| | | | | | | |
|---|---|---|---|---|---|---|
| Policy of 1825 for | £1,000 | increased to | £1,600 | 0 | 0 |
| Do. | 1830 | do. | do. | 1,412 | 10 | 0 |
| Do. | 1835 | do. | do. | 1,225 | 0 | 0 |
| Do. | 1840 | do. | do. | 1,087 | 10 | 0 |

An investigation of the Company's affairs, and a division of profits, are made every five years, the next being in 1850.

The system of bonus being an advantageous one for Policy-holders, the Directors of the Standard Company, in fixing the mode of division which they have adopted, gave the subject much attention, and after the most particular inquiry into the practice of other Companies who had divided profits, they adopted the survivorship principle followed by the Equitable Society of London, under which system a policy has been known to realize at death six or seven times its original amount. The Standard Company do not hold out the prospect of similar results as regards the amount of additions to their policies, for there are peculiarities in the arrangements of the London Equitable conferring Class Benefits, and there were advantages which arose in its earlier years, which are not in the present day open to any office. But it is the principle of division which is referred to as common to both Companies, and which has been highly conducive to the production of the great results alluded to.

To the terms and conditions of Assurance the Directors of the Standard Company have directed their particular attention, satisfied that the more liberal these are made, the wider will the practice of Life Assurance be extended.

PETER EWART, Resident Secretary,
82, King William-street.

Forms of proposal and every information may be obtained at the Company's offices, 3, George street, Edinburgh; 82, King William-street, London; 66, Upper Sackville-street, Dublin; 35, St. Vincent-place, Glasgow; or at any of the Agencies which are established in the principal towns of Scotland, England, and Ireland.

MEDICAL TRANSFER AND PARTNERSHIP.

MR. ORRIDGE, MEDICAL TRANSFER AGENT, 30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the honour of being allowed to refer TO THE WRITTEN TESTIMONY of upwards of forty gentlemen of the highest respectability, (between many of whom he has been professionally engaged in matters of transfer,) as a guarantee of the sincerity of his endeavours to conduct business in an honourable and straightforward manner.

Mr. Orridge takes leave to point out that his Agency offers particular advantages to gentlemen ABOUT TO RELINQUISH PRACTICE, EITHER WHOLLY OR IN PART, by placing them in direct communication with applicants for purchase of suitable professional standing and pecuniary resources, an INDISCRIMINATE publicity being carefully avoided.

Gentlemen ABOUT TO COMMENCE, who favour Mr. Orridge with the nature and extent of their wishes regarding purchase, may depend on being informed of appropriate opportunities as they occur.

Assistants provided on the plan formerly observed at Apothecaries' Hall.

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ETHERIAL INHALER, as constructed by Dr. BOOTT and Mr. ROBINSON.

Mr. HOOPER has the greatest satisfaction in stating, that at each of the Metropolitan and Provincial Institutions at which this apparatus has been used, it has been successful. Messrs. Lawrence, Fergusson, Guthrie, Aston, Key, Morgan, Thomson, M'Murdo, Salmon, and others, have operated whilst their patients have been under the influence of ether, by means of this instrument, with the most complete success, to whom Mr. Hooper begs to refer, and to the reports in the recent medical journals. The success attending this inhaler is, in great measure, owing to the construction of the valves, and the purity of the ether.

The ether Mr. Hooper supplies is precisely similar to that with which his apparatus is charged when sent out, and which is specially prepared for inhaling. Mr. Robinson's treatise can also be obtained of him, and which gives a sketch of the apparatus.

7, Pall Mall East.

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ETHER PREPARED EXPRESSLY FOR INHALING —also every description of Apparatus for administering the above—may be had at Messrs. Hewlett and Goddard, Wholesale Chemists, Arthur-street West, London Bridge.

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ETHER INHALERS, as recommended by ALFRED SMEE, Esq., F.R.S., and now so extensively used by the principal London and Provincial Hospitals. Manufactured by Horne and Co., Successors to E. Palmer, 123, Newgate-street, London. Price, complete in case, £2 12s. 6d.—Agents, Messrs. Gale, Baker, Warde, and Oldfield, Bouverie-street, Fleet-street.

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T. W. ATLEE & Co.'s PATENT PORTABLE ETHER INHALER, secured by Act of Parliament. This apparatus is extremely simple, and requires little or no preparation for its use. It has been tried successfully at the Birmingham and other Hospitals, and in all cases producing narcotism in much shorter time than any other instrument yet invented. To be had at their manufactory, 139, Snow Hill, Birmingham, and at the following London agents: Messrs. Savory & Moore, New Bond Street; Messrs. Philp and Whicker, St. James's Street; Mr. Read, 35, Regent Circus; and Messrs. Pepys and Williams, 22, Poultry. It can be forwarded through the post office if required.

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ROYAL COLLEGE OF CHEMISTRY, HANOVER-SQUARE, LONDON.

THE PRACTICAL COURSE OF SCIENTIFIC INSTRUCTION in this Institution is under the direction of Dr. A. W. HOFMAN, assisted by Dr. JOHN BLYTH, and Junior Assistants.

The FOURTH SESSION will commence on MONDAY next, the 8th of MARCH, in the NEW LABORATORY, and end on the 31st July.

The fee for Students, working every day during the Session, is £12 10 0

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|---|---|---|---|---|
| " | " | " | Four days in the week..... | 10 0 0 |
| " | " | " | Three days " ..... | 8 0 0 |
| " | " | " | Two days " ..... | 6 0 0 |
| " | " | " | One day " ..... | 4 0 0 |

The hours of attendance are from Nine to Five.—Further particulars may be obtained on application to the Secretary, at the office of the College, Hanover-square.

By order of the Council,
WILLIAM JOHNSON, Secretary.

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TO THE MEDICAL AND SURGICAL PROFESSION, &c.

TARRATT'S BANDAGE AND STRENGTHENING PLASTER.—This Plaster, from the nature of the composition and the material on which it is spread, is well adapted for a permanent bandage, as it neither produces irritation of the skin, nor, when well applied, does heat cause it to lose its adaptation to the part. Having these qualities it is peculiarly valuable in the treatment of ulcerated legs, varicose veins, &c., where equal and constant support is required. Several of the most eminent surgeons, approving of this plaster, continue to use it in their practice, preferring it in certain cases to any other. This plaster is well suited for exportation to, and use in, warm climates, the high temperature having less effect on it than on any other plaster, not injuring it in the least.

The profession are referred to Messrs. R. Westwood and Sons, Wholesale Druggists, 16, Newgate-street, where the plaster may be had in packets at 2s. 6d., containing three yards, or spread upon skins of Chamois leather, at 3s. 6d. each.

Medical gentlemen can also have it through the druggist who usually supplies them.

Messrs. WESTWOOD also beg to call attention to their Concentrated Preparations, Essences, &c., which have maintained their superiority for years. The Essence Aurunt. Comp., Cascarilla, Calumba, Gentian Comp., Rosar Comp., 2s. 8d. per lb.

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**HOOPER'S PREPARATIONS.**

EXTRACT (Inspissated Juice) OF TARAXACUM, Dose 1 to 2 drachms.

LIQUOR, or FLUID EXTRACT OF DITTO, prepared without heat, and not impaired by climate.
LIQUOR, or FLUID EXT. OF SARZÆ, dose, a dessert spoonful.
INSPISSATED OX-GALL.
PURE COD-LIVER OIL.
SULPHATE OF MANGANESE.
OXIDE OF SILVER.
PURE TANNIN and GALLIC ACID.
MATICO, the preparations of.
CITRATE (Ammonio Citrate) OF IRON.
CITRATE OF QUININE AND IRON.
SYRUP OF DITTO, dose, a teaspoonful.
IODIDE OF IRON.
SYRUP OF DITTO, dose, a teaspoonful.
ALKALOIDS.

**HOOPER, Operative Chemist,**
7, PALL MALL EAST, (Opposite the College of Physicians,)
IMPORTER of GERMAN and other MINERAL WATERS.

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TABLE and DESSERT KNIVES in CASES.—MECHI, Cutler, 4, Leadenhall-street, has an excellent variety of perfectly new patterns in ivory, pearl, and agate; DESSERT KNIVES in CASES, and every description of table knives, excellent in quality and reasonable in price. Also, a variety of Knife Sharpeners, (several new patterns,) Wharncliffe penknives, scissors, razors, strops, paste, and shaving-brushes, &c. His razor strops and paste are well worth the attention of those who find shaving difficult.

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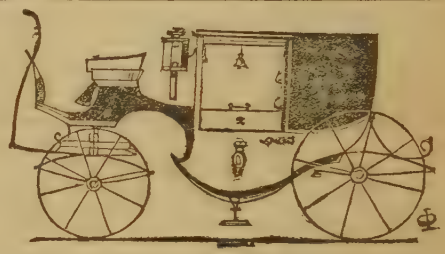

JNO. OSBALDESTON, COACH-BUILDER, respectfully intimates that he has made a very equitable reduction in the prices of CARRIAGES, both for Sale or Job, to gentlemen of the Medical Profession in Town and Country. Manufactory, 19, Little Portland-street, (directly opposite the Royal Polytechnic,) Regent-street, London.

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THE WELLINGTON SURTOUT, a new LIGHT REPELLENT OVER-COAT for the SPRING.—Registered 6 and 7 Vict., cap. 65.—PATRONIZED by H.R.H. PRINCE ALBERT, the ROYAL FAMILY, His Grace the COMMANDER-IN-CHIEF, the PRINCIPAL NOBILITY, and OFFICERS of the GUARDS.

This gentlemanly garment, cut without the usual seams at shoulders, so as to improve the figure, and which (owing to its elasticity) fits equally well, either as an over-coat or a LIGHT SUMMER FROCK, is made of a peculiar cloth, manufactured in the West of England, expressly for this coat, of double twist warp and weft, and finest Saxony wool. It is guaranteed to endure and maintain its primitive appearance at least twice the time of ordinary cloth, however good the quality, as it does not wear white or rough, and although repellent, is perfectly porous. The sleeves are lined with a rich durable silk, so that the coat slips on and off easily, and, owing to its softness, lightness, and elasticity, the wearer experiences perfect ease and freedom when the coat is buttoned.

The WELLINGTON SURTOUT commends itself to all who desire a quiet, elegant, gentlemanly appearance: it is kept in every size and leading colour, ready for immediate wear, price two guineas and a half, net cash on delivery. Every genuine coat has a stamp bearing the royal arms, with the name and address of the patentee, JAMES FOUGERE, 6, CONDUIT-STREET, REGENT STREET, and 11, POULTRY, near the Mansion-house, London.

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APPARATUS for PROLAPSUS UTERI.—WEISS and SON beg to recommend Dr. HULL'S ABDOMINAL SUPPORTER for PROLAPSUS UTERI, which, after some years' experience, has been found to supersede every variety of Pessary, and has been universally approved of. It is applied externally, and affords immediate relief, enabling those previously confined to a recumbent position to walk about with ease and comfort, while, in many instances, a cure has been effected.

Pamphlets may be had at their house, 62, Strand, where an experienced female is employed to attend ladies.

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MINERAL SPA of BATH.—The celebrated Hot Mineral Waters of Bath possess all the curative properties of the most esteemed Mineral Waters of Germany, and present a most valuable remedy in all rheumatic, gouty, paralytic, and chronic affections; in contractions and lameness arising from the above disorders; in sprains, or other local injuries; in all cutaneous diseases; biliary and glandular obstructions, and uterine affections, as well as in complaints referable to the female constitution: they are also most beneficial in hypochondriacal and hysterical affections, and in general disordered health, with impaired digestive powers. The most eminent physicians and surgeons, including Sir James Clark, Dr. Locock, Sir Alexander Crichton, Sir James Johnstone, Dr. Granville, Dr. Chambers, Dr. Barlow, Sir Astley Cooper, Sir Benjamin Brodie, Mr. Guthrie, &c. &c., have testified to the highly valuable curative properties of these mineral waters, which is further evidenced by the large and increasing number of invalids who annually resort with such signal benefit to these mineral springs.

The Baths and Pump-Rooms are unquestionably the most elegant and complete in Europe, and have been recently fitted-up and refurnished with every possible comfort and accommodation.

Bath is now reached from London (by the Great Western Railway) in two hours and a half, from Exeter in one hour and a half, and is admirably suited for the residence of the invalid, combining all the refined amusements and recreations of the metropolis with the pure air and invigorating breezes of the country.

Messrs. Green and Simms, Lessees of the Establishment of Pump-Rooms and Baths, of whom every information may be obtained.

# Annual Oration

DELIVERED BEFORE

## THE MEDICAL SOCIETY OF LONDON,

*March 8th*, 1847,

BEING THE SEVENTY-FOURTH ANNIVERSARY.

By GOLDING BIRD, M.D., F.R.S.

THE difficulty of selecting a fit subject for an Address on this the seventy-fourth anniversary of our venerable Society, arises less from the dearth of material, than from the number and diversity of the most salient objects which have engaged the attention of our profession during the preceding twelve months. The feverish excitement produced by discussions on the proposed government plan of medical reform has perhaps thrown a tone over the general tenour of the profession, from which it has not yet emerged; nor is it likely that the influence of such an incubus will be dispelled until the status of our profession, with regard to the public at large, and of the different sections of it with each other, are more definitively settled. Still, notwithstanding the hosts of individual interests mixed up with this and all such questions affecting the policy of medicine, its cultivators have not been idle; and we may boast with reason of the great and valuable additions made during the year to our recorded experience, and of the contributions made to the common treasury of science. Indeed, this circumstance, among others, is but an illustration of the great feature of our profession,—one which, I sincerely hope, will ever be its boast,—that no question of personal interest affecting the status, rank, or station of its members, ever allows them to forget that they are members of a liberal profession—of one which depends upon experience for its development. Thus we find, what perhaps it would be difficult for any other calling to afford an analogous example to, that the same pen which one week is advocating some peculiar views on medical policy, is the next engaged in developing some plan of treatment, or recording some new addition to the art of healing. Never does science shine in so brilliant a light as when it can exhibit its votaries, whilst depending upon it for the means of subsistence, anxious, apart from all narrow feelings of selfishness, to extend its limits, diffuse its blessings, and make it more and more a boon to their fellow-men.

I do not purpose to occupy your time by an examination of any one of those interesting subjects connected with medicine as an art which have so prominently occupied our attention, as these, I think, are better fitted for our evening meetings; but, with your sanction, I shall endeavour to make some remarks on a matter of general and absorbing interest, and which it is the duty of every medical man, whatever may be his rank, to pay some attention to. I need hardly say, that I refer to some of the social relations of our profession. In doing this, I feel anxiously the position in which I am placed, in some sense as the mouth-piece of a Society which has, from its birth, held so high a rank in the Associations of the scientific world. Had I consulted my own inclinations,—had I been merely in private practice, I should have left the consideration of such a subject to others, whose inclinations or acquirements better fitted them for the task; but I feel that those who happen to be indebted for their position, for the very name they may possess, to the place they hold in connexion with medical education, have a heavy responsibility resting upon them, which compels them to stand forward and advocate whatever promises to aid the commonweal of the profession to which they owe their reputation, their practice, and perhaps their very means of existence. I feel that some may ask—What claim have I to your attention whilst discussing such a subject, one which, like the bow of Ulysses, will yield to none save the bold pair to whom was given the power to bend it? During the seventeen years in which I have been a member of our profession, eleven have been spent in the responsible and onerous duties of teacher in one of the largest hospital-schools in Britain—of one, the fame of whose past teachers make their successors feel deeply the yoke of responsibility they bear. During this time, I have seen much of the practical working of many of the present plans affecting the education and status of medical men of all ranks, and in my own struggle for reputation have perhaps felt as severely as any, deeper than most, the effect of their influence, against which all have to combat who aspire after a reputable position in the archives of medicine.

In a critique upon the introductory discourse which, at the beginning of the present session, it was my duty to deliver at Guy's Hospital, I was reproached—although in so gentlemanly and kind a tone, that it made me feel the very rebuke a compliment—with being blind to the social interest of my profession, and that, content with what I had gained, I was careless of what might occur to others. I confess, kindly as this was worded, I deeply felt the rebuke, a feeling not lessened by my respect for the scientific attainments of the critic, if I am correct in referring the notice in question to its proper author. Still, were I addressing the same auditory, I believe I should repeat the same remarks; for I do hold that students engaged in mastering the rudiments of our profession have something else to do than to waste the time that ought to be spent in making them successful practitioners, in the consideration of disputes about medical reform. Now, indeed, my position is very different. addressing, not the alumni, but the experti; not the rising student, but the accomplished practitioner; not the medical infant, but the developed man; and a subject totally unfitted for the discourse alluded to, becomes a proper one for this arena. I confess I feel happy in having this public opportunity of alluding to some subjects connected with the social and political relations of that profession to which I am attached by the deepest ties of interest and gratitude; and to my position in which, I owe everything of a worldly character which I value or prize. In now making, what, after all, will appear, in the minds of my older and respected fellow-members, but crude remarks, I must beg the kind patience and consideration of those from whom I may unfortunately differ, honestly pledging myself that not a remark will occur which has not been elicited by deep conviction, and often bitter experience; and feeling that the time is come, when, after the recent agitation on such questions, if the members of the different sections of our profession would meet on common ground, each sacrificing his selfish interests for the good of the whole, the commonweal of practical medicine would be rendered more prosperous, and an amount of unanimity and comfort diffused among its members, of which they have been deprived for ages.

No one can cast a glance over the history of our profession during the last half century, without noticing how much its constitution has been altered. Although the same terms are still employed to designate the different classes of practitioners of our art, how essentially are their respective functions altered to what they were when these titles were first applied. The physician no longer has the privilege of being the only recognised practitioner of medicine; the surgeon is no longer the mere hewer and carver of the human frame; and the apothecary, if he has not altogether disappeared, has ceased to be "the physician's cook." This great change, this virtual alteration in the organization of the profession, is attributable to the influence of a more extended education, which, by rendering the acquirements of the different classes of practitioners more equal, has tended much to remove those absolute distinctions in grades which existed so completely at the end of the last century. The gross absurdity of giving an imperfect education to men destined for what were then deemed the inferior ranks of medicine, has been long admitted, and, year by year, has become less recognised, and now may be said to have altogether disappeared from the scheme of medical education. The aspirants for practice who have left the large hospital schools during the last few years, have really acquired an amount of knowledge which was scarcely within the grasp of the physician twenty years before. No one can, I think, for an instant, here refuse to accord the deep debt of gratitude to the Society of Apothecaries; for, however anomalous the accident, (for such I will call it,) of a trading body, a city company, retaining in their grasp the right of dictating the terms for the education of candidates, and of holding in their hands the exclusive right to open or close the portals to general practice, yet it must be acknowledged that that body of gentlemen well and worthily have done their duty, and, as far as was in their power, alike through good report and evil report, were the most active agents in advancing the standard of medical education to its present position. When we compare the curricula of the last fifteen years, we shall at once have ample proof how much has been done by that Society. Whilst retaining the name of apothecary,—the only legal one which entitles to general practice,—the practitioner has ceased to be what that term implies; he is, or ought to be, both physician and surgeon, differing only, from custom or convenience, in dispensing his own drugs, instead of leaving his prescripts to the mercies of the druggist. Whilst the accomplished general practitioner does his duty

in his own sphere, he fills a position, not only of the highest usefulness, but of responsibility and importance. The old apothecary having disappeared, the educated practitioner who has replaced him, at once becomes, from his own acquirements, the rival of both physician and surgeon, and perhaps this, the necessary result of a greater equalization of acquirements, (and therefore one of which we, as members of a liberal profession, ought to feel proud,) has tendered more than any other thing to excite those heartburnings, bickerings, and dissensions, which have, from time to time, so obscured the fair fame of our art, and too often exposed its practitioners to the shafts of ridicule launched at them by the public. It is true, that whenever, in a post-prandial speech, our profession is alluded to, one would think, from its tenour, that no calling in life equalled it for the mutual peace, harmony, and charity of its members. These attributes do, indeed, distinguish our members, in relation to the public at large. No one exceeds a medical man in his desire to diffuse peace in his own limited circle. How often is he called upon to heal breaches in the broken union of the families of his patients; how frequently to be the mediator in domestic dissensions. Who so distinguished for their charity? Can any one point out any other body of men who do so much for nothing? who, without fee or reward, are ever foremost to perform the most unselfish of Christian duties; to stand by the bedside of infection, heightened by the privations of poverty, without any other fee or reward than the grateful thanks of the looker-on, or the blessings of the dying man. Alas! how different the picture of the mutual relations of our members, in too many instances, with each other, (I mean, not in sickness, for then all animosity, even between rivals, is forgotten, and each feels a pleasure in seizing the opportunity of aiding the other;) but in health, and struggling for the means of existence, how little of this charity and harmony—how much of heartburning and jealousy, starts at once into a bold relief.

Whenever the distinctions, either in terms or modes of practice, can be settled by some wise and comprehensive scheme, much will be done towards putting an end to those evils which so frequently cross our path, do what we will to avoid them. I say, *distinctions in terms and modes of practice, for distinctions in rank can, for the future, depend alone upon the respective acquirements of their possessors, and not upon the titles they may be pleased to append to their names.*

That the general practitioners must always be, beyond all comparison, the most numerous and influential body in our profession, must be at once obvious, and any plan of legislative reform which does not give them their proper and legitimate status must at once, from this very circumstance, completely fail in effecting any real good. Of all the plans which have been proposed, I do certainly think that suggested by the editor of the *London Medical Directory* is the best. With him, I think there ought to be (excluding those who practice specialities) but two classes in our profession—the general and consulting practitioner. Under the former term ought to be included those who practise both medicine and surgery, with or without midwifery. I think any distinction founded on a gentleman supplying his own drugs, or merely writing a prescription, is absurd, so long as he merely uses them as his own weapons in combating disease; for if he deals in them as a druggist, with an open shop, he, to all intents and purposes, retires from the dignity of his profession, and becomes a tradesman; and I believe that every well-wisher to his profession will feel happy at seeing all its members cast down those external attributes which the druggist shares with him. Consulting practitioners must of necessity exist, even if any enactments should destroy the titles which usually distinguish them; for to acquire such a knowledge of his profession as shall enable a practitioner to practise the three branches of his profession with credit to himself and safety to his patient, is alone an immense labour, and not merely one exerted during a few years of pupilage, but persisted in during the whole of his career. I verily believe, that no other occupation of life involves so vast an amount of mental tension and labour. But difficulties will arise in practice—puzzling points in treatment—anxious questions in diagnosis; the patient will be, perhaps, apprehensive regarding his recovery; the alarms of his friends be excited; and then a second opinion is sought for—a consultation is required. Hence arises the necessity for a number of men, although a limited one, who, from the bias of their education, their inclinations, or accidental positions, have devoted themselves to the study and investigation of one of the three branches of the profession. The physician, who has devoted all his energies to the study of general medicine alone, the surgeon, to that of operative medicine, and the accoucheur, to that of obstetric medicine, is referred to. This remark brings before us one of those points which, of all others, has most tended to create jealousies and difficulties in our relations with each other. I refer to persons arrogating to themselves the title of consulting practitioners, and preferring in the eyes of the public a high claim to their consideration, when they have no right to it, either from their acquirements or the character of their practice, their title to this rank being resolvable into this, that they do not supply their own drugs. Thus, if a person calls himself a pure surgeon, and yet practises everything, I ask, in what respect does he differ from the general practitioner? Like him, he diffuses his talents over the whole of the vast field of the healing art, and therefore cannot hope to have that value attached to his opinion on any case which ought to be accorded to it if he had devoted all the energies of his mind to the department of practice to which it belongs. Again, the physician who practises surgery is in the same position, and is, to all intents and purposes, a general practitioner. I know that these remarks may be met by the statement, that cases occur which belong alike to both provinces, and form the debatable ground between the physician and the surgeon. This is true enough; but these form just the exceptions required to make the law a general and not a universal one. No one can doubt to whose province the treatment of pneumonia or a broken limb can belong; and I confess, I think every one forgets his position who, whilst claiming the consideration of the public at large, and his brethren in particular, thus derogates from his legitimate duties. There may be those who lay claim to the power of grasping excellence in all the departments of practical medicine in their own person—who believe themselves equally competent to the minutest refinement of physical diagnosis, which perplex the really experienced physician, and to the performance of the boldest and most intricate of surgical operations. That such a medical Crichton may exist is possible rather than probable; and if he should be recognised, must, like that wonderful Scot, be indeed regarded as a blazing luminary in the world of science. If, indeed, we look to the recognised consulting practitioners themselves, how generally do we find, from some circumstance or other, that they have, in the minds of the general profession and the public, become to some extent classified; and one is often chosen in preference to another as a referee in a difficult case, from his having been supposed, from the character of his investigations, to possess peculiar excellence in the class of diseases to which it refers.

If the distinctions thus proposed by the editor of the *Directory* were admitted in essence as well as in terms, one great step would be taken towards making the great machine of practical medicine work more smoothly. Unfortunately, all consultations are now too frequently avoided, for fear of being eclipsed by the referee who is called in, at least in the eyes of the patient. All this would be done away with, if it were understood that in absolute rank all practitioners were alike. The general practitioner possessing a sound and excellent knowledge of all the branches of his profession; the physician, whilst inferior to him in surgical and obstetric knowledge, ought to bring more information upon medical questions; the surgeon, on the other hand, inferior to him in knowledge of medicine, ought to be able to bring to his assistance more manual tact and operative experience.

It has always appeared to me that all these difficulties would be met, by making but one portal to the profession, through which all must enter who wish to join its ranks; and the first means of effecting this must be by doing away with (what I believe is already nearly practically abolished) the odious and absurd system of five years' apprenticeship, or rather waste, of the most valuable years of a man's life, an exaction which cuts dangerously in two directions, causing a lad to be taken from his school before his mind is fully developed, and curtailing, on the other hand, the number of years which might and ought to be devoted to the proper and well-directed study of his profession. I anxiously look forward to the time when some one qualified for this difficult task shall develop a plan, which will present this great advantage of opening one general door to our profession. If all students, when commencing their career, were to spend a given time in becoming well acquainted with all the branches of their profession, and, at a certain period, all undergoing the same examination, and receiving the same licence, a great good would be gained. Then, such as, from inclination or other causes, wish to devote themselves specially to one branch of the profession, could do so with far greater advantage than if they were ignorant of all others, and they might, after a certain devotion of time to such object, and passing a second and searching examina-

tion, be received into the class of consulting practitioners, with the distinct understanding of their confining their practice to medicine or surgery, according to their choice, and not becoming the rivals of their brethren in general practice, by dabbling in all. By such a plan, a general practitioner could, as his experience increased, or his views in life altered with his inclinations and circumstances, pass at any future time into the class of consulting practitioners. One great and serious difficulty stands in the way, at present, of any hope of this important adoption of one portal common to all; this is one of which I can speak with some authority; I refer to the too frequently imperfect preliminary education of the aspirants for our profession. The distinction of grades which has so long existed has been a pregnant cause of this fearful evil. Too few, excepting those looking forward to the College of Physicians, commence their medical studies with anything like a sound classical and mathematical education, so essential to their proper standing, and the want of which all must deplore, who unfortunately do not possess such advantages. In conversing with "freshmen" on such subjects, it is too generally found, that they bring with them a mere smattering of classical, but little mathematical knowledge, and too frequently an absolute ignorance of the modern languages, so essential and important to every gentleman who becomes a member of a liberal profession. Of course there are many and noble exceptions to this statement, but still the picture I have presented is not overdrawn; the mass certainly fall under the category I have alluded to. It is painful to see a person who might make a respectable tradesman or trustworthy clerk, entering a profession to which he is by education unfitted. Nor can this be remedied, until the state interferes with the great subject of education. It is a disgraceful thing, that in England any man may open a school, and assume the dignity of preceptor, without an approach to the attainments which fit him for his practice. When we reflect but for a moment on the influence exerted by education on the boy in the career,—nay, on the habits, intellect, and mind of the man,—can we avoid being struck with the monstrous anomaly which compels every illiterate enthusiast who considers he has a divine call, to apply for a licence to preach, and which does not permit the lawyer to practise without his annually renewed licence, should yet not interfere to protect the mind of the child (who is, indeed, the father of the man) from running to waste from ignorance and neglect, or becoming poisoned by the rank weeds arising from bad associations, and often worse principles. It is true that good schools are to be met with, and that many on a collegiate system (excepting the doubtful question of residence) are now more abundant, and that, thanks to the principles inculcated by that noblest of institutions, the Established Church of the realm, the clergy, a body so peculiarly fitted for such duties, often undertake the task of teaching. Still, too many parents can ill distinguish between the accomplished preceptor and the academic quack. How useful would it be, then, to place at the proposed portal of our profession a means for sifting the knowledge of those who seek to enter, and thus to determine on their fitness for such an honour. This might be effected by a comprehensive matriculation examination, the passing of which should be considered as giving the *sine quâ non* right of stepping on our threshold. How far better would this be, what a better class of educated youths would knock at our door for admission, if such a plan were adopted, instead of deferring such a task until the application for a licence, and then limiting it to the poor farce of translating half-a-dozen lines of Gregory or Celsus.

The Royal College of Physicians deserves the gratitude of the profession for having always maintained, by its mandates, the necessity of such a connexion between a sound classical knowledge and professional experience. And if, in their liberality, the governing powers of the College has lately somewhat relaxed certain of their restrictions, it has been for the wisest purposes, and attended with satisfactory results. This body has indeed set a noble example of liberality before the other governing bodies of the profession, in boldly, against the custom, experience, and prejudice of centuries, throwing open the doors of the fellowship to all their members, and determining that a man's acquirements, and not the name of the university at which he graduated, should alone earn for him that honour. Witness the last election, in which the two excellent physicians who were called upon to take their seats among the fellows, were neither of them graduates of an English university, which, for centuries, constituted the only claim to the fellowship; and whoever has the pleasure of knowing Dr. Risdon Bennett and Dr. William Baly, will acknowledge at once that talent constituted their real title to admission. How much dissent might have been prevented, how many heartburnings quenched, had another College followed such a liberal example. The College to which I have the honour to belong, legislating, as it does, for a necessarily small body, however much it may have the will, has unfortunately not now the power (once, indeed, offered to it, and fatally declined) of interfering for the great body of the profession. It must therefore help itself, and there must be among its members some of those high-toned and good spirits fitted to grapple with the task.

I dare not trust myself with the serious question of possible improvement in the arrangement of the details of education for pupils who have entered my imaginary portal; many will rise to view, such as the numerically dealing out of lectures, the abuse of the certificate system, the evils of permitting persons to arrogate to themselves the rank of teachers who have not one single qualification for the task, the existence of what are called private schools of medicine—that is, of schools professing to instruct pupils in the practice of medicine, without even the capability of affording clinical or bedside instruction, the only mode of learning our profession; and, lastly, the gross anomaly, when students are struggling to acquire knowledge, not only to fit them for their practice, but to obtain the diploma permitting them to do so, to find themselves perhaps listening to teachers who actually possess no legal right to practise, and thus are positively violating, in their own persons, the very laws whose mandates they profess to enforce. In connexion with this remark, I am anxious to allude to the bad effects resulting from too many practitioners purchasing medical degrees, worthless and contemptible alike from the facility with which they are procured and from their not giving the most distant approach to a respectable status in their profession. The licence of the Society of Apothecaries is a far greater proof of a man's attainments than the possession of a host of purchased titles. So long as a medical man does not practise as a physician, so long, I conceive, he ought to keep that affix to his name which is correct and customary: whenever he thinks proper to limit himself to consulting practice in medicine, then the title of "Doctor" becomes a necessary appendage. With regret I have noticed respectable and excellent practitioners becoming so deluded as to degrade themselves by such surreptitiously acquired titles. If the possession of a purchased title of M.D. is of no influence, why possess it? If it, in the eyes of the public, places a man in a position which he is not legally entitled to occupy, its possession is dishonest. I have many times known persons who have been rejected at Blackfriars, flutter in the jay's feathers of a German diploma, and presume to claim consideration above the accomplished and qualified practitioner.

If the abuses to which I have alluded could be removed—if the two classes of practitioners alone existed—if each followed the plan of keeping to his own department of practice, much of the necessity which now exists for some stringent code of medical ethics would be done away with. Still the profession would hail with pleasure a work emanating from a respected name, based on that of Dr. Percival, but modernized and fitted for the present state of things. His interesting work is everywhere marked by candour, honesty, and good feeling, no less than for the elegance which always characterized the writings of that respected physician. No one, however, can now peruse its pages without at once feeling how absolutely the organization of our profession is altered since his day, for, late as he wrote, the apothecary to whom he refers has become almost a legendary being. There are, however, certain matters which imperatively call for some ethical code, and none more so than the frequent question which arises from the presumed injury resulting from a patient thinking proper to change his medical attendant. Whenever a practitioner finds that a person who has been accustomed to consult him has called in the services of another, the medical man so preferred is too generally regarded with feelings of jealousy and distrust, and often, without cause, is considered as having, by some underhand or incorrect conduct, seduced the fickle patient from his due allegiance. This circumstance, and a frequent one it is, is, of all others, the one which has been most productive of discord and unhappiness. The root of this evil is easily discovered, and is traced at once to the assumption of a fancied vested right or interest in a patient, which alike prohibits him from referring to another practitioner, and interdicts the attendance of the latter without falling under the imputation of some breach of propriety. So long as a patient is under the care of a medical man, he is supposed to trust his life with full confidence in his hands, and nothing can warrant the officious interference of another practitioner, unless requested by the patient or his attendant.

Any one offering his services to the prejudice of the regular attendant, or criticizing his treatment before the patient, unless his opinion be actually requested, must be regarded as acting most unwarrantably. No one will dissent from these remarks, and they invariably actuate all the honourable, or, indeed, honest members of our profession. But there is one fact, unhappily, which is the cause of half the misunderstandings of our jealous profession, in some degree, perhaps, flowing from a mistaken view of such considerations. The medical man is too frequently apt to consider that the patient has no right whatever to consult another without his sanction, and that if summoned, no one has a right to attend if such sanction be declined. Nay, some are too apt to carry this spirit of exclusion to an unwarrantable length, by assuming, that having once attended a patient, such patient becomes a sort of property, by which he is ever after prohibited from applying to another medical man, or the latter attending without a breach of etiquette. This notion has, to my knowledge, in one remarkable instance, been carried to the ridiculous extent of assuming that such a vested interest can be sold, or left as a legacy to another. It occurred to me to be consulted by a patient, whose family attendant had been dead many a year, and whose practice had on his death been bought by another practitioner. The patient had not applied to any other medical man up to the time of my seeing him. Finding him dangerously ill, I insisted on his having the advantage of the daily attendance of a general practitioner, and as the family said they were on friendly terms with one whom I knew to be a most excellent and worthy man, I directed my prescription to him. The result was, a most impertinent letter, a few days afterwards, from the person who had purchased the practice, desiring to know by what right I had dared to recommend the patient to another, he having alone the right to attend the patients of his predecessor.

Now, however much any one of us may be blinded to the real merits of such a question, when affecting the individual interests of his own pockets, we cannot avoid seeing in others how absurd such a claim over the private consciences of our patients is. Until this sort of medical Puseyism is done away with, we shall not have much harmony added to our profession. If a practitioner is called to a patient whilst absolutely under the care of another, it is his bounden duty to express his desire to meet the family attendant, and to see the patient only in his presence; or if prevented from some circumstance, it is his duty to direct his prescription to him, and arrange for meeting him; or if this be impossible, he ought at his earliest convenience to write to him, explaining his view of the case, and placing any information in his power in the hands of the family attendant. But if the patient positively declines continuing to receive the visits of his usual attendant, and has either not sent to him at all, or formally declined his services, then I think it is assuming too much (and what the public never will admit) to suppose that any other practitioner is prohibited from attending if summoned. One thing, however, I am sure no member of our profession ought to consent to—namely, to accede to the wish of a patient to visit him privately, whilst under the care of another practitioner, with the view of criticizing his opinions and treatment. This is a plan too many sick persons are fond of following; but I am convinced no one ought to accede to such a wish—it is, indeed, but playing the part of a spy—an office, I suppose, not of less questionable honour in the medical than in the strategic art.

Consulting practitioners, who are retained for their visit, and receive their fee at the time, should, unless they receive a request to attend again, either expressed or understood, consider themselves as dismissed for the time, and can have no claim to appear offended, if this patient, an hour after his visit, consults another. Indeed, this is well understood by that branch of the profession, and acted upon by the public; and therefore, except in the minds of persons unhappily endued with a more than ordinary share of narrow mindedness, can never be a source of misunderstanding.

In thus presuming to touch on some of those evils which appeared to me (it may be in ignorance) most seriously to interfere with the unity of the profession, I feel that I am treading on dangerous ground. Still, I have expressed nothing more than I conscientiously believe. I have referred to nothing which has not been often a subject of painful anxiety to myself; and in alluding to these blots upon our comfort and happiness in practice, I look forward to the time when some one, highly gifted, and fitted for the task—some one, whose experience, age, and attainments, may invest his opinions with due weight, shall grapple alike with the serious questions upon which the welfare of our profession so essentially depends—viz., the educational and ethical relations of medicine. I cannot, however, quit this part of my subject without alluding to the simple ethical code, to an obedience to which the fellows and licentiates of the Royal College of Physicians give their faith. It forms, I think, an excellent groundwork on which to base some few laws relating to the whole profession.

There is one other subject to which I must just allude, not with the presumption that anything I, as an individual, utter, can have weight, but with the hope, that as an emanation from the Society it may claim some attention. I allude to the extent and, I fear, extension, of that monster evil, QUACKERY. I know full well, that when we allude to the subject, we are too frequently and erroneously regarded as incited by selfish feelings, and that we regard the empiric as a rival, in treating diseases that ought to fall under our care, and, in fact, that our opposition to such persons is an argumentum ad crumenan. How short-sighted and erroneous a view! In the long run, I am sure the quack adds to the income of the regular practitioner by the mischief he does. But I defy any one to deny that we are actuated by a nobler motive, one which devolves upon us, as the acknowledged conservators of the public health, to step in between the credulous and, *quoad* medicine, ignorant public, and save them from the ruined constitution, misery, and death, which quackery ever inflicts upon its victims.

It would appear that quackery is the almost necessary bane of all professions: there are no small abundance of religious quacks, legal quacks, and medical quacks. The practice of medicine early became infested with this race of parasites, for we find Scribonius Largus, the court physician of his day, who flourished in the reign of the Emperor Tiberius, bitterly lamenting their existence and influence. A man may oppose to the quack in religion, if he should dare to modify its sacred tenets to his own vile purpose, the word of Him who cannot err; with this light to his feet it is his own fault if he falls into the snare. Reason and common sense will do much towards unmasking others; but what weapon can be opposed to the quack in medicine? Profoundly ignorant as are the public, as a body, of the commonest principles upon which a safe practice of the healing art is founded, the heartless and grasping empiric has but to throw out his net, to haul it in loaded with his credulous prey. There are several reasons which afford an explanation of this melancholy fact; and, among others, a belief that each disease has its specific remedy; a belief, innate, apparently, in the minds of some, has led many to refer to the impudent impostors who boast the possession of an infallible catholicon. The existence of a disease which the patient is anxious to conceal, often also makes him a ready dupe to the glittering promises of the advertisements which, to the disgrace of too many of the editors of periodical publications, stain their columns. I know there is a strong feeling in the minds of many, that silent contempt is the proper weapon with which to oppose these persons. Such was once my own impression; nor was I led to adopt a contrary opinion until, with increasing practice and experience, I met with overwhelming evidence of the influence of these pretenders on the public. Had I not over and over again met with it, I never could have believed that sensible persons, moving in a respectable station of life, could for a moment have entertained the idea that the respected and valued names of a Babington, a Locock, a Bright, had any real connexion with the jujubes, wafers, and ointment, to which the proprietors of such trash had dared to attach them. It is almost incredible that we are often called upon to give a serious denial to a connexion between such names and the trash to which they are affixed. Against the impudent vagabonds who thus attempt to borrow a ray from the legitimate reputation of the good and great, there is, unhappily, no remedy. The avowed proprietors are almost always men of straw; and legal evasions are so easy, that the expenses of a prosecution would be almost sure to fall on the injured individual. Still, all this shows the frightful evil of a law which throws the protection of a patent around such abominable impositions.

The articles on quackery which have incessantly appeared in THE LANCET, have, I am sure, been of the greatest service in opening the eyes of many of the general public, and from their influence in unmasking many of the evils attendant on this wholesale nuisance, have deserved the gratitude of the profession. Many have, however, thought, that the attacks thus made on quackery are more severe than the evil deserves, but this can only be expressed by those whose sphere of observation is limited. The quack usually lays hold of the real or imaginary ailments resulting from vice, and thus by a bold manœuvre attacks the culprit in his most vulnerable point. The nature of many such

diseases are boldly trumpeted forth in the advertising columns of some of our periodicals, in expressions so prurient and disgusting, that their very presence ought and must prevent every parent from letting more than one of the morning papers enter his house, for fear of meeting the eyes and contaminating the minds of his children.

Exclusive of the duty of opposing all forms of quackery, on the ground of public health, I maintain that such a crusade is a righteous one. Perhaps few of my hearers have ever polluted their eyes with reading the disgusting details occurring in some of the wretched books which have emanated from some of these quack firms; if they have, I am sure I shall call to mind the feelings of horror which impressed them when they read such miserable panderings to the worst of vices, as if man came into the world only to indulge his animal appetites, and that his excellence and fitness for any office in life was in the exact ratio of the perfection of those powers which he shares in common with the beast of the field. Such books are found everywhere loaded with expressions from Holy Writ, the authors often making blasphemous appeals to Omniscience to witness the rectitude of their intentions, in penning such filthy impuritics. One such has even dared to express his confidence of being at the last day addressed by the great Judge as a good and faithful servant!

The heart turns away sickening from this worse than Augean stable of loathsome iniquity, and can but grieve that there are some who give these writings to the world, who actually have the authority to announce that they are members of one or other of our colleges, from whose lists the very issuing of such a book ought to be the signal for the *ignominious erasure* of their polluted names. It may be said that there are other irregular parasites upon the tree of medicine, to whom such expressions cannot apply, more particularly to those who profess the puerilities of Hahnemann, or the bold empiricisms of Preissnitz. And with these we ought to have scarcely more charity. I acknowledge that homœopathy may have done, in many cases, a negative good, by amusing a drug-ridden patient with trifles, whilst a correct diet and an absence of active medicines have allowed his powers to rally and recover. This may, indeed, occur in some affections; for we know that some diseases tend to recovery, but we must not forget that others tend to death; and here the vain trusting to decillionths of grains will indeed become a fearful mockery, a worse than meditation upon the grave.

Some have argued that both the homœopath and hydropath do no harm, if they do no good. What! are there no sins of omission as well as of commission? Is a man less a murderer who does not snatch a blind fellow-creature from the brink of a yawning chasm, than he who, more boldly, at once throws him over a precipice? The records of our journals contain abundant instances of such illustrations of virtual and moral homicide. A lady, in the fourth month of pregnancy, has hæmorrhage for weeks, is blanched and nearly pulseless; her livid lips, watery eyes, scarcely audible whisper; her cold surface, her feeble jactitations, all attest her peril. The homœopath has attended her during the whole time, giving his infinitesimals, and forbidding support, or other interference. In a moment of despair a physician is summoned; he enters the chamber upon the condition of the pretender being turned out; he, by aid of brandy and opium, keeps alive the flickering flame of life, sends for the regular medical attendant of the family, who soon after, examining per vaginam, finds a portion of the ovum in the vagina, and part in the uterus, preventing its contraction. Under his care the lady did well. In this case, (which occurred to myself,) could any one doubt the moral guilt of the disciple of Hahnemann; for be it known, that he did really know better, or, at least, ought to have done so, for he wrote after his name, Member of the Royal College of Surgeons.

Again, a person has severe erysipelas of the head and face, with low fever. An hydropath is called, who assiduously enough attends her, applying merely cold applications, and in a short time she dies. This person not only defends himself on the ground that he did nothing; but in a subsequent public advertisement in the daily prints, claims merit for his proceedings, identifying his cause with that of temperance! Had, in this case, the cold applications been exchanged for hot fomentations, the capillaries of the surface relieved by minute punctures, serpentary and ammonia, and wine or brandy freely given, how different might have been the fate of this victim to credulity or something worse; at least, we are authorized in expressing this, from the fearful and almost hopeless cases of this disease which so generally do well in our hospitals. That this case is not here imagined, for illustration, every one present is well aware.

There can be but one feeling among the regular and educated practitioners against all forms and varieties of quackeries and quacks, whether within or without the pale of the profession. They must be regarded, not as negative but as positive nuisances—as blots upon the fair fame of medicine—as rootless parasites, which exist by the little strength they can borrow from the venerable trunk of medicine, to which they unworthily cling. Until the extension of education has made the mass of the public better judges of those who are worthiest of their confidence,—a feeling, which it is our duty to encourage by the most candid expressions of our opinions to our patients, and never seeking to gain influence over them by other than legitimate means,—we are but paying a proper tribute to the art we profess, and acting as honest men, by boldly waging an uncompromising war with quackery and the quack, and in regarding him, with Emilia, as a

> "base, notorious knave, some scurvy fellow.
> Oh heaven, that such companions thou'dst unfold,
> And put in every honest hand a whip,
> To lash the rascal naked through the world,
> Even from the east to the west."

It is certainly a curious fact, that, notwithstanding the wonderful progress made by medicine as a science during the last four-and-thirty years, the organization of the profession devoted to its cultivation and practice remains almost as imperfect as at that period. If we open the medical journals of the time, without knowing the date of the publication, we might almost fancy that the remarks actually made in 1813 were intended for 1847. In referring to the *Medical and Physical Journal* for the former year, for a totally different purpose, my attention was arrested by a passage so remarkable, that I cannot refrain from quoting it, as it shows, in a striking manner, how little the organization of our profession has improved since these remarks appeared under the auspices, if not from the pen, of one, the mention of whose name at once excites a feeling of veneration in the heart of every member of the London Medical Society—I mean, Dr. Fothergill:—

"The mass of the medical faculty of the British empire is indeed an heterogeneous compound. Physicians, doctors of the English universities, fellows of the Royal colleges, versed in all human science, learned, honourable, and approximating to the Corinthian capital of society, are pushed from their seats by doctors of no universities, unlearned men, and even women without science and without honour. The Abernethys, Coopers, and Brookes's, have opposed to them self-created surgeons, raspers of shin-bones, advertising gonorrhœa curers, and men whose chirurgical knowledge has been acquired by carrying a box after the dresser at an hospital. The legitimate apothecary is circumvented by the druggist, who was yesterday a grocer,—by the chemist, who hardly knows a crucible from a cauliflower. To the educated physician,—to the regular surgeon,—to the instructed apothecary, this is personally perhaps unimportant; but what is it to the public?—pain, mutilation, death! London, that common sewer, teems with the surreptitious multitude.

* * * * *

The druggists of a midland county are querulously complaining that a horrible attempt is making to take from them the privilege of prescribing for the sick. We are not among those who think this must be endured; but believe that laws may be framed to protect society against these depredators, not on money but on health."

If it is the *fiat* of Providence that good and evil be mingled, and that, in the moral as in the natural world, the noxious plant should grow beside the salutiferous herb,

> "Terra salutiferas herbas, eademque; nocentes
> Nutrit, et urticæ proxima sæpe rosa est,"

the gardener may exercise his office, the poisonous may be extirpated, and the doubtful confined to their quarters.

There can scarcely be a question, that the best mode of opening the eyes of the public to the due appreciation of the regularly educated practitioner, and the distinguishing him from the ignorant pretender, would be by a correct system of registration. If an annual register of the regular practitioners were published in some form in which the expense would not exclude it from general reference, it would be of vast service to the profession and to the public. The *London Medical Directory* has already effected much good, and although it is generally supposed that the public is hardly interested in such matters, I believe few persons could refrain from referring to any publication which would inform them of the standing and position of the practitioner they propose to consult. It is obvious that the *Directory*, excellent as it is,

can ill supply the absence of a regular registry, regularly published under the auspices and sanction of the government.

To turn from this subject to one of a more pleasing character—to one on which no dissentient voice will be heard. If it has been my lot, in treating of the subject matter of this Oration, to allude to disputes in our profession, I have now to allude to an arena where such cease to exist. If I have indicated the existence of jealousies and heartburnings, I have now to point to a place where they are unknown. If I have alluded to the bad influence of a division of our profession into ranks of unequal dignity, I now have to say one word regarding a place where all meet on the common footing of equality, and where many of us have made and cemented valued friendships. Need I say I refer to the Society whose anniversary we are met to celebrate. The conversational tone, the kindly feeling, the desire to conciliate, which has ever been the tone pervading our meetings, has made the hours of our weekly meetings no less recreative than instructive. The kindly spirit which was first infused into it by a Lettsom and a Fothergill has never deserted our meetings; and long may that feeling be our pride. Seventy-four years have passed over our Society, and unfortunately, with increasing years, our meetings have become less numerously attended, fewer young buds have been engrafted than were required to preserve its verdure. But even this, whilst it is our regret, is also our boast, for our venerable Society has given off so many offsets, that much of its own sap has been exhausted. With one exception, every other medical society of this metropolis may be regarded as its offspring, and some of these have attained a gigantic magnitude, which, like the Royal Medico-Chirurgical, have, by their size, almost eclipsed their venerable parent.

Like the celebrated banian, our Society has emitted hosts of vigorous shoots, but which, unlike those of the Indian tree, have not, in return, lent their support to prop up the aged trunk whence they sprung. We all owe something of gratitude to the influence of our meetings—let us show our sense of it, by transfusing young blood into it; let us beat up for recruits, and try to enforce the full attendance of the members, and then we shall soon find that our Society is not sterile, but will once more bud out afresh, and produce good fruit.

Having endeavoured, however imperfectly, to indicate some of the duties which we owe to the public, to our profession in general, and the Society in particular, permit me, in conclusion, to remind all present of their high and glorious function, in the graphic words of a talented and excellent physician, (Dr. Robert Willis,) who, in remarking that our members have no place in the body politic of our country, adds, "It would be well for humanity if they had; for who, since the revival of learning in Europe, have been foremost in every undertaking whose object has been to extend the boundaries of knowledge, and to exalt mankind? Who knows half so much of the wants and the wishes, of the joys and the sorrows, of the community? Who are the friends and comforters in adversity, especially of persons in every grade of life, from the sovereign and the peer, to the wretched outcast of the streets, houseless, homeless, friendless, alone? Who disarms pestilence of its powers, and gives Jenners to the world? Who follows in the field through the thickest of the fire, not that they may aid Destruction in her work, but that they may staunch the wounds she makes? The servant of Religion hath not more of true sanctity about him than the good physician. The service, indeed, that was rendered of old in special temples to the Divinity, conceived in one of his most beautiful attributes, is not yet extinct upon earth, but has its ministering priest, ennobled by Christianity, in every worthy member of the medical profession. Oh! let society cherish and exalt its medical community—let it become aware, that if *science* cannot aid it, in its struggle with disease, neither can ignorance; that nothing can by possibility be known to the quacksalver and empiric, that is not familiar to the educated physician; that a youth of preparation, and a life, however protracted, of ceaseless devotion to his art, are all too little to familiarize him with all the varieties of disease, and the means of meeting them successfully; and that there is no access to the temple of medicine save through an intimate knowledge of the laws by which we live, move, and have our being."

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Dr. S. W. J. Merriman having resigned the office of Physician to the Westminster General Dispensary, has been appointed Consulting Physician to the Charity; and Dr. Wegg, of Maddox Street, has been elected Physician to this Dispensary.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION; AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

### AMPUTATION AT THE INFERIOR THIRD OF THE LEG.

The operation of amputation at the inferior third of the leg for diseases and injuries confined to the ankle-joint or the tarsal bones, has not yet received from all quarters those commendations to which the perfectly successful results of numerous well-recorded cases justly entitle it. It has been proved that the smaller the wound, and the more distant from the trunk, the fewer are the dangers attending its infliction; that a stump formed in tendinous structures cicatrizes both speedily and firmly; and that to the extremity of the leg there may be attached an artificial foot, upon which the patient, enjoying the movements at the knee-joint, may be supported with but little deformity, and with comfort to himself. To females, especially, this improvement of modern surgery is a great boon: their dress renders the inconveniences, inseparably connected with a stiff wooden leg, supporting a stump bent at right angles to the thigh, particularly distressing; they are in constant fear of injury happening to the projecting limb, and the mutilation is ever apparent.

It is hoped that a report of cases illustrating various points connected with this operation, which has been newly revived, and for the first time brought into general use, may not be without interest to those not yet familiarized with its advantages.

### DISEASE OF THE ANKLE-JOINT; PROMINENT CONTRACTION AT THE KNEE; AMPUTATION AT THE LOWER THIRD OF THE LEG; SUBCUTANEOUS DIVISION OF THE FLEXOR TENDONS IN THE HAM; EXTENSION OF THE LEG; ADJUSTMENT OF AN ARTIFICIAL FOOT; RECOVERY.

Case 1.—Margaret S——, aged thirty, was admitted, under Mr. Stanley, into Sitwell's ward, May 21st, 1846, with disease of the ankle-joint, of twelve months' duration, consequent upon a sprain. She moved about upon crutches, the leg of the affected side being bent at nearly right angles to the thigh, in which position it had become firmly contracted. The ankle, swelled by disease, and exposed, from its unnatural position, to blows and other injuries, was in constant pain; her rest was disturbed, and she lost both appetite and strength. The effect of continued rest, opiates, counter-irritation, and other suitable remedies, having been unsuccessfully tried, Mr. Stanley amputated the leg immediately above the malleoli, July 18th. The flaps were united by sutures: water-dressing was applied to the wound. Union took place in the usual time, without an unfavourable symptom.

Oct. 13th.—Mr. Stanley divided the flexor tendons in the popliteal space. By means of an apparatus for extension, and of variously constructed splints, the limb was brought tolerably straight in about a month. Every means were then employed to restore the power of flexion and extension at the knee-joint.

Nov. 15th.—The stump being firmly cicatrized, a hollow boot,* to which an artificial foot was attached, was fitted to the limb.

Dec. 30th.—She is walking about the ward, with the aid of a crutch; the heel of the boot comes nearly to the ground.

Jan. 20th.—She is able to walk without crutches. Discharged.

The progress of this case was not so rapid as it might have been, had the patient coöperated with those who had the charge of her. It required the unremitting exertions of Mr. Rendle, the house-surgeon, to induce her to make the slightest effort for her own improvement, or to abstain from concealing that which she could really accomplish.

### DISEASE OF THE ANKLE-JOINT; AMPUTATION AT THE LOWER THIRD OF THE LEG; EXAMINATION OF THE MORBID PARTS.

Case 2.—Letty C——, aged twenty, a good-looking, fresh-coloured country girl, states, that she has suffered from weakness of the right ankle for full two years. She was, however,

* A description of the boot constructed by Mr. Fergusson, surgical instrument maker to the hospital, is given in The Lancet, 1846, vol. i. page 643.

able to walk upon it until seven months ago, when severe pain, coming on at irregular intervals, compelled her to lie up. Six weeks afterwards swelling ensued. Subsequently, there formed a small abscess, which burst, discharged a quantity of matter, and left a fistulous passage, which is now open. Admitted into Treasurer ward, December 10, 1846, under Mr. Lawrence.

The right ankle is swelled and somewhat hotter than natural; the integuments covering it are brown and discoloured; the toes are pointed downwards; the slightest flexion or extension causes intense pain, but she bears without inconvenience considerable steady pressure of the astragalus, against the articular extremity of the tibia; the appetite is good, but she sleeps badly at night. To take three grains of soap and opium pill at night time.

19th.—The leg was amputated just above the malleoli by Mr. Lawrence: the flaps were united by sutures; water-dressing was applied to the wound.

*Examination of the morbid parts.*—The articular cartilage covering the opposed surfaces of the tibia and the astragalus and os calcis was removed by ulceration. From the denuded bones, which were slightly softer than natural, large pallid granulations arose; the synovial membrane was much thickened and of light-brown colour; the fistulous passage extended into the joint. Upon making a section of the tibia, there was found, near the inner malleolus, an abscess about the size of an almond, lined by pallid granulations, and containing a small bit of dead bone; the surrounding osseous structure was healthy; that portion of bone interposed between the cavity of the abscess and the joint was of dark colour, and destitute of granulations. The synovial membrane, examined microscopically, seemed thickened by numerous large cytoblasts, floating in a gelatinous fluid, deposited between the epithelial and the vascular layers; not otherwise materially altered in structure. In the course of a few days there ensued some slight inflammation, which was encountered by the usual means.

28th.—The wound is granulating healthily.

Feb. 20th.—Still in the hospital; wound cicatrized.

DISEASE OF THE ANKLE-JOINT; AMPUTATION AT THE INFERIOR THIRD OF THE LEG; EXAMINATION OF THE MORBID PARTS.

Case 3.—A. B——, aged twenty-two, a delicate-looking girl, sprained the left ankle eleven months ago. Although she kept quiet in bed, and paid attention to the injury, severe pain came on at intervals, her rest became disturbed, the appetite failed, and she lost flesh and strength. Admitted into Lucas ward under Mr. Stanley, about the middle of November, 1846.

It having been ascertained that ulceration of the articular cartilages of the ankle-joint had taken place to a considerable extent, it was agreed, in consultation, that amputation was the only means of relieving her from suffering.

Dec. 19th.—The leg was amputated at the inferior third by Mr. Stanley. The vessels having been secured, the flaps were united by sutures; water-dressing was applied to the wound, and the patient was conveyed to bed.

*Examination of the morbid parts.*—The articular cartilage was removed by ulceration from the opposed surfaces of the tibia and the astragalus; the denuded bones, of their natural firmness, were covered with a mass of pink-coloured granulations; the synovial membrane was converted into a thick, light-brown coloured, pulpy mass. A long fistulous passage extended from the fibrous sheath of the flexor longus pollicis into the joint. The wound healed without an unfavourable symptom.

In the beginning of February she left the hospital to stay with her friends for a few weeks, that time might be given for the stump to become sufficiently firm for the adjustment of an artificial foot.

The construction of the boot used in St. Bartholomew's Hospital remains the same as was described in a preceding report. Accidental excoriations, from pressure against the hard leather case in walking, are obviated by two wedge-shaped lateral pads, buckled on to the extremity of the stump, before its insertion into the boot.

The histories of Cases 2 and 3, and the morbid appearances observed in the amputated limbs, suggest a few points worthy of consideration. In both instances, an accident of trivial character excited inflammatory disturbance of the bones; ulceration of the articular cartilages ensued; the ligaments became softened; the synovial membrane thickened; and the structure of the joint was destroyed. But conjointly with these morbid actions, processes of reparation were going on. From the denuded bones there arose granulations, which, under favourable circumstances, would have eventually formed a bond of union between the opposed articular surfaces, and have been the means of establishing complete bony ankylosis. It may be asked,—Then why were these joints removed? Why was not time allowed to Nature to complete a cure which she seemed so ready to effect?

It has been remarked by Mr. Stanley, that bony ankylosis of the ankle-joint is an extremely rare occurrence. There are but three specimens contained in the pathological collections of London—namely, one at the museum in the Royal College of Surgeons, a second at Guy's, and a third at the London Hospitals.* The explanation of this seems to be, that the ankle, composed of an assemblage of bones, between which a certain though limited amount of motion readily takes place, cannot, without the utmost difficulty, be maintained in that state of repose essential to the formation of a soft uniting medium, and its subsequent conversion into bone. When, therefore, in these cases, the bones are extensively denuded of their articular cartilage, and the patient's health is suffering from the severity of the disease, experience does not justify us in postponing the operation of amputation with any fair expectation of bringing about a stiff joint.

In Case 2, the inflammatory disturbance, excited in the tibia led to the formation of an abscess, which contained a small portion of mortified bone. These abscesses, which, as has been remarked by Sir B. Brodie, occur most frequently in the tibia, are productive of severe pain. Their hard, unyielding walls, lined by a vascular surface, secreting pus, offer a firm resistance to pressure from within, and hinder the matter, for years, from making its way to the surface. When in close proximity to a joint, they may themselves prove an exciting cause of disease in the articular cartilages, or in the synovial membrane; or may prevent the establishment of those reparative processes which, under other circumstances, would have taken place.

## Original Papers.

### ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

### THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from p.* 199.)

*Colic.*—Colic is a generic name for several diseases of various origin and nature, and only agreeing in having their common seat in the intestinal canal, and perhaps, also, in being each accompanied by the symptom—pain.

We do not revert to cardialgia, sometimes named, and not inexactly in some respects, stomachic colic; it we have already noticed in The Lancet of Jan. 23rd of the present year.

The principal varieties of colic are—bilious colic; spasmodic and flatulent colic; a third variety, for which we would suggest the name scybalous; lead or painters' colic; vegetable, Poictou, or Devonshire colic; and lastly, infantile or meconial colic. In this enumeration, we have left out volvulus or ileus, because this is often, or always, but an aggravated form or consequence of some one or another of the varieties now named. Nor have we thought it necessary to allot a separate place to colic arising from intestinal or hepatic concretions, and other rare causes.

1. Bilious colic is generally the consequence of a profuse action of the liver, the bile being, at the same time, of morbid quality, and irritating in its effect on the mucous membrane. In some diseases, as is remarked by Dr. Prout, the bile is acid: in some instances, it is so to such a degree as almost to excoriate the lips when vomited, and to cause severe *ardor ani* when evacuated downward. This change may depend on some excess or morbid alteration in the oleic acid. Again, the bitterness of the bile sometimes increases to an acrid degree, depending on some morbid change in the biliary resin. It is easy to understand how a fluid so corroding in its action will irritate, if not inflame, the mucous surface of the intestine, and provoke spasmodic contraction or violent peristaltic or anti-peristaltic efforts, in its muscular coat.

The treatment is simple: Total abstinence, *pro tempore*, from stimulant food and drink; the ample use of warm diluents, which, on first being taken, may act as emetics, and

* No history is attached to any of these specimens.

no harm, but rather advantage, if they should; then, gentle oleaginous laxatives and enemata. Both the laxatives and enemata may have, if griping is severe, a few drops of the tincture of hyoscyamus or of opium added to them. In France, infusions of chicory, taraxacum, and lettuce, to which acetate of potass is added, are recommended.

In severer cases of bilious colic, a chillness, like the cold stage of fever, sometimes comes on. Against this, a hot bath is the best means, by which also the colicky pains are generally much alleviated.

2. *Spasmodic, or nervous and flatulent colic.*—These have many points of resemblance. If no signs of inflammation are present, they are to be treated by antispasmodic and carminative draughts and enemata, and by warm abdominal frictions. The following are the substances we must principally rely on: valerian, assafœtida, musk, castoreum, galbanum, belladonna, camphor, the aromatic waters and oils, as those of anis, fennel, pimento, carraway, &c.

3. *Scybalous colic.*—In this variety, irritation of the mucous membrane of the bowel, even of a sub-inflammatory or inflammatory kind, may be caused by the prolonged contact of scybalæ; and either obstinate torpor of the gut, with constipation, may ensue, or, what is more to be dreaded, antiperistaltic action may commence, ending in dangerous or fatal ileus.

In this case, oleaginous laxatives, such as castor and olive oil, must be given, and that in a manner least likely to excite nausea; since thereby the tendency to anti-peristaltic action may be increased. Copious oily enemata, aromatised so as to excite the downward action of the bowels, should, at the same time, be assiduously employed. All drastic purgatives should be abstained from.

4. *Lead or painter's colic.*—The treatment of this disease, practised in a principal hospital of Paris, and which is often successful, is as follows:—

First day.—In the morning, a purgative enema is administered, consisting of the following various ingredients:—An aromatic electuary, containing scammony, thirty parts; jalap powder, four parts; senna, eight parts; syrup of buckthorn, thirty parts; boiling water, 125 parts. During the day, a tisane, made from cassia, sulphate of magnesia, and tartar emetic, is taken; and in the evening, an anodyne (?) enema of walnut oil and red wine, succeeded by a *bol calmant*, consisting of a drachm of theriaque (a senseless medley of almost every known antispasmodic, tonic, and narcotic) and one grain of opium.

Second day.—This day commences with an emetic, consisting of two-thirds of a grain of tartar emetic in eight ounces of water, divided into two doses, and taken at the interval of an hour. In the course of the day, a sudorific tisane is drank, composed of a decoction of somewhat more than six ounces of rasped guaiac in one pound and a half of water; this being boiled down to half that quantity. In the evening, the "calming bolus" (see first day) is repeated.

Third day.—This day commences with a laxative sudorific tisane, consisting of an ounce of guaiac, half an ounce of sarsaparilla, a drachm or so of sassafras, the same of liquorice, half an ounce of senna, and so much water as to form, when boiled and strained, about half a pint of decoction. Soon after, a purgative potion is administered, consisting of an aromatic electuary, containing scammony, a drachm of jalap, two drachms of senna leaves, seven drachms of syrup of buckthorn, and one pound of boiling water. In the evening, the anodyne enema (see first day) and calming bolus (see ditto) are repeated.

Fourth day.—The same routine as the third.

Fifth day.—During the day, the sudorific tisane is given, (see second day;) at four in the afternoon, the purgative enema, (see first day;) at six o'clock in the evening, the anodyne enema, (see ditto;) and at eight o'clock, the calming bolus, (see ditto,) are successively taken.

If the disease has not now yielded, the above whole series of treatment is repeated, (only the emetic solution is omitted,) and is continued until the abdominal pains are removed, and the patient goes regularly to stool.

It must be owned that the treatment now detailed is very methodical, and is a not unskilful *melange* of means calculated to stimulate the bowels, and to quiet them and relieve their spasmodic action alternately.

Alum and sulphuric acid also undoubtedly possess something like specific powers in the treatment of lead colic. Kapeler recommends from two to four or five drachms of alum to be dissolved in five ounces of a demulcent julep, and this to be taken in doses of a spoonful every hour. In Germany, this is much used, and is very successful. Dr. Copland states that he has uniformly succeeded by means of alum, which, however, he combines with camphor, cayenne pepper, and occasionally opium, and assists with oleaginous clysters. Gendrin recommends as a prophylactic to operatives engaged in lead mines or manufactories, a sulphuric acid, "lemonade," as he calls it, consisting of a drachm or two in a pint or more of water, sweetened so as to make it agreeable, and taken in quantities of twelve or sixteen ounces a day.

Besides the means now enumerated, elaterium, croton oil, calomel, and many things else, have been suggested and tried, in lead colic, with various results. We should, however, ourselves prefer the French treatment above detailed, or the aluminous treatment, which, it may be observed, "more certainly" (to use Dr. Copland's words) "opens the bowels than any other."

5. *Vegetable, Poictou, or Devonshire colic.*—This has been erroneously supposed to arise from the use of cider or acerb fruits. While, no doubt, such may be occasionally its origin, yet a colic precisely similar arises from totally different causes, as cold feet, &c. We must combat it by hot fomentations and the conjoint use of mild laxatives, as castor oil, and opiates, or at least anodynes, and by oleaginous and anodyne enemata.

6. *Meconial colic.*—Castor or olive oil, with hot fomentations to the abdomen, and mucilaginous injections, will usually speedily relieve this species. Indeed, half an ounce of syrup of the rose in the evening, and the same quantity in the morning, will often be all that is required. Sometimes, however, what Canstatt calls "deutero-pathic"* eclampsia is the result, demanding more active treatment. See the chapter entitled "Topographische Pathologie einzelner nerven und nervengebiete," in his Special Pathology and Therapeutics, pp. 370 et sequentes.

We do not refer to colic from unhealthy lactation in the mother or nurse, nor to colic which has passed, as every species of it occasionally does, into ileus, enteritis, and peritonitis. The treatment of these severe forms of disease was not contemplated in this series of papers. I may observe, that in THE LANCET for March 25, 1843, Mr. Doughty, of William-street, Knightsbridge, reports a very serious case of ileus which I treated, and fortunately with success. On referring to the details of the case, I notice that the following were the principal points of the treatment:—calumba and opium to arrest vomiting, an object of importance in all such cases; then a turpentine enema, with castor oil: on the following day, six ounces of quicksilver, (by mouth,) and sixteen ounces of the tobacca enema, administered by Mr. Doughty; this caused syncope and cold sweat. On the following day, eight more ounces of quicksilver were given, and tobacco-smoke to the extent of five or six whiffs, on that, and again on the following day, by Mr. Doughty. Lastly, an assafœtida enema. "After the latter," writes Mr. Doughty, "we began to have copious stools, and the whole of the mercury passed."

I may observe, that before I was called to this case, stercoraceous vomiting had decidedly set in. My object in ordering the tobacco infusion and smoke enemata was to favour the reduction of any obscure hernia or muscular spasm of the bowel which might exist. I also directed that the attendants of the girl should, after she had taken the crude mercury, frequently raise her up in bed, (she was too feeble to raise herself,) to alter her position from one side to the other, from the back to the belly, and *vice versâ*, with the view of favouring the gravitation of the mercury to the lower bowels. The issue of this case was extremely gratifying to me, inasmuch as I had despaired of a successful one. Had it proved unfavourable, I should now, at least, perhaps have been disposed to blame some parts of the treatment as too energetic. However, the desperate aspect of things appeared to justify a prudent rashness, and as the issue *was* fortunate, I am not called upon, on this occasion at least, to practise the duty of self-stricture.

Bentinck-street, Manchester-square.

## ON THE CAUSES, SYMPTOMS, AND TREATMENT OF UTERINE HYDATIDS.

WITH CASES.

By CHARLES EDWARDS, M.D., M.R.C.S.E., Cheltenham.

I BEG to submit the subjoined remarks on uterine hydatids, accompanied by a case illustrative of the causes, symptoms, and treatment of a morbid condition or degeneration, much disputed as to its origin, and of so comparatively rare occurrence as to render its records most valuable and interesting.

* This is, of course, secondary, as contradistinguished from idiopathic eclampsia.

With such authorities as Baudelocque, Voigtel, Desormeaux, Velpeau, and especially Madame Boivin and Dr. Montgomery, I believe uterine hydatids to be always the result of sexual intercourse. The argument from analogy against this view has been clearly answered by Dr. Montgomery, and is perhaps needless to detail to persons familiar with the subject of this paper.

S. A——, residing in Sydney-street, aged forty-two, of bilious temperament, but of active habits, and healthy, states as follows:—She is always regular as to the catamenia, except during utero-gestation and suckling; has had six children, now living; has but once suffered abortion, and that twelve years ago. After weaning her last child, which she suckled till eighteen months old, the menses immediately reappeared, and continued regular for three months—the usual period of her former conceptions after weaning: they now ceased.

At the expiration of three months from their cessation, there succeeded a daily stillicidium of blood, generally, but not invariably, black; being at length, in gushes of ordinary hæmorrhage after every slight exertion, and these constantly attended with forcing pains like those of parturition.

The concomitant symptoms were now constant nausea, vomiting after the most simple food—gruel, tea, &c., and, in consequence, great emaciation, pain at scrobiculus cordis, and in the bowels. As to her appearance, the breasts and abdomen were enlarged, but, she thought, not proportionately to their development at the same stage of her former pregnancies. The bulk of abdomen "seemed to lie very high up." The usual umbilical prominence had also lately occurred. This brings us nearly to the end of six months, the three last of which she designated a continued labour and flooding, and in the three last weeks of which only she had sought medical advice at the dispensary, at the end of which time she was thought so much better by the medical officer as to be dismissed cured.

This temporary respite was, however, in a few hours, succeeded by still more violent and regular labour pains, and severe flooding, under which circumstances she first applied to me for advice.

At the expiration of about twelve hours of regular pains and hæmorrhage, about a wash-hand basonful of hydatids were discharged, adhering like an immense cluster of grapes to a bloody, spongy substance, resembling a degenerated placenta, which being macerated and cut into exhibited an aggregate of hydatids embedded in its substance. I could detect no investing membrane nor portion of a fœtus.

The pains and hæmorrhage now subsided, but in a few hours returned, when an almost equal quantity of hydatids were discharged, which last mass, unhappily, I had not an opportunity of examining, it having been inconsiderately removed by the attendants, who supposed that having reserved the first I would not require to examine further. A discharge, quite undistinguishable from lochia, followed, but no secretion of milk.

So far as the case detailed is concerned, I think, by reviewing it carefully, little doubt can be entertained as to how the hydatid disease was here occasioned. The female was married, and so predisposed to the exciting cause; regular in the menses, except when pregnant or suckling; and the interval between the birth of her last child and the suppression of the menses after weaning, corresponded to her former conceptions in equi-distance.

As to the symptoms—this case presents strikingly interesting differences from most on record. Sir C. M. Clarke considers "the occasional and sudden discharge of an almost colourless and inodorous watery fluid a most constant, indeed, a diagnostic symptom." Such discharges were entirely absent in this case, which was remarkable for the hæmorrhage, as it were, of a prolonged abortion. I can find only two cases on record of this repeated and prolonged hæmorrhage—one by Mr. Watson, in the *Philosophical Transactions*, the other illustrated in Cruveilhier's "Pathology of Anatomy," of which, however, I believe no clear exposition has yet been given by authors.

In my opinion, the presence of these hæmorrhages is evidently determined by the place of adherence of the spongy or hydatid mass near the os uteri, acting, in fact, as that of a placenta prævia; whereas, in cases of watery discharges, the attachment is more remote from the os uteri, and vesicles not immediately attached are occasionally burst, thus giving rise to them so frequently; the case of the hæmorrhagic discharges being evidently thus seen to be most rare, as the determining site of adhesion is most abnormal and uncommon.

With respect to diagnosis, I think, with Madame Boivin, that ballottement is the best, and should always be essayed for pregnancy in suspicious cases; and I would regard any case of protracted hæmorrhage, with uterine pains, as sadly overlooked, were no vaginal examination instituted. Should the case be sufficiently advanced, the stethoscope may be appealed to.

After death, when concealment or inadvertent removal of the mass has occurred, I would look for the limited placental mark, (as hydatids have a wider adhesion,) and a corpus luteum, as confirmatory, the latter of pregnancy, the former of delivery. Should, however, a hydatid mass be presented to me, the presence of a fœtus, or part of the ovum, would of course decide the point of impregnation at once; but not inversely, I believe; yet, with Dr. Montgomery, if acting as a medical jurist, should I find no trace of either, I would give the patient the benefit of the doubt—(if she required the charity) shadowy indeed—their absence perhaps not being real, but inferred, (as I would explain further than he has done,) from the occasional impossibility of finding them.

In addition to the suggestion of Dr. Davis, that hydatids may be the result of conceptions of antecedent dates, I would name two other causes of failure, in proving cotemporaneous gestation, hitherto, I believe, unnoticed—viz., 1st, a perfect or advanced degeneration, (that which was most probably a placenta in my case appearing so;) or, 2ndly, as hydatids are discharged frequently at intervals, and in separate masses, the very part which may happen to contain traces of the ovum or fœtus may be removed by design or indifference, (the second lot was thus carelessly thrown away in my case,) and so the examiner may fail to find what really existed.

To these views of hydatid etiology, it has been triumphantly objected, that the disease has coëxisted with a hymen. My reply to Mr. Andrews is perhaps uncharitable—viz., hymens are sometimes lucky; pregnancy has also coëxisted with the same. Vide Ramsbotham's cases and others.

Do these etiological views derive confirmation from coincidence with the patient's feelings? Dr. Montgomery argues thus: "In every instance under our inspection, &c., the women supposed themselves with child." My patient quite doubted her being so situated: I speak of her feelings, for this doubt arose from the presence of the ordinary troublesome sympathetic effects now present, and really confirmatory, but to which she was unused on former occasions.

As to the time at which a ceded pregnancy is degenerating—is this indicated by any peculiar symptoms? Professor Burns says yes: "the mammæ become flaccid, and the sympathetic effects of pregnancy cease." In my case, the breasts, though never much distended, did not become flaccid, and the vomiting and other sympathies were most urgent during the degeneration. The black stillicidium was here the first index.

The first discharge of blood commenced, in the majority of Madame Boivin's cases, at three months. She does not state how long they lasted. My case coincided with this period, but was remarkable in having hæmorrhage protracted to the sixth month.

Finally, with respect to the treatment, I place most confidence in the tincture of ergot, with sulphuric acid, and compound spirit of sulphuric ether. By these means I had no need of introducing the hand to detach or remove hydatids, or excite uterine contraction; manipulations "which must be done cautiously, and only when hæmorrhage, or some other urgent symptom, occurs."—Burns.

My case had been sufficiently hæmorrhagic, but I believe that the plug, till the os uteri is sufficiently dilated, conjointly with the ergot, will effectually control all hæmorrhage, whether intermediate or subsequent to the final expulsion of the hydatid masses; which latter is generally most alarming, from the extent of uterine surface from which they have been detached.

Grosvenor-street, Cheltenham, Feb. 1847.

## ON THE TREATMENT OF STRICTURE OF THE URETHRA BY HYDRAULIC DILATATION.

By JOHN GOODMAN, Esq., M.R.C.S.E., Broughton, Manchester.

An individual from the country applied to me, a few days ago, with complete retention of urine, owing to a stricture just in front of the bulb of the urethra, from which he had suffered for a considerable period. About two months before, an instrument had been passed, by a surgeon in the country, with considerable difficulty, which he stated to be about the size of a small catgut bougie, and he had since that time totally neglected all remedial measures, and had usually mic-

turated in a twisted stream, about the size of a small crowquill. On the day of application for relief, he had been taking some beer, to which he attributed the closure of the passage, and had been unable to pass a drop of urine from an early hour in the morning. The bladder being now uncomfortably full, and a constant desire to micturate, attended with a good deal of pain, I attempted to pass the most appropriate bougies and catheters of various diameters, but failed in every attempt, and could not enable the patient to evacuate the smallest quantity of urine. What was to be done? The individual was very urgent—was on his way to Dublin—in much pain, and exceedingly desirous to be relieved before his departure. In this emergency, (one by no means uncommon,) the forcible application of a warm-water injection suggested itself. There was the soothing and spasm-subduing quality of the warm fluid,—the probable insinuating and permeative quality of a steadily increasing column, adapted for every condition, form, size, and situation of stricture; and there was also the gradually and slowly dilative power of hydraulic pressure, which, if sufficient force could be employed to enable it to perforate the contracted portion of the urethra without rupturing any of its walls, might be brought to bear with any amount of force which can be required.

With regard to the capability of perforation in an already formed channel, however reduced in size, the difficulty seemed to vanish when I remembered having heard it stated that aqueous fluid can be forced through even the pores of iron itself when under immense pressure. It was borne in mind also, that this method of removing obstructions, (although of a very different kind,) and of effecting a passage, is employed in all the other outlets of the human body—for instance, the ductus lachrymalis, meatus auditorius externus, Eustachian tube, &c., (although the fluid employed in the last named is not exactly the same, yet the force is obtained by the same instrument.)

After introducing a gum catheter as far as the stricture, which was well secured by a band of tape, and a compress upon the penis to prevent escape, a syringeful of warm water was injected with some force, and was found to flow with tolerable ease. The patient exclaimed, "It passes." On removing the apparatus, the patient micturated immediately in a stream about the size of a crow-quill.

After some persuasion, rendered necessary partly by the satisfaction ensuing from being able to micturate, and partly from the slight pain endured during the injection, the apparatus was again connected as before. After this injection, which flowed still more readily, and the removal of the instrument and bandage, the stream was found to be considerably augmented. A pint of urine was passed in a very short space, and the patient went away completely relieved and well satisfied.

A question might arise, that if watery fluid is so capable of perforating and dilating the stricture, why does not the urine itself, with all the efforts made use of by the patient for emptying the bladder, produce the effect desired as readily as it can be accomplished by external means of the same nature?

To answer this question, the muscular power of the bladder was tested in the following manner:—A tube, filled with water, to which was previously joined a smaller one of glass, containing mercury, and so arranged as to exhibit the rise of the mercury in ratio with the existing pressure, was placed in communication with the urethra of a healthy individual, and secured by bandage and compress as before. He was then desired to make his most strenuous efforts to pass water. On so doing, the mercury in the small tube was found to rise only to the height of four or five inches, showing that the contractile force of the muscular coat of the bladder, aided by the abdominal muscles, is only equal to a column of water of four or five feet.

This small column, when compared with the effects capable of being produced by hand,—in the common lifting pump, the fire engine, and more especially by the hydraulic press,—readily evince a good reason why an attempt might be made to force a passage through an obstruction which the muscular power of the bladder was incapable of effecting.

With such propitious results on the first trial of this method, I anticipate the relief of patients at all times under like circumstances; and even, perhaps, in those extreme cases where perforation of the bladder might otherwise be suggested, as well as in cases of spasmodic stricture.

And it may not be improbable that the cure of stricture itself may be somewhat facilitated by the employment of this remedial agent, unless it be found that the power of dilatation by the syringe is reduced considerably when free communication is established with the feeble walls of the bladder.

It is not improbable, that in practice the injection from the extremity of the catheter may be found to serve the twofold purpose also of directing and introducing, as well as dilating, the orifice of the stricture, for the passage of the catheter itself, during the flow of the injection.

Broughton, March, 1847.

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# ON THE NON-DUALITY OF MIND
IN ITS
# PHYSIOLOGICAL, PHRENOLOGICAL, AND PHILOSOPHICAL RELATIONS.

By THOMAS CATTELL, M.D., Braunston.

(*Continued from p. 407, vol. i.* 1846.)

## THE PHYSIOLOGICAL AND PHRENOLOGICAL RELATIONS OF DR. WIGAN'S DEFINITION OF MIND.

The definition to which I allude will be found in The Lancet of November the 22nd, 1845.

This definition, with the connecting arguments, supports the hypothesis that the mind is "the aggregate of the mental functions and powers, whether exercised by one brain or two;" or that it is constituted by a complete series of mental operations, emotional instincts, propensities, and reasoning powers. Profound absurdity! How can a complete series of mental operations—which must, of necessity, include the reasoning powers—be associated, in character and kind, with the feelings and propensities? Or, in what manner can a complete series of mental operations, emotional instincts, and propensities, be the mind itself?

There must be a substance from which the mental operations proceed, and in which they unite, distinct from these operations; or, in the words of Paley's Natural Theology, "a centre in which perceptions unite, and from which volitions flow." It is, besides, highly unphilosophical to conglomerate instincts, feelings, and propensities, qualities purely animal, with those only manifested by mind. The mind, an aggregate of the mental functions and powers! How so? Surely the hypothesis might have been, that the mind is the aggregate of its own functions and powers. But what can be proved in such a case, when a definition may be exacted of a function or a power?

We admit, in scientific pursuits, a distinction is made between function and organization; but slight reflection will convince any person that it is for the purposes of science only this distinction is resorted to. The structure of the brain is its anatomy, what that structure does is its physiology; the one has to do with the organ simply, the other with the function exclusively.

The term function, as must be evident, cannot be applicable to that which does not possess a structure, *aliter*, an organ. The mind is an indivisible entity, without structure and without parts; to speak, therefore, of the physiology of the mind analogously to that of the organs of the body, is to confound the radical distinctions which hold in the mental as in the physical world.

Aggregation of the mental functions presupposes the abstract existence of each function. But this notion cannot be corroborated, whether we regard the mind as a material or immaterial entity. In the one case there must be an organization originating their existence; and in the other, a substance in which such qualities unite, and from which they proceed.

The remark, then, that the great source of error in psychological pursuits is attributable to the wrong employment of terms and distinctions used merely as such for the convenience of science, will appear particularly apposite. This is very evident in the writings of those that are corrupted by the false and specious doctrines of materialism and phrenology. Who can dissociate function from organization without confusing our ideas? Are not function and organization essential to, and inseparable from, each other?

If a union of mental functions and powers possess an abstract positive existence, (which the definition of Dr. Wigan unquestionably implies,) and if such definition be insisted on, as constituting the mind, I would ask, if one of these functions were removed from this supposed aggregation of divisible functions, will the mind retain its capabilities or not? If it retain them, then this subtracted function must have been superfluous and unnecessary, which will at once destroy the necessity of such an aggregation of functions. As the mind cannot retain its capabilities after a function or power is subtracted, I would further ask, is the function or power thus

withdrawn cogitative or not? If cogitative, the capabilities must adhere to this single function, and then all besides are rendered useless and unnecessary; if uncogitative, the mental capabilities can never be destroyed by the removal of an uncogitative function. In either case, the necessity of an aggregation of functions is destroyed, constituting the proof conclusive, that the mind does not consist in, nor result from, any union or aggregation of functions or powers whatsoever.

Besides, it is evident that functions are effects, and that they presuppose existent causes. Dr. Wigan must therefore give up his definition, or show that whatever is necessary to an effect is the cause of that effect, and that the instrument indispensable to an operation is the efficient and ultimate agent. Destroy the fly of a smoke-jack, and the desired effect will cease; but is the fly the real or primary cause of the motion? Destroy the brain, and thought ceases; but this merely proves the necessity of the organ, and nothing more. The destruction of the eye is the deprivation of the visual faculty; but the eye is only the instrument, and not the percipient being. What may be necessary to an effect is not necessarily its primary cause. In no case can the instrument and the agent be proved to be one and the same thing. When I speak of myself, I do not mean the brain or organ of thinking. A paralytic man wills to move a palsied limb; but the nerves and muscles do not obey his volition—the limb does not perform its functions. The difference between the person willing, and the instrument which he would employ, is evident. In like manner, I will, but am unable, to recollect a fact, a name, an argument. The brain is the instrument whose agency is necessary. It does not obey my will; it is incapable of executing my purpose. The brain seems to be as different from the person willing, as the muscles, the tendons, or the appropriate nerves. I am conscious that I can exert a direct influence over the agency of the brain; I can affect it with images or impressions, painful or pleasing; I can continue its action to a certain extent of time, or to a certain degree of exertion; or I can interrupt its energies by lulling it into a state of inaction. Can an organ thus subject to my volitions be identical with myself? The notion seems to be absurd. I do not hesitate to admit, that the brain thinks in the same sense in which the eye sees, each being considered as the organ of one simple cogitative being under whose volitions these organs operate; but I repudiate the hypothesis, that the mind is either material or dual. The functions and powers of the mind, then, having no abstract existence, conformable with the definition of Dr. Wigan, demonstrates the positive existence of a substance in which they unite, and from which they proceed. And it is equally conclusive, that as these functions and powers presuppose both a source and an object, man can possess but *one* mind, uncompounded and indivisible. For if there be *two* minds, they must be extended; and if the functions and powers which they are supposed to possess depend upon these extended substances, they must be diffused, or they must not, throughout the two minds; or else we are driven to the admission that each function and power possesses a distinct habitation. And if the functions and powers be diffused, they may be divided; but to admit the division of any simple function or power of the mind, consonant with the foregoing definition, is positively to annihilate the existence of that function and power, and to coerce us to admit the division or duality of that which can have no real or nominal existence. But if we suppose these "functions and powers" not to be diffused throughout the two minds; or if we suppose them to possess distinct habitations, we must, in either case, admit that such extended substances are not necessary to their own existence: from which it may be deduced, that extended minds may exist, abstracted from those functions and powers which are attributed to them, and that the *two* minds, their functions and powers, have no physical relation, but may exist independently of each other. And if the functions and powers associated with these substances have no necessary connexion, do we not advance further to the discovery of a primary principle, the nature of which must be congenial to such functions and powers? These extended substances having no physical connexion with the functions and powers, must fail to afford us any conception of their nature, distinct from animated matter, in any of its modes and relations. The hypothesis, that the mind is an "aggregate of the mental functions and powers," as being merely hypothetical, cannot be regarded. Neither should we, in our inquiries concerning mind, place any dependence on reasonings drawn from some supposed similitude or analogy of body to mind. Indeed, in such investigations as these, we ought always to be exceedingly suspicious of the employment of analogical reasoning in any way; but especially where the principles supported by it are so adverse to the true philosophy of mind. And I cannot dispense with the remark—which is made with every kindly feeling towards Dr. Wigan—that he has, in order to establish a rule, multiplied all the instances in its favour, and repressed all the exceptions. The adoption of such a course, to say the least, reflects some degree of doubt on the value of the doctrine supported thereby; whereas a proposition or a theory, once demonstrated to be true, on unimpeachable evidence, can never be contravened, how much soever it be assailed.

Moreover, a function or a power, in the philosophic sense of the word, must be an admitted quality; and that which is a quality must be a quality of some substance: the mind is necessarily obliged to associate the two ideas. To suppose a function or a power to be a quality, without admitting the existence of the organ of which it is the quality, is a contradiction. What idea can we form of an organ abstracted from a function or a power, and *vice versâ?* The detachment of this function or power is the detachment of that quality by which it is denominated; and there can only remain a nonentity, to which we can attach no idea.

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### THE EVIDENCES ON WHICH DR. WIGAN ATTEMPTS TO ESTABLISH HIS THEORY, WITH THE PHILOSOPHY OF MIND WHICH THEY INVOLVE.

I cannot cursorily pass in review the egregious error into which Dr. Wigan has lapsed, by reference to the absence of mind in reading, as it involves too much of the general philosophy of mind. "Every one," he says, "must have observed that in reading a book we sometimes proceed through a whole page, while the mind has been completely absent—has been conning over past events, or luxuriating in interesting scenery connected with some influential events of our lives. The slightest effort of even turning over the leaves is sufficient to arouse the attention, and to make us aware that no part of what we have been reading rests in the memory, which is, however, wholly and vividly conscious of the train of thought we had been pursuing. If the book were now suddenly abstracted, we should not even know the subject of it, and for myself I can answer, that the attempt to recover any portion of the matter thus read has always been unsuccessful; yet the instant we recommence the perusal of any portion of the page, the whole will sometimes flash upon the consciousness almost as completely as if we had been reading with attention."—(*Vide* THE LANCET, Oct. 11th, 1845, p. 387.)

It is certainly paradoxical and perplexing to suppose the mind sometimes *completely* absent in the act of reading, and yet sufficiently present to be conscious of the train of thought we had been pursuing. If the verbal phraseology had not placed the mental operation beyond the possibility of intension or remission, we might have inferred that Dr. Wigan believed there existed a medium between the absence and presence of mind, or of any object or idea about which the mind can be occupied.

The points of error particularly implicated in this speculation regard perception, consciousness, and memory. Perception, because attention in relation to objects of sense can be nothing more than the coexistence of desire, with the perception of the object to which we are said to attend. Consciousness, inasmuch as without the exercise of this combination of feelings, no consciousness could result. Memory, for without attention there can be no memory, and without memory we can have no evidence of the different successive conscious states.

The question, then,—Whether the mind can be absent and present at the same time, will involve the whole philosophy of mind? For the complete absence of mind is the complete absence of desire with the perception of the object to which we are said to attend. And if the mind can be completely absent in the act of reading, then must memory and consciousness also in relation thereto.

The complete absence of mind cannot therefore be proved by the absence of those evidences which are supposed to be present, while they are absent; for while they are absent, they are non-existent. To prove the non-existence of the thing by the absence of its own existence, is manifestly absurd. How then can the consciousness and recollection of an idea exist abstracted from the perception of it? Of every fact which we attempt to establish, we must have some conception; and every idea which we have of that fact supposes its existence. To attempt to prove that the mind may be completely absent in the act of reading, is to attempt to prove the positive existence of a nonentity. Should it still be asserted that the mind was *completely* absent in the example given, then we must

assert, so was perception, consciousness, and memory, equally complete. But I would ask, how can the fact be known? It must either be deduced from reasoning, must be self-evident, or must exist in common experience.

To prove, by reasoning, the existence—i. e., presence—of that which is supposed to have no existence—i. e., absence—is proving directly the reverse of what is not required to establish the supposition; it is demonstrating the existence—presence—of a nonentity, which is a contradiction: it cannot, therefore, be ascertained by reasoning.

To suppose it self-evident is to suppose the existence—i. e., presence—of what is supposed to have no existence—i. e., absence; for whatever exists must be present, and that which does not exist, must be absent. Were the self-evident character of the proposition to be admitted, it would necessarily destroy the supposition it was designed to establish. What, therefore, is supposed to be absent, or to have no existence, cannot possibly be self-evident.

Neither can the fact be known by common experience; for whatever we experience we must be conscious of, and of whatever we are conscious, we must perceive. It is a contradiction to suppose that we experience the absence of attention; for we should then experience the absence of perception and consciousness, while the hypothesis, wherever it exists, establishes the fact which Dr. Wigan attempts to deny.

*(To be continued.)*

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CASES

# ILLUSTRATIVE OF THE VALUE OF ETHER INHALATION IN PRACTICAL SURGERY.

By THOMAS WRIGHT, M.D., Senior Surgeon to the Cheltenham Dispensary.

### TUMOUR OF THE EYELID.

Mr. H——, aged thirty-six, consulted me, on Monday, the 22nd instant, for a tumour situated on the right lower eyelid. It had increased rapidly in size during the last few weeks; it was firm, and incompressible to the touch, free from subcutaneous adhesions on its anterior wall, but was firmly adherent to the conjunctiva and tarsal cartilage; posteriorly, that membrane was much inflamed, and highly vascular, especially where it adhered to the tumour. This body was the size of a kidney-bean, and was the cause of much irritation and inconvenience to Mr. H——. On suggesting its removal, he informed me that he was of a highly nervous temperament, and would consent to its removal, provided he was put under the influence of ether, otherwise he could not submit to the operation. On the following day Dr. Smith kindly assisted me, and administered the ether by the simple and effectual method invented by that gentleman, which consists in soaking a sponge, of the best Turkey species, and of about four inches in diameter, in water of the temperature of ninety degrees; squeeze the hot water well out, and saturate it with a solution of etherial oil, in sulphuric ether; two drachms of the former to six ounces of the latter, redistilled for this purpose. The sponge thus charged with ether is gradually approached to the mouth and nostrils, and afterwards retained in close apposition, until the full effect is produced. Expiration easily takes place through the porous canals of the sponge by this process. Our patient was rendered insensible to pain in three minutes; the integument was transfixed and divided without the slightest excito-motory action; the fibres of the orbicularis palpebrarum were separated, and some of them divided, but the muscle did not contract. The tumour was drawn downwards and outwards with a tenaculum, and the difficulty now commenced; the adhesion was more firm and extensive than I anticipated, and a slow and careful dissection of the posterior wall of the tumour from the vascular conjunctiva was necessary, the mobility of the latter increasing the difficulty, as the tumour lay closely imbedded at the internal angle of the eye, adhering to the tarsal cartilage, the lachrymal sac and ducts. The angular vein and arteries had to be carefully avoided. From the delicacy of the dissection necessary, and the laxity of the parts concerned, I am convinced that the removal of this body would have been attended with great difficulty, but for the motionless condition of the patient, which was maintained for fifteen minutes. Mr. H—— never once manifested the slightest excito-motory act, felt no pain, but was conscious of what was going on around him.

This case proves, first, that the excito-motory nervous system is that which is primarily affected by the vapour of ether, then its influence on the pneumogastric nerves, the functions of the brain being performed, as proved by the patient's consciousness, whilst cutaneous sensibility was for a time suspended.

### FEMORAL HERNIA.

Mrs. S——, aged seventy-two years, of a highly sensitive, nervous temperament, which has been developed from the station of life in which she moved. Her general health has been much enfeebled from dropsical symptoms, supposed to depend on renal disease. She has been suffering from an attack of bronchitis, attended with spasmodic cough, and much irritation of the bronchial mucous membrane, for which she consulted Dr. Smith. Early on the morning of the 23rd ultimo, that gentleman was summoned to see his patient. She had for some years past had a fulness in the right groin, of the nature of which the patient and her family were ignorant. Never having been inconvenienced by its presence, no opinion was asked about it. On the morning of the 23rd, after a violent paroxysm of coughing, she found the usual swelling suddenly increased to three times its former size. Dr. Smith had succeeded in reducing a portion of the hernia; but as the obstruction still continued, that gentleman requested my opinion of the case. We met in consultation in the evening. I employed the taxis with caution for about an hour, and with some success. During the manipulation, Dr. Smith held a sponge to the nostrils, with a view to relax the vital tension of the tissues. It was certainly useful in aiding the partial return of the intestine. We left her composed and free from pain, and directed bladders of ice to be kept on the part all night. The cough returned, and the tumour was again protruded. It was now tender to the touch, with a painful sense of constriction, referred to the crural ring. She had vomited several times some dark bilious matter, and neither food nor medicine would remain on her stomach, and hiccup had commenced. When we met at one o'clock, finding it impossible to return the intestine, we decided on the operation. As soon as the necessary preparations could be made, Mrs. S—— was placed in a sitting posture in bed, with the legs depending over the side. Everything having been previously arranged, Dr. Smith proceeded to put our patient under the influence of ether vapour in the way already described. This process occupied about ten minutes. It is important to note that instead of exciting the inflamed membrane of the respiratory passages, the etherial vapour had, on the contrary, a sedative effect, allaying cough and irritation. When the full effect was produced, I commenced the operation for femoral hernia. The patient was in no way restrained. I raised a fold of the integument four inches in breadth, transfixed it with the bistoury, and cut rapidly outwards. This produced an incision in the course of Poupart's ligament. A second incision was made in the same manner, and joined it so as to form a T-shaped wound. The superficial fascia was carefully dissected backwards, and the hernial tumour exposed. It was now evident there was a double femoral hernia, an old rupture, and one of recent origin. The sac of the former was firmly united to the inguinal glands and superficial fascia. This contained fluid and omentum, which was easily reduced. The sac of the recent hernia contained a knuckle of intestine in a state of strangulation. As it was thrust tightly into the superficial fascial covering of the old sac, and was closely embraced by layers of condensed cellular tissue, these layers of fascia were cautiously divided, and the recent sac forced from all connexion with the ancient hernia. I attempted in vain to return the intestine without opening the sac, and therefore laid it open and divided the constriction at its neck. Still the intestine could not be returned. I carried the index finger of the left hand up to the crural ring, and felt two tense bands stretched firmly across the arch. These were separately divided, and the canal explored. No other obstruction was discovered, and the intestine was returned without further difficulty. The vermicular motion of the intestine was now observed during the entire operation. The patient remained almost motionless. The only assistance required was given by Dr. Smith. If evidence were wanting to prove the great value of ether inhalation in suspending excito-motory action and cutaneous sensibility, the facts recorded in this case would supply such, that I was enabled to make this painful, tedious, and delicate dissection, in a highly nervous patient, without restraint, and almost without assistance. The wound was united by the interrupted suture; the sponge was removed, and the patient now, for the first time, experienced pain from the punctures of the needle. We did not consider it necessary to renew the effect, as she had been about thirty-five minutes under the influence of the ether. There was no collapse nor disposition to syncope. She ex-

pressed herself most grateful for the total absence of pain during the operation, and said she only felt the prick of the needle when the sponge was removed.—Half-past six P.M.: Has been very calm and free from pain, and has had some sleep since the operation. Feels as if the bowels would now act. Asked for a cup of cocoa, which was allowed.—Half-past ten P.M.: Bowels have comfortably moved; feels much better, and has not coughed much since the inhalation of the ether.

Thursday, twelve P.M.—Dr. Smith saw her early this morning, and ordered a dose of castor oil, which has acted three times freely. She passed a comfortable night; slept soundly; complains of a state of stiffness in the inguinal region, but no pain; abdomen distended with flatus, but not tender on pressure. To take some chicken broth *tous les mois*.

Friday, twelve P.M.—Is much better this morning; bowels were moved in the night; feels quite easy; the wound has united by the first intention, and her state is most satisfactory.

Sunday, 28th.—Much better to-day; has no tenderness in the wound, and is cheerful and free from pain. Dr. Smith ordered her some chicken for dinner.

*Remarks.*—This case illustrates the value of ether under a combination of circumstances apparently the most unfavourable for its success:—

1. The age of the lady, her extreme sensibility to pain, and previous debility, rendered the operation for hernia one of extreme danger under any circumstances: the etherial vapour presented that shock to the nervous system which, without this valuable agent, would in all probability have proved fatal to our patient.

2. The presence of bronchitis, with spasmodic cough, might appear, to those unacquainted with the power of ether vapour as a general sedative, to have excluded it from the class of cases in which its inhalation was admissible. The result, however, shows the fallacy of *à priori* reasoning in a science of observation and experiment like practical medicine.

3. The tedious nature of the operation, and the length of time which the sentient and excito-motory nervous systems were under the influence of this agent, without producing any unpleasant effect when the sponge was removed, leads to the conclusion, that the brain is not always in that state of congestion which some have supposed—that the primary influence of the vapour of ether is upon the expansion of the pneumogastric nerves in the lungs, and by them conveyed to the medulla spinalis. In some of the cases observed by Dr. Smith and myself, the cerebral functions were more or less active. Some patients, as Mr. H——, state that they were perfectly conscious. The nerves of the higher senses, the optic and auditory, were affected by light and sound at the time that common sensation and voluntary motion were suspended. The ganglionic system of nerves is not influenced by the etherial vapour, as proved by the regular action of the heart after the first shock has passed off, and by the vermicular contraction of the muscular coat of the intestine as it lay before me during the dissection, the fibres of which were aroused to increased contraction every time the director or back of the bistoury touched the peritonæal covering. I cannot conclude the history of this instructive case without bearing my humble testimony to the great value of Dr. Smith's method of administering the vapour of ether: its simplicity, efficacy, and superiority over the apparatus recommended, will be admitted after a trial; the patient and the agent are so completely under the command of the operator, that the effect is produced as by a charm. The porous canals of the sponge present an extensive surface for the evaporation of the ether; they, at the same time, allow of the ingress of atmospheric air for the support of the respiratory function, and the escape of the carbonic acid gas given off from the lungs, so that danger of asphyxia from that cause is effectually prevented.

Exeter-place, Cheltenham, March, 1847.

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A CASE OF

## DIFFICULT LABOUR FROM CONTRACTED PELVIS, COMPLICATED WITH HÆMORRHAGE, AND SHORTENED FUNIS.

By FRANCIS McEVOY, Esq., Surgeon, Balbriggan.

In the capacity of dispensary surgeon I was required to see a young woman, twenty-eight years of age, who had been taken in labour of her third child sixty-five hours previous to my seeing her.

During the first thirty hours, labour was reported as natural; the waters were discharged, the head had advanced into the pelvis, and rested in the hollow of the sacrum. For the last thirty-five hours the pains gradually decreased, and finally disappeared altogether. She was much weakened and exhausted by her previous sufferings; she had some sleep for the last six or eight hours prior to my visit, which greatly refreshed her.

She gave me to understand that her two former accouchements were tedious, the first was of four, the latter of three days' duration. Complained much of a dragging pain, referrible to the right side of abdomen. Has come to her full time on this occasion, but did not with the two former children; with the first she wanted two months, the other six weeks, of her full time.

On examination, I found the pelvic outlet narrowed, the presentation natural; head well down in the pelvis, but small, and had not made the turn; the ear could not be felt; parts well prepared. Had not passed water for twenty-four hours; the catheter was with difficulty introduced into the bladder, and about two quarts of high-coloured urine drawn off. Could not detect the pulsation of the fœtal heart with the stethoscope. It occurred to me, that prior to proceeding to any more decided steps, and as she had previously, by her unassisted efforts, borne two children, although they were premature, that some attempt should be made to reproduce the uterine action; I therefore determined to administer ergot of rye, in ten-grain doses, every fifteen minutes. In about an hour the uterine action was brought on, which, though strong, produced no impression whatever on the head. Passing my hand over the abdomen, the uterus appeared to contract sufficiently, with much pain.

On a more careful examination, there appeared a greater degree of narrowing than I at first imagined. I found the os coccygis ossified, and firmly adherent to the sacrum, and projecting anteriorly. The outlet of pelvis narrowed transversely, by reason of the right ischium being inclined towards the opposite side of the pelvic cavity. When questioned, stated she heard her mother say that she had had rickets when a child, but no other evidence of this affection was perceptible. Complained much of the dragging sensation before mentioned. Suddenly, (within six hours after the re-commencement of the uterine efforts,) whilst speaking to me, she was seized with a discharge of blood from vagina, accompanying each pain; became rapidly faint and exhausted, throwing her arms about, exclaiming she was dying. Face pale and anxious, covered with a clammy sweat; lips bloodless; surface and extremities cold; pulse scarcely perceptible at the wrist; pains diminishing.

I now saw that further delay on my part would be criminal, therefore I had recourse to the perforator, and delivered her, with the crochet, of a very small child, and simultaneously with the child the placenta came away, with a great gush of blood, the funis not being more than twelve inches and a half, which was twisted once round the neck; the uterus contracted well.

Notwithstanding her weakened and debilitated state, for the two or three following days, resulting from the hæmorrhage and the forced delivery, this woman's convalescence was rapid in the extreme, without even one unfavourable symptom, and was engaged in her domestic pursuits within a fortnight.

*Remarks.*—The foregoing complicated case exhibited some peculiar symptoms, in a practical point of view, worthy of remark.

1st. The narrowing of the pelvis, which, being altered in capacity and direction, the distance from the inside of one tuberosity to the other, appeared to have been about two inches and three quarters or three inches, exclusive of the soft parts.

2ndly. The ossification of the coccyx at right angles with the sacrum, the distance of apex of the coccyx from the angle at symphysis pubis, about three inches or three inches and a quarter, so that the tuberosity of the ischium, and the coccyx formed a complete ridge or ledge, which opposed the further progress of the head, and prevented the completion of parturition. Of course, the measurements here stated cannot be affirmed to be perfectly accurate, as I had no pelvimeter available, and they merely give my impressions at the moment of examination.

3rdly. The length of funis, twelve inches and a half, and being twisted once round the neck; could this be the cause of the dragging sensation she complained of?

4thly. The separation of the placenta from the uterus. Query—Was this caused by the renewed action of the womb, or by the funis being shortened, in consequence of taking one turn round the neck, and so acting mechanically? But perhaps this is of very little importance to the accoucheur.

This patient was evidently of scrofulous diathesis, and was externally marked in the neck; her habits of life, which were sedentary, tended to produce and confirm the deformity of pelvis, as she was, in her childhood, a bobbin-winder; in her girlhood, a weaver; and since her marriage, had been occupied in domestic duties; she however stated, that she enjoyed excellent health.

She left this neighbourhood a short time after her confinement, became again pregnant at the expiration of nine months, and died in labour. I regret much being unable to place the circumstances attending her last accouchement before the profession.

Balbriggan, March, 1847.

## Reviews.

*Rapport a l'Académie Royale de Médecine sur la Peste et les Quarantaines, fait, au nom d'une Commission*, par M. le Dr. Prus. Accompagné de piéces et documents, et suivi de la discussion dans le seine de l'Academie. pp. 1056. A Paris: chez J. B. Baillière, &c. 1846.

*Report to the Royal Academy of Medicine on the Plague and Quarantines, edited, on behalf of the Commission*, by Dr. Prus. Accompanied by documents and papers on the subject, and followed by the discussion in the Academy, &c.

(*Continued from p.* 152.)

The third portion of the Report of the Commission is devoted to the practical and important question of the infectious character of the plague. In the first place, what grounds have we for believing that individual contagion assists its fatal progress in its epidemic foci? And, secondly, what are the laws of its transmission to other localities? We will first briefly examine the circumstances which mark its progress in its indigenous seats, premising that all the facts must be received with due consideration to the existence of a common cause of disease, so overwhelmingly powerful, that cases which might justly be held conclusive arguments for the doctrine of contagion, become exceedingly doubtful.

1. The first mode of communication examined by the Commission is inoculation with the blood, serum, or pus of the infected. Passing over the various apocryphal narrations which form the staple of many historians of this disease, we proceed to relate the more accurate experiments of the French physicians, on criminals placed in their hands for that purpose. We make no remarks on the assumption of the office of the executioner by our French brethren. The heathen physician, Celsus, condemned those medical men, who, in his time, sanctioned by their practice the vivisections of notorious criminals, for the sake of scientific investigation. Not less powerfully would the censure apply to those modern investigators who introduced the blood and pus of plague patients into the miserable Egyptians. The experiments are as follows:—

"The 15th April, 1835," says M. Lachéze, "five criminals, condemned to death were taken from the citadel of Cairo to the hospital of Esbekii, for the purpose of resolving the question of the transmissibility of the plague by inoculation.

"The 18th of April," says our honourable colleague, "I took some blood on a lancet, as it escaped from the arm of a plague patient, and introduced it in two places under the epidermis of the inside of the arm of a criminal.

"The 21st of April he had a confirmed attack of plague, which Clot Bey incorrectly maintained to be doubtful in its character.

"The 26th the patient was recovering.

"The 22nd of April, 1835, M. Lachéze again inoculated with blood. No result followed.

"The 30th of April, the same experiment was renewed on another patient, with similar immunity from subsequent symptoms. Lastly, a young criminal (aged eighteen, who had slight symptoms of the disease after sleeping, on the preceding 15th of April, in a bed recently occupied by one suffering from a severe attack of plague) was inoculated on the 13th of May with some blood from an infected party. No result ensued.

"The same individual had, eight days previously, undergone, with the same impunity, an inoculation with serum, taken from the vesicle arising on the carbuncle of a plague patient.

"Another criminal (aged sixteen years) was inoculated with the same fluid, and with a similar negative result.

"On the 30th of April, the same individual was inoculated in the right axilla and groin, with pus from a recently opened pestilential bubo. No ill effects resulted.

"Thus, out of four inoculated with blood from infected parties, only one suffered from plague, and that in its mildest form. The two inoculated with serum from a pestilential carbuncle, and one with recent pus, had no symptoms whatever."

In addition, it must be observed that the criminal, who, after inoculation, had the attack of plague, (the single affirmative result of the whole series of experiments,) was exposed, like all the other inhabitants of Cairo, to a common epidemic influence. He had been located for three days in an hospital which contained a great number of patients suffering from the disease—an hospital, in fact, which eventually became a focus of the pestilence. We may therefore reasonably doubt the cause of the symptoms which he exhibited, as he was surrounded by many recognised causes of infection.

After detailing some other experiments with an equally negative result, the following is the conclusion of the Commission:—

"Inoculation with the blood from a plague patient, or with pus from a pestilential bubo, have only furnished equivocal results; and inoculation with the fluid from the vesicle of a pestilential carbuncle has in no case been followed by any symptoms of plague. It is not, therefore, proved that the plague can be transmitted by inoculation, even when an epidemic of the disease is prevailing."

2. The second question propounded by the Commission is—"Can the plague be transmitted in the epidemic foci by the mere contact of the infected?" Those who have perused the narrations describing the monstrous power assigned by fear and imagination to the very touch of the infected, will hope, for the sake of its practical results, for a negative reply to this query. In obedience to the terror-stricken fancy of the physician and attendants, the unhappy patient was confined in a species of cage, and frequently died from absolute starvation. The buboes, when opened at all, were operated on with an instrument fixed at the end of a long pincers. Sometimes they were inefficiently opened; at other times, the trembling operator pushed the weapon into dangerous proximity with the great vessels of the axilla or groin. The absurdities of the speculator, considered *per se*, may only excite a smile; but very far from harmless is the practical application of his unauthorized conclusions. The physician arms ignorance with a firm belief, inspiring terrors of the most fearful description; and therefore he is to blame, if, under his auspices, the miserable victim of the plague perishes with all the aggravation of his evils which starvation and neglect can effect. We have been principally led into this digression by a conviction, which becomes more certain by every day's experience, that hypothetical errors in medicine, whether suggested by fear, as in the present instance, or, as is more commonly the case, arising from personal vanity, are sure to bear an evil harvest, abounding in obstacles to the progress of truth, and impeding the career of human amelioration.

To return to our subject. In the middle of the sixteenth century, Frascator, a celebrated physician of Verona, taught, "that the plague might be communicated in three ways:—1st. The most frequent cause of infection is distinct contact with the infected. 2nd. Next in frequency is infection by wearing apparel, furniture, &c. 3rd. The atmosphere is sometimes, though rarely, a medium of infection." These opinions, opposed as they were to the doctrines of the Greek and Arabian physicians, were nevertheless generally held by medical men till the year 1835, when a great number of European physicians had an opportunity of observing the destructive pestilence which reigned during that year in Egypt. The result of their experience was diametrically opposed to the prevailing opinions. Clot Bey observes,

"During the prevalence of the epidemic of 1835, which lasted five months, MM. Gaëtani, Lachézo, Bulard, and myself, at Cairo; MM. Duvigneau, Seisson, Perron, and Fischer, at Abouz-Abel; and MM. Rigaud and Aubert, at Alexandria, have incessantly visited the infected, both in hospitals and private dwellings. We employed no prophylactic measures. We placed ourselves in the most immediate contact with the sick in all stages of the disease. We have received on our hands and clothes the matters ejected from the stomach, the blood from bleedings, and the pus from thousands of buboes opened by us. More than a hundred autopsies have been made at Cairo, and we have spent hours in examining the pathological changes in parties recently deceased. The same examinations have taken place at Alexandria. With all this exposure to immediate contact with the patients, Dr. Rigaud is the only one of us who has fallen a victim to the epidemic. By a singular fatality, several physicians who have scrupulously avoided the touch of the infected, and of infected substances, have been attacked by the plague, and have died. Amongst these are Drs. Manucchi, Leopold, and Lardoni."—pp. 92, 93.

Individual facts occurring in Syria, in 1837, are also quoted in support of the same views. For the clear and precise narration of these circumstances, and the scrupulous care with which evidence has been received and canvassed by the Commission, we must refer our readers to the Report itself. The conclusion arrived at is as follows:—

"A close and attentive examination of the facts presented to our notice establishes,—1st, That the immediate contact of thousands of the infected has been unattended by danger when occurring in the open air, or in well ventilated places; and 2ndly, That no distinct case of plague has been traced to mere contact with the sick."

3. There is great doubt with respect to the power possessed by the wearing apparel, coverings of beds, &c., of the sick to communicate the disease. On the one hand, numerous examples, of a very wholesale character, show that they may be employed with impunity, without precautionary purification. It must not, however, be concealed, that certain facts tend to a different conclusion. They have, however, been observed during the prevalence of epidemics of this disease; and this circumstance alone is sufficient to render them valueless as positive arguments. Before they can furnish us with any proofs of the disease being retained and transmitted in this manner, they must be observed, not only when no epidemic of the plague prevails, but in other localities than where it is originally endemic. The same observations apply, with still greater force, to the question of its transmission by various articles of merchandise, and induce us fully to concur in the opinion, that "such a mode of infection in countries where the disease is endemic or epidemic is by no means proved."

4. The fifth chapter of this section of the Report is occupied by the important subject of infection through the medium of certain pestilential miasmata from the infected. The comparatively perfect safety experienced in attending the sick is insisted on; whilst, on the other hand, the great mortality of the inhabitants of the same house or hospital, when the plague once appears amongst them, is strikingly in favour of the opinion that each patient is, to a certain extent, a focus of the disease. Mr. Laidlaw observes—"When a great number of plague patients are congregated in one spot, they seem to create a pestilential atmosphere." Dr. Rigaud, when dying of this disease, after having watched its progress, and attended the sufferers with the greatest care and devotion, observed to M. de Lesseps, who frequently shook him by the hand, "Call on me as often as you like—twenty times in the day, if you can—but do not remain more than five minutes at a time in my room." Mr. Laidlaw notices, "that in the Levant they close up the rooms in which plague patients lie as much as possible. In some cases they were so offensive that he could not remain in them."

Before stating the conclusion arrived at by the Commission, we will briefly observe, that from the vast body of evidence here collected, two important practical deductions may be drawn:—1st. That little or no danger results from visits to the sick in well ventilated apartments, or for short periods of time. 2ndly. That confining persons in their residences by the system of "special quarantines" is highly injurious, as it tends to create foci of contagion. The same reasoning applies to placing any city in a quarantine so strict as to prevent the unhappy inhabitants from escaping beyond its walls. Such a "cordon sanitaire" girding the devoted place is more destructive than the slaughter of a battery, or the famine of a blockade.

On this subject, the Commission conclude by stating, that in localities where the plague is epidemic it may be transmitted by the miasmata exhaled from the infected, and by the foci of contagion resulting therefrom.

As we have before observed, any experiments, to be fully conclusive on the general question of the infectious character of the disease, must be instituted in localities exempt from either endemic or epidemic pestilence. It is a mistake to suppose that this subject can be best studied in either Egypt, Syria, or Turkey. On the contrary, "it is in ships at sea, in shores where the disease is not endemic, and in the lazarettos of Europe, that conclusive facts must be discovered relative to the solution of the question of individual infection of the plague."

5. The previous considerations lead naturally to an examination of the most important section of the Report—the solution of the problem which demands how far governments can reconcile their obligations to public health with that freedom of commerce which dreads the lightest shackle; in the words of the Report: "Can the plague be transmitted beyond its epidemic foci? If the answer be affirmative, we must maintain the sanitary system; if negative, we at once condemn commercial quarantines, and abolish lazarettos."

The progress of the disease in ships at sea is the safest means of arriving at a conclusion on this important point. The Commission have therefore examined the details of its fatal career, in twenty-five ships arriving with the plague on board, in various ports of France and Italy. Especially have they investigated the facts furnished by those entering Marseilles; and after attentively examining ten such narrations, the conclusion indicated is as follows:—

"That no doubt the plague may be transmitted beyond its endemic or epidemic foci, either in ships at sea, or in European lazarettos."

The following corollaries result from the preceding opinions:—

"1st. From the facts stated, relative to the transmission of the plague, both in the epidemic foci and in other places, it is certain that persons infected, by vitiating the air of their immediate neighbourhood, may create foci of pestilential infection capable of transmitting the disease.

"2ndly. These factitious foci of infection may remain after the sick are removed."

"3rdly. When once the foci of pestilential infection are formed on board a ship, by the presence of several infected parties, they may be carried even to great distances."

Our space will not permit us to enter on the other topics discussed in the Report. We may, however, briefly state, with respect to articles of merchandise.

"1st. That it is not proved that merchandise can transmit the plague out of its epidemic foci; and 2ndly. The classification of various bodies, as recognised in the lazarettos, into susceptible and non-susceptible substances, rests on no single fact or experiment worthy of confidence."

We may remark, that the classification employed in the Mediterranean, is chiefly founded on the principles laid down by Frascatorius. These taught that the relative susceptibility of bodies to imbibe and retain the infection of the plague was in direct ratio to their porosity. This dogma is certainly totally wanting in any foundation of ascertained facts. But we must be permitted to add, that the permanence of factitious foci of disease, after the removal of the patients, is strongly in favour of the opinion, that surrounding bodies

may acquire an infectious power. And this opinion is by no means weakened, when we consider the property possessed by gaseous bodies, of mixing with each other. This power is well known, and so great is it, that specific gravity, and even chemical affinity, are to a certain extent in abeyance to it. We would therefore suggest, that a permanent focus of contagion, when independent of endemic, epidemic, or living influences, cannot be localized in the atmosphere or other gas.

We need not follow the Commission into the practical results of their inquiries. A code of quarantine for the shores of the Levant would hardly be required for our country. It is sufficient to indicate the general laws which regulate the diffusion and propagation of the disease. Their application to various localities must admit of considerable modifications. The extirpation of the pestilence in its cradle is probably the only complete assurance of safety. Nor is the anticipation of such a result utopian or visionary. Till, however, the progress of real civilization has swept away the degrading vassalage, which renders the inhabitant of Lower Egypt the easy prey of disease; till the laws of public hygiene are better understood and acted on, by both the governors and the governed, no such boon will be realized. Meanwhile, we must be content to moderate and abate the evil as much as we can. Special quarantines—filthy, crowded hospitals and lazarettos—miserable neglect of medical and other attendance, principally attributable to the fear and fancies of speculative physicians; such things can be corrected, if we cannot make plenty take the place of famine, and habits of self-respect and cleanliness those of abasement and squalid filth. The latter evils owe their source to profound ignorance and selfish tyranny, the latter especially. We are sorry to add, that it is feebly denounced by the French Commission, dreading too much, perhaps, the loss of a "valuable ally" to their government, to point out the wrong done, not only to the inhabitants of Egypt, but to the interests of European health and commerce, by thus maintaining a perennial hotbed for pestilence.

Our present observations are not intended in any way to detract from the general merits of the Report. It is the most complete document on this subject which has yet fallen under our notice. As a natural history of the general progress and special propagation of the disease, it merits the attentive perusal of the profession generally. And to those legislators who wish to learn the fatal consequences resulting from a neglect of the laws of public health, it will teach a lesson invaluable in its practical applications. We would also especially direct attention to the cautious and judicious reception of evidence observable throughout. This latter particular merits the notice of our army and navy surgeons, in their sketches of epidemic and contagious diseases, which, unhappily, are often wanting in those exact details which alone can eventually furnish us with the general laws of these diseases.

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*A Treatise on the Inhalation of the Vapour of Ether for the Prevention of Pain in Surgical Operations, &c.* By James Robinson, Surgeon-dentist. Webster and Co., 1847. pp. 63.

The author of the above treatise was the first in this country to employ the vapour of ether; and to his ingenuity in the invention of an instrument for its application, to his assiduity and kindness in assisting operating surgeons and dentists in their early employment of this wonderful agent, as well for his exertions in thus putting together the facts connected with its history, administration, and results, we are much indebted. The distinguished merit of having applied and brought into general use the inhalation of intoxicating vapours is yet a *questio vexata*. Many persons have suggested certain sniffings and breathings, and have employed them in private in a few slight cases; but these we may justly pass by as unworthy of notice,—certainly not detracting in the least degree from the praise and honour due to the American originator, whether that originator be Dr. Morton, Dr. Jackson, or Mr. Horace Wells, the last claimant. Our readers will have perceived by our last publication the claims of the latter gentleman to the merit of originality; and at page 289 of our present number, we have a letter from Mr. Dorr, declaring that Drs. Morton and Jackson are the inventors. Even should it be established that Mr. Wells deserves all the praise of originality, still are we beholden to Drs. Morton and Jackson for pushing it before the world, although, unfortunately, they adopted a means which the whole public condemns, and which, at the same time, they were quite unable to support. To patent such an invention as this would be a monster cruelty, as it would deprive the poor man of its blessings; but justice and gratitude require that the distinguished author should reap a large pecuniary reward. A government grant should be the means of conveying to America a nation's thankfulness.

Mr. Robinson attributes the want of success in the first few instances to the incompleteness of the apparatus employed. Experience and ingenuity has enabled him to suggest the construction of an instrument which is now employed with almost universal success. Mr. Hooper, of Pall Mall, is the maker, and although Mr. Robinson is the inventor, we believe he refuses to derive any profit from its sale. The same honourable circumstance may also be mentioned as regards Dr. Snow's invention, one peculiarly adapted to country practice, being small, compact, and portable. It differs from Mr. Robinson's in being made of tin, and by immersing it in water heated to certain temperatures, the vapour may be increased, an advantage in cases where the patient has been a hard drinker. We believe that most of the other instruments which have been suggested and brought before the profession are only modifications of the two we have mentioned, and the only thing wanting to make them perfect appears to us to be a good mouth-piece; as yet, we have not seen one universally applicable.

Having obtained a good apparatus, the next consideration is, whether the ether you are about to use is the most volatile it is possible to attain. This is a point, Mr. Robinson observes, of the greatest importance, the failures being attributable, in most cases, to that cause alone; he insists upon its being perfectly pure, and prepares it himself. For the information of our readers we will quote his description of the best mode of washing ether:—

"Having procured the strongest and purest rectified sulphuric ether, wash it well with water to get rid of any acid that may remain, and which would cause considerable irritation, producing coughing, &c., during the inhalation. The ether is then to be decanted from the water, drying it with chloride of calcium to free it from any water that might otherwise remain from the washing. The specific gravity of ether sold by chemists is .750. The specific gravity of ether washed with water, and dried with chloride of calcium, is .725."—p. 18.

With regard to the inhalation, the author says,—

"At the commencement of the operation I always allow the patient to inhale the vapour three or four times without closing the nostrils, carefully observing the pupil of the eye, which in about one minute will be found considerably dilated; but this will of course depend upon the susceptibility of the patient. After eight or ten more inspirations, the pupil will remain stationary for some few seconds, it will then turn towards the eyelids, which motion will, in most cases, be repeated several times. Continuing the inspirations, the pupil will be observed to turn under the upper eyelid, or remain in the centre of the eye; and in five or six inhalations beyond this, the operation may commence. In operations, the performance of which requires any length of time, the vapour should be cut off by means of the stop-cock attached to the mouth-piece, which is so constructed as when turned it admits a current of atmosphere to the mouth, as well as permitting the patient to breathe through his nose during seven or eight inspirations. Then, again, let on the vapour, and so on breathing that and the atmospheric air alternately at intervals of half a minute, until within three minutes of

the end of the operation, when the pipe may, with perfect confidence as to the result, be removed from the mouth."—p. 13.

Subscribing generally to these observations, we must, however, warn our readers that the eye is not always an indicator of the absence of sensation; there is not invariably that lifting of the eye, nor is there always dilatation; but his pulse is, we believe, much accelerated: this, with relaxation of the voluntary muscles, and the state of the pupil, will together enable the operator to say when he shall make the first incision. It sometimes happens that a patient—and especially if accustomed to stimulating drinks—is thrown into a state of lively intoxication; he becomes loquacious and obstreperous, so much so that the operator is unable to proceed; but, as in cases of drunkenness, should the operation have been effected, he is, when restored to his natural senses, quite unable to remember the pain which he appeared to have experienced. Of course, at present, opportunities have not presented themselves to enable us to test the whole range of its application; but suggestions out of number have been made; and we trust physicians will not be behind the surgeons in applying ether vapour to the relief of suffering. Is it a proof of the superior intelligence of the age, of the absence of bigotry and prejudice, or of the simplicity and evident truthfulness of this great discovery, that has caused it to be received with such general approval?—an approval which we sincerely hope will be marked by a substantial public remuneration, and one not awarded when the great recipient is sinking into his grave; but let it be prompt, so that he may feel the gratitude of his fellow-creatures for the boon he has conferred.

## Medical Societies.

### PATHOLOGICAL SOCIETY OF LONDON.

MONDAY, MARCH 1, 1847.—DR. WILLIAMS IN THE CHAIR.

DR. OGIER WARD had made a

MICROSCOPICAL EXAMINATION OF NECROSED BONE,

taken from the humerus, which was exhibited at the last meeting. He found the minute structure of bone in no way changed from its normal character, and the only alteration detected was the presence of an orange-coloured deposit around the Haversian canals.

DR. QUAIN had made a

MICROSCOPICAL EXAMINATION OF THE KIDNEYS AFFECTED WITH MEDULLARY SARCOMA,

presented at the last meeting by Mr. Obré.

He found them to consist of new structure, and the proper secreting tissue in a morbid state. The new structure was formed of a fibrous stroma, the fibres being ill-defined and parallel with each other; of nucleated cells two or three times the size of the blood discs, oval, spindle-shaped caudate, and doubly caudate; of bloodvessels and numerous corpuscles.

In reference to the changes produced in the proper structure, which could only be examined at the cones, owing to the cortical structure having undergone complete degeneration, scarcely one of the uriniferous tubes had a natural appearance, many being destroyed. Several were increased in size, and lined with numerous cells, in some degree retaining the normal arrangement. A still greater number of the tubes atrophied, containing irregularly formed cells and granules, and surrounded by the morbid structure.

Dr. Quain concluded, from the above examination, that the disease was, in all probability, medullary cancer; that it commenced by the infiltration of morbid matter, external to the proper secreting apparatus; and that the circumstance of the organ having retained its functions, considering its almost entire degeneration, was a point of great interest.

MR. NATHANIEL WARD read a communication from Dr. Letheby on a case of

POISONING BY TURPETH, OR TURBITH MINERAL.

G. L——, aged sixteen, swallowed, on Tuesday night, Feb. 19th, at twenty minutes past twelve, two pennyworth of the mineral. It caused a burning sensation of the mouth and throat; and in about ten minutes he was very sick, and threw up the remnant of a hearty meal of tea and bread-and-butter, which he had taken two hours previously. He now felt scalding pain in the throat, chest, and stomach; and this became so severe, that he walked to the London Hospital, where he was admitted under Dr. Frampton. He vomited repeatedly on the road, and was faint and weak. He was admitted at a quarter past one o'clock, and then looked pale, with an anxious countenance, felt cold, and complained of sickness, with great pain in the throat and stomach. Sulphate of zinc, followed by mucilaginous drinks, having been given, he went to bed, and was seen again in half an hour, when he was suffering from great pain in the stomach and œsophagus, and had constant sickness, and a sense of heat and constriction in the throat. He passed a sleepless night, being tormented by pains and cramps in the limbs, constant purging and vomiting. In the morning, in a high state of fever; throat and stomach still painful, the latter somewhat tender on pressure, and so irritable that nothing would remain on it an instant; tongue and inside of mouth red and inflamed, feeling, as he said, "raw;" bowels much relaxed. Leeches were applied to the epigastrium, and mucilaginous drinks, with opium and henbane, were given, without allaying the irritability of the stomach. On Thursday the purging had ceased, but he still complained of his throat; the breath also began to acquire the mercurial fœtor, and he spat more than usual. From this time he became weaker and weaker; nothing would remain on his stomach; his mouth and throat continued exceedingly painful, and he became profusely salivated, the gums acquiring a deep bluish tint, and beginning to ulcerate at the margins. This condition increased, but he never lost his senses, or became in any way comatose. The debility increasing, he died at eight o'clock upon the following Tuesday morning, without any convulsion or struggle, nearly one week after the administration of the poison.

*Post-mortem examination, twenty-seven hours after death.*—The body was stiff, well developed, and rather pale, except at the dependent parts, where it was livid from the gravitation of the fluid blood; the countenance was composed, the parotid and sub-maxillary regions rather swollen; the lips had a pale-bluish colour, and the gums looked purple and ulcerated at the edges. On opening the chest, the lungs did not collapse, but were so gorged with blood as to be quite black at the dependent parts; a few old pleuritic adhesions bound them to the costal pleuræ. The heart was slightly enlarged; it was immensely distended on the right side with black fluid blood; on the left it was nearly empty. The abdominal viscera were rather redder than natural, and showed the meanderings of numerous vessels filled with dark blood; the ascending and transverse colon were of a deep leaden colour, and the intestines were contracted throughout their whole course; the œsophagus, from the mouth downwards, was much inflamed, and for about four inches before it joined the stomach, its mucous coat had become opaque white, and was pealing off in long strips. The stomach contained nearly a pint of dark yellowish-brown fluid; it was not much contracted; its internal surface, especially about the cardia and pylorus, was covered with patches of small petechial spots, as seen in the model, very similar to those arising from the action of arsenic; elsewhere it had acquired a dirty yellowish-green tint, from the presence of much bile. The intestines throughout their course were contracted and nearly empty, the little which they did contain looked like bile and thick mucus; the internal coat was everywhere redder than natural, and towards the lower part of the ilium it was covered by numerous isolated petechial spots, of about the size of a hemp-seed; this condition was also very evident in the cæcum, and along the whole course of the large intestines; the mucous coat was not anywhere abraded or ulcerated. The liver was enlarged and much congested with dark blood; the gall-bladder was full of bile, the pancreas hard and enlarged, the spleen and kidneys of a deep-purple colour, and the bladder empty and quite contracted. The vessels on the surface of the brain were full of black fluid blood; in section there were more bleeding points than natural; the cortical substance looked bluer than usual, but its consistence was normal. Portions of the intestines were broken down by nitro-muriatic acid, and there was distinct evidence of mercury obtained. I regret that I had not an opportunity of examining any of the urine or saliva which was secreted in such abundance before death.

*Remarks.*—Turbith mineral is a subsulphate of the binoxide of mercury, and, like the other persalts of this metal, is a violent poison. It is, however, so rarely used, either in medicine

or in the arts, that I am not aware of the report of any case of poisoning by it since the time of Wibner.

In the present instance, I learnt that one drachm of the poison had been taken. The effects which followed were very similar to those which result from the action of corrosive sublimate. The poison did not appear to exert any influence over the sensorial functions, but it rather seemed to exhaust the organic acts, and, perhaps, to have given rise to a state of atonic pneumonia.

Among the post-mortem appearances, the most striking were, the leaden blue tint of the lips and gums; the ragged, ulcerated condition of the latter; the swollen state of the salivary glands; the alimentary canal, too, from the mouth to the anus, was found to be redder than natural, and studded with livid petechial spots—a condition most manifest from the cæcum downwards. Then, again, it is worthy of remark that the intestines were contracted throughout, and nearly empty, and that the colon had acquired a slate or lead colour. The gorged and uncollapsed lungs, together with the distended condition of the right side of the heart, and the emptiness of the left, pointed to the fact that death had begun its work at the respiratory organs. This was further evidenced by the turgid condition of the whole venous system, and by the black uncoagulated state of the blood everywhere. In this case, there were many points of resemblance to the effects produced by the preparations of lead, especially as regards the blue colour of the gums, and the purplish hue of the large intestines; but there were also other points of marked distinction, as in the ulcerated state of the gums, and the universally contracted condition of the intestines and bladder.

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Mr. Avery exhibited a specimen of

DISEASED HEART.

The preparation was taken from the body of a man, aged forty-five, who died from softening of the middle lobe of the brain, with considerable effusion of serum in the ventricles and sub-arachnoid cellular tissue. One of the kidneys was almost entirely filled with a substance very much resembling soft mortar, and both testes contained tuberculous matter. He had been a patient in the Charing-cross Hospital three or four months, and was treated for his disease of the testes. During his stay, nothing particular happened to call attention to any disease about the heart, and, consequently, that organ was not examined. Some six weeks before his death, he suffered so much from a rheumatic attack of several of his joints, that he kept his bed for a few days. He recovered, however, quickly under the use of colchicum, and neither there nor subsequently did he complain of palpitations or difficulty of breathing, nor was there any irregularity of pulse. He was suddenly seized with paralysis of the right side, and his pulse was frequently observed, but no irregularity felt, until he began to sink, previous to his death. There had been several occasions which might have given cause for sudden excitement, such as the unexpected news of his wife's death from apoplexy whilst he was in the hospital, several operations on the scrotum, &c., none of which circumstances appeared to produce any extraordinary phenomena with regard to the heart's action. The aorta at its origin and upwards is very much dilated, and the coats otherwise diseased; and directly across the opening above the valves, there is stretched a firm adventitious cord, to which is attached three fibrinous deposits, each as large as a small bean, floating loosely in the vessel. That valve usually situated above, and attached to the septum ventriculorum is almost entirely destroyed, and in its place is a considerable cavity, containing also portions of fibrinous deposit. This cavity is making its way through the septum into the right ventricle, and, indeed, seems to have perforated that division entirely, as there is a considerable portion of a similar deposit between two of the tricuspid valves, which appears to be continuous with that contained in the cavity itself. The amount of mischief here found in so important a part of the organs of circulation is truly surprising when we consider the absence of any very prominent signs during life.

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Mr. Pollock exhibited two specimens of

FIBRINOUS DEPOSITS IN THE SPLEEN, ACCOMPANIED WITH DISEASED HEART.

The first was taken from a woman, who had been under the care of Dr. Wilson, in St. George's Hospital, about three months ago. The mitral valve was much diseased, with almost entire destruction of the tendinous cords, and considerable contraction of the mitral orifice; the spleen was a foot long, and interruptedly pervaded with large fibrinous deposits.

The second specimen was taken from a patient who had been under the care of Dr. Bence Jones, for a rheumatic affection. The mitral and aortic valves were much diseased, and the spleen, which barely exceeded its normal dimensions, was pervaded with miliary deposits.

Mr. Pollock observed, that the cases were particularly interesting, as illustrative of the coincidence of fibrinous deposits in the spleen, with disease of the heart—a fact to which pathologists had lately had their attention directed by Rokitansky. Mr. Pollock exhibited also a specimen of

ENCEPHALOID DISEASE OF THE RIGHT OVARY,

which had filled up the entire cavity of the pelvis, projecting into the abdomen. The patient was between thirty and forty, and from the circumstance of her being in an all but dying state on admission, it was difficult to obtain any details of a satisfactory character. The vagina and uterus were healthy.

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Mr. Sankey exhibited a specimen of

ABSCESS OF THE LIVER.

The patient, aged twenty-three, a female, was admitted into the Fever Hospital, under Dr. Tweedie, on the tenth day of her illness, which lasted altogether forty days. Faintness, vomiting, and shivering, ushered in the disease. The most prominent symptoms on admission were, griping pain in the abdomen, coming on in paroxysms, from epigastrium to pubis, coated tongue, and thirst. She was bled, and put under the influence of the mercury, the fœtor of which was observed on the fourteenth day, and on the sixteenth the shivering returned, and did not leave her till the day of her death. On the twenty-first day, vomiting of bilious matter came on, accompanied with tenderness over the region of the liver. Little or no alteration took place in the character of the symptoms from this period; there was daily repeated attacks of shivering, frequent bilious vomiting, a sallow skin, but no jaundice, a red and fissured tongue. She sank on the fortieth day, worn out by the frequent vomiting. She died quite sensible. The post-mortem examination was made fifteen hours after death. The body was well-formed, and there was one inch and a half of fat in the anterior walls of the abdomen. The omentum had formed adhesions at its lower border, to the adjacent surfaces of the uterus and the rectum, and in the space formed by these attachments was a cavity filled with pus; there were also several smaller purulent collections. The right iliac artery, along the edge of the pelvis, was obliterated. The ovaries had also contracted adhesions with the omentum. The abscess above described communicated with the rectum, by a fistulous opening in the anterior wall of the latter. The liver, which was pale and flabby, presented, on the upper convex surface of the right lobe, a circular elevation, an inch in diameter, and elevated half an inch. On making a section of the organ, through the centre of this elevation in its antero-posterior diameter, numerous small cavities were laid open; the largest, corresponding with the elevation on the surface, was of sufficient magnitude to have contained a small walnut. The smaller cavities divided, were of irregular shape and size, all more or less connected with each other, so that the whole cut surface presented a ragged appearance, being riddled, as it were, by a chain of cavities. The contents of these cavities were more or less alike in all: their walls were lined by a flocculent lymph, in some parts deeply tinged with bile. The centre of them was occupied by a strong fluid; in the smaller ones, of the colour of pus; but in the large cavity, resembling mucus, being of very tenacious character, and capable of being drawn out in strings.

Beneath the microscope the fluid from the large cavity presented a confused granular appearance, with numerous organic globules, of various diameters, having irregular margins, and the majority obscurely resembled pus globuli. Another portion of the less tenacious fluid exhibited pus globules of less equivocal appearance, but no positive conclusion could be drawn from even these. Imbedded in the slimy fluid were numerous seed-like bodies of a yellow colour: on placing these beneath the microscope, they exhibited acicular crystal, resembling cholesterine.

The morbid products were distinctly found to occupy the track of the portal canals, and in many parts of the organ the disease was entirely confined to the portal vein, the artery and the duct being easily distinguishable and perfectly sound; in no part were the duct or artery the only vessels involved, but in many positions they were included in the common destruction. The stomach, which was healthy, contained a greenish fluid; the small intestines, a liquid, pultaceous matter

of a greenish-brown colour; the great intestines contained soft and pale fæces.

It appears to be probable that this serious pelvic abscess had existed for some time, and it is only curious that the peritonæal inflammation should have gone on so insidiously without producing more serious disorder; for she had enjoyed tolerable health for three months at least before she entered the hospital. It is, perhaps, difficult to fix the precise time when the disease of the liver occurred—that is, supposing it to have been subsequent to the pelvic mischief, the twenty-first day is the first day of bilious vomiting, but the frequent and distressing signs occurred much earlier.

It may be also somewhat interesting, in a physiological point of view, to call attention to the large quantity of fat found after death. In many diseases a much shorter time than forty days is sufficient to produce the greatest emaciation. That the use of the bile is to dissolve the fatty matter of the food is not therefore corroborated by this case.

## THE LONDON HOSPITAL MEDICAL SOCIETY.

FRIDAY, JAN. 15.—DR. COBB IN THE CHAIR.

DR. STEPHEN WARD read the following case of

### PARAPLEGIA FROM INJURY OF THE SPINE, FOLLOWED BY RECOVERY.

A lady, sixty-eight years of age, on her way to church one Sunday, in Sept. 1843, was much alarmed by seeing a horse, which had broken loose, gallop towards her along the pavement. In her attempts to get out of the way, she slipped off the kerbstone, but did not fall; she was much shaken by the violence of the shock, and felt acute pain in the back, with a sense of faintness. During the ensuing week, the effects which she experienced from the injury were so trifling, that she went to one or two dinner parties, and continued in her usual health and spirits until the following Sunday. The pain in the back then became aggravated; and at a point corresponding to the fifth and sixth dorsal vertebræ, there was tenderness to the touch and on percussion—numbness of the lower extremities, with impaired power of motion, supervened, and extended gradually from below upwards; so that by the ensuing Wednesday perfect paraplegia was established, with retention of urine, obstinate constipation, and a more or less tympanitic condition of the abdomen. There was no evidence of acute inflammatory action, the tongue being clean and moist, the surface cool, and the pulse but little above the natural standard; but there was restlessness and irritability of mind, with despondency, from which, however, she effectively rallied in the course of a few days. For a week or two she was kept rather low, the bowels being relieved by injections, and an opiate given at night-time, with a view of allaying restlessness and procuring sleep. The tenderness of the back gradually disappeared, nothing remaining but a sense of local weakness. The paralysis, however, continued; and there was superadded, after some weeks, an extremely violent reflex action, occurring several times during the day, sometimes not apparently due to any exciting cause, but frequently very severe during the action of the bowels—the thighs being then flexed on the pelvis, the knees knocking violently together, and the legs powerfully retracted. These spasmodic movements were the cause of much distress, being attended with severe pain, resembling that of cramp, the parts remaining rather tender after they had subsided. She was, for the most part, under the care of my father, and the only treatment had recourse to consisted in gentle friction, with stimulating liniments over the back and spine; careful attention to the state of the secretions; the exhibition of morphia at night-time, which induced sleep, and checked the reflex movements; and sustaining the physical powers with nourishing, digestible food, and the mind with a moderate amount of social intercourse.

No material alteration in the symptoms took place until the autumn of 1844, her general health up to this period continuing good, and her mind preserving throughout a cheerful healthy tone, which no doubt contributed materially to the successful termination of the case.

One morning in August 1844, nearly two years from the receipt of the injury, she felt something irritate one of her legs, and on experiencing a desire to alter its position, found, to her surprise, that she could move it, although in a limited degree. From this time she gained the power of flexion and extension of the left leg and foot, and partially so of the right, the paralysis of the bladder still continuing. This partial recovery, however, contributed much to her comfort, enabling her to sit up in a chair for one or two hours daily. A very gradual increase of power took place in the early part of 1845; and by the end of July in this year she was able to turn herself round in her chair, and, by the aid of her nurse, to raise herself in the upright position. About this time the bladder regained its power; and the bowels, although still requiring the use of medicine, acted more regularly and freely. From this time she rapidly progressed; the reflex movements gradually subsided; for the last year she has been quite independent of medical aid; and at present, with the assistance of her nurse or a crutch, she is able to move about with tolerable ease.

The principal points of interest in the above case are:—

1st. The peculiar nature of the accident, and the morbid action which probably ensued upon it.—There is no reason to suppose that either the cord or its investments were materially injured, the mere shock sustained by them being sufficient to give rise to inflammation, resulting in the effusion of fluid, which, after a protracted period, became gradually absorbed. A parallel case is alluded to by Dr. Abercrombie, of a gentleman who, in jumping over a low wall, slightly sprained his back. He felt but little uneasiness at the time, but after some weeks his lower extremities became paralytic. In this state he continued for four or five months, and then gradually recovered.

2nd. The extremely violent reflex action, throughout entirely beyond the control of the will, occurring frequently, without any evident exciting cause, and attended with excruciating pain.

In connexion with this symptom, two questions arise:—The first—Whether this extreme irritability of the excito-motory system does not warrant a rather favourable prognosis, as indicating considerable vitality of the cord? The second—How are we to explain the fact that these spasmodic movements were productive of extreme pain, when in the intervals between them sensation was entirely lost. This may be accounted for by the supposition, that although the transmission of nervous influence, under ordinary circumstances, was interfered with by the pressure of fluid, or thickening of the membranes, the integrity of the cord was, in all probability, not impaired, and a powerful impression could still be conveyed by it to the brain.

3rd. The negative character of the treatment pursued, which consisted merely in supporting her powers, and ministering to symptoms. Efforts were continually made by her friends to induce her to make trial of galvanism, mesmerism, &c.; but as she was doing well, she had the good sense to resist their persuasion.

The case, consequently, instead of flourishing among the advertisements of charlatanry, remains an evidence of what may be effected by medical treatment coöperating with the restorative powers of Nature.

Mr. BARRET exhibited a specimen of

### ULCERATION OF THE INTERNAL JUGULAR VEIN AFTER SCARLATINA,

taken from the body of a girl, aged five, who had been admitted into the hospital with an extensive slough on the left side of the neck, extending from the ramus of the jaw above to the clavicle below, part of the latter being in a state of exfoliation.

The sloughing was the sequelæ of scarlatina. She appeared almost anæmic, hæmorrhage having occurred on two or three occasions prior to her admission. Upon removing the lint and bandages, which had been applied by a surgeon in the neighbourhood, an unhealthy, indolent ulcer was seen, which had penetrated to some depth below the anterior border of the sterno-mastoid, the remainder of which muscle was completely exposed. At the upper part was seen the parotid gland, through which sinuses appeared to pass, and in one of these was a small clot. The edge of the thyroid body bounded the ulcer in the median line. Lint, moistened with a solution of hot chloride of lime, was applied over the ulcer; tonics and nourishing food were administered.

On the following day, the ulcer appeared more healthy. Hæmorrhage, however, came on from its upper part, and was checked by pressure. On the third day, copious bleeding came on at two distinct periods, and the child sank. On dissecting in the course of the carotid vessels, the sheath of the external carotid was found to have been opened by an ulcer in the substance of the parotid gland, and had extended into the internal jugular vein, causing a perforation four lines in length by three in width. The margin of the opening was smooth, and analogous to a perforating ulcer in the intestine.

# THE LANCET.

LONDON, SATURDAY, MARCH 13, 1847.


At the recent meeting on the subject of the suppression of the republic of Cracow, at which the Marquis of Northampton presided, his lordship made a liberal speech, of the most unexceptionable tendency, in favour of freedom and sound responsible government, and on the responsibility which attaches itself to governing powers. Opinion, too, that power before which we have so often brought the officials of the Royal Society, was acknowledged to be supreme. In introducing himself to the meeting his words were as follow:—

"That in taking the chair on this occasion he had deviated from a rule which he had for some time acted upon, not to occupy any prominent position on public occasions of this kind. He had laid down this rule, partly because attendance upon large assemblies was injurious to his health; and also because, holding, as he did, the office of President of the Royal Society, he considered that an abstinence from all interference in party matters would enable him the more efficiently to perform the duties which had been devolved upon him. But there were occasions of a peculiar nature in which he felt that he might deviate from this rule, and he considered the present to be one of them. (Hear, hear.) This was not a party meeting; for there was no statesman, and there was no man in England, who did not consider and avow that the maintenance of public faith, and of regard to public treaties, was the great mainstay for the security of peace. (Hear, hear.) The progress of intellectual pursuits of every kind must mainly depend upon the existence of peace in the world; and the peace of the world could never be continued or secured if breaches of public faith were allowed to take place without any expression of public opinion on the subject. (Hear, hear.) He believed that the expression of public opinion in England would have a great effect in preventing the repetition, on the Continent, of such events as that which they had that day met to consider. He would not detain the meeting longer, but would only observe, that it appeared to him of great importance that they should, as far as possible, be unanimous in the expression of their sentiments on this occasion; that they should not bring forward any violent propositions in which there could not be general concurrence; that they should be moderate, that they should be temperate, but that they should be firm. (Hear, and cheers.)"

Unfortunately, we fear the noble chairman justifies by his acts the old shafts launched against liberalism, that the patriot abroad is often the tyrant at home. Lord Northampton spoke of the progress of intellectual pursuits, and of their dependence upon the preservation of good faith among those having authority. We might draw a parallel between the position of an emperor of Austria or Prussia, and the President of a great scientific institution. If breaches of faith by kings and princes are reprehensible, because of the evil results to the spread of knowledge, are not the same kinds of breaches committed by presidents and chairmen of learned republics equally reprehensible? In its different sphere, is it not quite as bad in itself, and quite as baleful in its consequences, for a President of the Royal Society of London to put his pen through its statutes? to erase, or suffer the erasure, of minutes of its transactions, and that for an unjustifiable purpose?—to award the honours and medals of that Society with convicted and confessed injustice, and in defiance of the statutes and royal regulations for their distribution?—is it not, we say, as bad, in its sphere, to do or to suffer the perpetration of such things as these, as it is to blot out a constitution, to infract a treaty, or to remove a free state from the map of Europe? We maintain that the selfsame tyrannical, lawless spirit as that which the Marquis of Northampton so pathetically deplores at Cracow, has not been altogether rejected from the house of the Royal Society over which he presides; and we opine, that before the noble lord attempts again to exhibit the motes in the eyes of tyrannical princes, he will pluck out the beams from the eyes of disorderly presidents. As it is, his preachings and his practices, his precepts and his examples, are singularly at variance. His speech at the Freemasons' Tavern is a signal and severe condemnation of his own proceedings at Somerset House.

It is reported that it is in contemplation to perpetrate a most extraordinary and flagrant *job* at Guy's Hospital. The Governors should remember that the revenue of that princely establishment is of an enormous annual amount, and that the office of *Treasurer* is one of high trust and vast responsibility.—*Verb. sat.*

We direct attention to an excellent letter in another column, from an assistant-surgeon in the navy, complaining of the injury and indignity suffered by young medical men, in being located in the gun-room as long as they remain assistant-surgeons. All candidates, before they can obtain the post of assistant-surgeon, must undergo the special examination required of them, and obtain a certificate of qualification from one of the British Colleges of Surgeons; they must have undergone a lengthened course of professional preparation, including an apprenticeship, or pharmaceutical engagement; a lengthened attendance upon lectures on anatomy, surgery, military surgery, theory and practice of medicine, clinical medicine, chemistry, materia medica, midwifery, and botany, and must have attended a recognised hospital for two years subsequently to the age of eighteen. At the time they are admitted, after all this preliminary education and examination, to the examination of the Inspector-General of Naval Hospitals and Fleets, they must be between twenty and twenty-four years of age. And, after all this, when they enter the service, though highly educated, they are only on a par with naval youngsters, boys who have just commenced their emancipation from school. The raw midshipman is practically put on a par with the scientific man, upon whom the preservation of the health of the whole ship, in case of death or accident among the other medical officers, may depend.

Viewed in any light, this is an evil which loudly calls for remedy. It interferes, as our correspondent points out, with the professional studies of the young naval surgeon. Though a special set of certificates are required for the naval service, the great proportion of those applying for the post of assistant-surgeon have already obtained their ordinary and legal qualifications for practice. When thrown on shipboard, the immediate opportunities of seeing extensive practice are seldom very great. It becomes, therefore, the more necessary for the assistant to cultivate his opportunities to the utmost, by reading and study. Study is indeed enjoined as a part of his career; he is expected to prepare himself, while an assistant, for the examination he will have to undergo as full surgeon, when his time of promotion may come round. But how obviously unfitted must the noise and bustle of the gun-room be for pursuits of this kind. How impossible that any-

thing like real medical study can be carried on in the midst of the juniors of the ship, whose tastes, habits, and even duties, are quite alien to a quiet profession like that of medicine and surgery. The naval authorities, then, defeat their own expressed intentions; they tell the assistant-surgeon to study, and they entirely preclude him from that retirement and independence without which study is impossible. Obviously, this is not the way to cultivate the medical arm of the naval service in the way its importance deserves.

The naval authorities really or affectedly seem to desiderate high professional qualifications and degrees on the part of the applicants for the assistant surgeoncy. They give a respectable ordeal themselves; but they are glad to get young medical men who have gone through a much higher one. They say in their regulations, that although their own specified qualification may be all that is absolutely necessary in candidates, yet "a favourable consideration will be given to the cases "of those who have obtained the degree of M.D. at either of "the Universities of Oxford, Cambridge, London, Edinburgh, "Dublin, or Glasgow; or who, by possessing a knowledge of "diseases of the eye, and of any branch of science connected "with the profession, such as medical jurisprudence, natural "history, natural philosophy, &c., appear to be more pecu-"liarly eligible for admission into the service." Ought it not to strike those in power, that if they want high degrees, they should, at least, treat the holders of these degrees with respect;—that they should, in respect to mess-room, cabin, uniform, and pay, be treated as officers, and not as mere learners of their profession?

## Correspondence.

### THE ORIGINAL DISCOVERER OF THE APPLICATION OF ETHER TO SURGICAL OPERATIONS.

*To the Editor of* THE LANCET.

SIR,—As the trustee and representative of the European rights of Dr. Jackson and Dr. Morton of Boston, United States, the inventors of the Letheon, or means of inducing a state of insensibility to pain during surgical operations, it is my duty to reply to a communication or statement of Mr. Horace Wells, republished in your periodical of March 6th, in which Mr. Wells lays claim to the merit which belongs to Dr. Jackson and Dr. Morton; and in answering the statement of Mr. Horace Wells, I shall incidentally reply to and dispose of the claims of others who have attempted, or may hereafter attempt, to appropriate to themselves the honour and advantage of having originated the invention.

Whoever has read attentively the statement of Mr. Horace Wells above referred to, which was dated Feb. 17th, must be fully satisfied, by the internal evidences of the statement, that Mr. Horace Wells could not have been the inventor of the Letheon; for, even so late as Feb. 17th ultimo, he, by his own showing, was ignorant of the true nature and value of the invention. He affirms that the *Boston Medical and Surgical Journal* recognises him "as the discoverer of the happy effects produced by the inhalation of exhilarating gas or vapour for the performance of surgical operations." It may be that the *Boston Medical and Surgical Journal* has so recognised Mr. Wells; but it remains, in the first place, to show what these "happy effects" are; and, in the second place, to show that the certificate of that respectable journal as to Mr. Wells's discovery is correct in point of fact. Sir Humphry Davy, so early as the year 1799, distinctly stated his opinion that exhilarating gas—i. e., nitrous oxide gas,—inducing a state of insensibility to pain, would be available during surgical operations. In his works, edited by Dr. John Davy, vol. iii. p. 329, we find the following remarkable words:—"As nitrous oxide, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place." It appears, then, that not to Mr. Horace Wells, but to Sir Humphry Davy, belongs the honour, whether great or little, of having discovered "the happy effects produced by the inhalation of exhilarating gas or vapour for the performance of surgical operations." Why did not the surgical profession avail itself of the suggestion and advice of Sir Humphrey Davy? Simply because the effects of exhilarating gas, administered during surgical operations, are *not* "happy," and are, in fact, worse than useless; and the effects are useless precisely because they are exhilarating—because they are accompanied by what Mr. Wells considers the cause of insensibility to pain—viz., "nervous excitement," to such a degree, that in many and most instances the exhilaration and excitement render the patient uncontrollable, and very unfit, from muscular contraction and convulsion, to be made the subject of surgical operations. Besides, every chemist and physician knows that chemical, mechanical, and medical objections of the strongest character forbid the use of nitrous oxide or exhilarating gas during surgical operations; expense of preparation, trouble of conveyance and manipulation, and danger of poisonous impurity, are insuperably against it; and he who can speak of nitrous oxide gas as being the equivalent or optional substitute for the vapour of ether, exhibits in the same sentence his ignorance of the merit of Dr. Jackson and Dr. Morton's invention.

If, however, in this view of the inutility and impracticability of the employment of exhilarating gas I am in error, and if it be an equivalent and fit substitute for the vapour of ether, then I do not hesitate to affirm, that to Sir Humphry Davy, and not to Mr. Horace Wells, belongs the merit of the discovery of the principle of the Letheon—

"Palmam qui meruit ferat."

Mr. Wells goes on to state, that in Dec. 1844, he having tried certain experiments in extracting teeth of patients when under the influence of exhilarating or nitrous oxide gas, proceeded to Boston, "to present his discovery to the medical faculty, first making it known to Drs. Warren, Hayward, Jackson, and Morton, the two last of whom subsequently published the same without mention of our conference." Mr. Wells herein affirms too much for his own good; for it is self-evident, that if Drs. Jackson and Morton did "publish the same," the same being known by such witnesses as Dr. Warren and Dr. Hayward to have been previously presented to the medical faculty, then Drs. Jackson and Morton did by such publication distinctly and effectually preclude themselves and all other persons from laying any claim to "the same;" for, upon laying such claim, it would be sufficient to produce the publication by them, and prove by Drs. Warren and Hayward the previous gift to the medical faculty, and the claim would fall to the ground. From which I infer, and consider it to be demonstrated, that what Dr. Jackson and Dr. Morton claim as their invention is not "the same" thing that Mr. Wells presented to the medical faculty.

Mr. Wells further states, that since the discovery of the happy effects of exhilarating gas was made, he has "administered nitrous oxide gas and the vapour of ether to about fifty patients." So it appears, that since Dec. 1844, or earlier, Mr. Wells has administered, indiscriminately, nitrous oxide gas and the vapour of ether to about fifty persons. In a matter of so much importance as a claim to the merit of the discovery or invention of the Letheon, one would expect the claimant to define and discriminate precisely, and the fact of not doing so proves, beyond question, that however Mr. Horace Wells may settle his claim to priority of discovery of the effects of exhilarating gas with Sir Humphry Davy, he certainly can make no claim of priority against Dr. Jackson and Dr. Morton, so far as the discriminated, peculiar, and exclusive effects of the vapour of ether, properly administered, are concerned. The effects of sulphuric ether, properly administered, are not exhilarating and exciting, but sedative; and it is this quality of sedativeness, attending a state of insensibility to pain, which constitutes the chief value of the Letheon; and to have invented the safe and certain means of inducing this complex state—of insensibility to pain, muscular quiescence, and a soothed and unexcited condition of the nervous system—constitutes the chief merit of Dr. Jackson and Dr. Morton.

It is not a little singular, that Dr. Warren and Dr. Hayward, if they received from Mr. Wells, for the medical profession, the gift of a discovery of such value as the Letheon, did not manifest a greater interest in the matter; particularly as Dr. Warren has since stated, that for many years such an improvement had been a desideratum with him! This is the more singular, inasmuch as the first certificates of success obtained by Dr. Jackson and Dr. Morton,

were given them by the same Drs. Warren and Hayward, Surgeons of the Massachusetts General Hospital! Would Mr. Wells have us believe that Dr. Warren and Dr. Hayward have entered into a conspiracy to defraud him of his fame and rights?

Is it not also very singular, that Mr. Horace Wells, having made so important a discovery as that which he pretends to, suffered it to die a natural death? for we hear no more of him or his discovery, until after Dr. Jackson and Dr. Morton had perfected the Letheon. If Mr. Wells did discover the principle of the Letheon, of which discovery his statement does not contain a shadow of evidence, it was his bounden duty, not only as a surgeon, but as a man, to make it known to the world; he had no right to abandon it; for such an abandonment would have been treason against humanity; neither his vanity nor his philanthropy would have permitted it; and if, having really made such a discovery, he had not the courage and the perseverance to make it known, and that without delay, then, instead of deserving the praise and gratitude of mankind, he would have merited their execration and contempt.

I shall not dwell upon the consideration that, in law and reason, the abandonment of an invention is a disclaimer; we are called upon, in charity to Mr. Wells, to believe that what he abandoned, whether his own discovery or Sir Humphry Davy's, was something impracticable and worthless, certainly not the Letheon.

In corroboration of the views and opinions herein expressed, I would call attention to the following extracts from communications from Dr. Henry Bennet, P. W. Ellsworth, of Hartford, Connecticut, and Dr. E. E. Marcy, of New York, all published in THE LANCET of March 6th, in connexion with the statement of Horace Wells:—

Dr. Bennet says,—"The results at which he (Mr. Wells) arrived were principally attained through the use of the nitrous oxide, which he preferred to ether, and which has not yet been tried, to my knowledge, in this country."

Mr. P. W. Ellsworth says,—"After the idea suggested itself to him, he (Mr. Wells) debated for some time which to use, the (nitrous oxide) gas or ether; but preferred the former, as he thought it less liable to injure the system."

Dr. Marcy says,—"In the month of October, 1844, a dentist of Hartford, Connecticut—Horace Wells, Esq., first made use of the nitrous oxide gas in extracting teeth. The results of his experiments were, that teeth could be extracted without the slightest consciousness of pain to the individual operated upon. During the same month, the writer of the present article, while witnessing the experiments of the gas, suggested to Mr. Wells the use of the sulphuric ether as a substitute for the nitrous oxide gas. Being familiar with the effects of both these agents, and knowing that other operations upon the system were analogous, I first urged upon him the use of the sulphuric ether, as being equally efficacious, and less troublesome to prepare. Upon reflection and more full discussion of the matter, I advised Mr. Wells to abandon the use of the ether, and confine himself to the exhilarating gas."

From these extracts it not only appears that Mr. Horace Wells disapproved of the use of ether in comparison with nitrous oxide gas, but that, even so far as any experimental trials of ether were concerned, if there were any, he was indebted to the suggestion and advice of Dr. Marcy, who states that he was at that time "perfectly familiar with the effects of both these agents!"

To bring this matter to a decisive test, so far as England is concerned, I am prepared to state that Dr. Jackson and Dr. Morton make no claim whatsoever to the employment of nitrous oxide gas during surgical operations; so that if nitrous oxide gas really be an equivalent to, or optional substitute for, the vapour of ether, the public can freely avail themselves of it, and reserve their gratitude for the memory of Sir Humphry Davy, who first suggested its use, leaving Americans to settle any disputes as to the invention of the Letheon among themselves.

It is not my purpose, in this paper, already too long, to furnish all the evidence I possess of the title of Dr. Jackson and Dr. Morton, of Boston, to the merit of the invention of the Letheon; that title must be assailed by some stronger claimant than Mr. Horace Wells to render any very vigorous defence necessary. In the meantime, it may be proper to state that, first, Dr. Jackson and Dr. Morton have sworn, or legally affirmed, that they are the joint inventors of the Letheon; second, that the Board of Examiners of the claims for patents at Washington, several of whom are physicians, has found, after thorough investigation, the invention of the Letheon, claimed by them, to be *novel* as well as useful; third, that the physicians and surgeons of Boston have, through Mr. Winthrop, a representative, and Mr. Davis, a senator, of Massachusets, memorialized Congress to reward the inventors. With so strong a *primâ facie* case as this, it is superfluous to enter upon the defence of their claims more at large,—the burthen of proof is upon the assailant of their title; and he must appear before the bar of public opinion with such strong evidence as would, in a court of justice, convict them of perjury.

It is the common fate of the great benefactors of men to be neither appreciated nor recompensed; fortunate are those among them who escape with these negative wrongs. The inventors of the Letheon have bestowed the greatest boon which medicine and surgery combined have as yet conferred upon mankind, and there are not wanting those who would detract from their fair fame, and deny them their fair reward.—I am, Sir, your obedient servant,

London, Duke-street, St. James's, March, 1847. JAMES A. DOBR.

## THE "ASTLEY COOPER TESTIMONIAL."

*To the Editor of* THE LANCET.

SIR,—I shall feel obliged by your publishing the enclosed correspondence between Mr. Travers and myself, respecting the epigraph or inscription to be placed on Sir Astley Cooper's monument, in St. Paul's.

The history of the correspondence is briefly this:—The "Astley Cooper Testimonial Committee" having some difficulty in deciding upon the inscription, in consequence of most of its members having competed for the honour of writing it, agreed to refer the selection to the Rev. Dr. Hawtrey, of Eton College. Accordingly, the whole of those sent in were submitted, without the names of the respective writers, to the above-mentioned eminent scholar, for the purpose of his selecting that which he deemed the best and most appropriate.

After some time, the Rev. Dr. Hawtrey made his award in favour of the inscription which I had had the honour to write. What followed is explained in the correspondence.

I should add, that Mr. Travers, after a third attempt, I believe, succeeded in manufacturing an inscription, to the adoption of which, the rest of the Committee, *after dinner*, gave their consent. In its correctness and appropriateness, however, he appears to have so little confidence, that notwithstanding my repeated requests to have a copy, I have been unable to obtain one.

I regret extremely that the Rev. Dr. Hawtrey, for whose courtesy I feel bound publicly to express my acknowledgments, objects to the publication of his letter, which contains a complete answer to the imputations cast by the Committee, or rather Mr. Travers, upon the grammatical accuracy of my inscription. At least, it is the authority of one of the best scholars in the kingdom against that of a surgeon, on a matter purely of scholarship. However dexterous Mr. Travers' use of the scalpel may be, it would hardly qualify him to be a judge, or, at all events, a better judge on such a subject, than Dr. Hawtrey.

Mr. Travers has not thought fit to reply to or acknowledge the receipt of either my last letter, or one since written, enclosing him, by express permission, a copy of Dr. Hawtrey's letter. Doubtless, Mr. Travers has good reasons for his conduct in this as well as in the matter spoken of in our correspondence. I can only express my regret that he has not condescended to enlighten myself or the subscribers upon conduct which at present appears arbitrary and unfair, and in the highest degree discourteous and unbecoming, in the chairman of a public committee.—I am, Sir, your obedient and faithful servant, JOHN JACKSON GOSSET.

Broad-street Buildings, March 5, 1847.

No. 1.—(COPY.)

140, Broad-street Buildings, Feb. 12th, 1847.

SIR,—Having just been informed of what I cannot but think a most unfair transaction as regards myself, I take the liberty of requesting that you, as one of the committee of the "Astley Cooper Testimonial Committee," will be courteous enough to inform me at your earliest convenience, if it be true, as, until directly informed from yourself, I am unwilling to believe that one ranking so high, both in your profession and as a man of honour and a gentleman, would be a party to so unusual, not to say unhandsome, an act as the one in question. The act to which I refer is relative to the inscription to be placed on Sir Astley Cooper's monument.

Perhaps you are not aware that, after my inscription had been selected by Dr. Hawtrey, Mr. Callaway* informed me officially that the Committee had consented to its adoption, and requested me to allow of certain verbal alterations which the Committee had suggested, and to which of course I readily gave my assent. Mr. Callaway also then informed me that the matter was quite settled, and that he would take care it should be inserted in the medical journals. I think, after the above statement, you will agree with me that the rejection of my inscription is most unhandsome, and that at least a full and perfect explanation ought to be afforded me as to the grounds upon which the Committee have acted.

I address myself to you, as I understand it is your inscription which has been substituted in place of mine; but I need hardly say that my communication is to the Committee generally.

I think, in fairness, I ought to add, that should my information be correct, I shall feel bound to inform Dr. Hawtrey of the slight passed upon him; and the subscribers, of the very unhandsome way in which the Committee have acted towards me.

Requesting that you will oblige me with an answer at your earliest convenience, I am, Sir, your very obedient servant,

(Signed) JOHN JACKSON GOSSET.

To Benjamin Travers, Esq.

No. 2.—(COPY.)

Bruton-street, Monday, 15th, 1847.

SIR,—I repudiate all imputation of discourtesy towards you. Either you have misconceived, or have been misinformed, on the subject. The Committee never did come to a final decision—at least I, as chairman, never heard of it, and you could not have been officially so informed, with a due regard to accuracy on the part of your informant. I will call together a committee, and lay your letter before them.—Your obedient servant, (Signed) B. TRAVERS.

J. Jackson Gossett, Esq.

No. 3.—(COPY.)

Bruton-street, Feb. 22, 1847.

SIR,—I am deputed by the sub-Committee appointed to superintend the erection of the monument to Sir Astley Cooper, to inform you, that at a meeting, held this evening, they have come to a final decision respecting the inscription to be placed thereon; and that any information which may have reached you in private conversation was not an authorized and official communication.

The Committee desire me to express their regret that any misconception should have occurred to cause you disappointment, or to create an impression on your mind that you had not been treated with due courtesy.—On behalf of the Committee, I remain, Sir, your most obedient servant,

(Signed) B. TRAVERS.

J. Jackson Gossett, Esq.

No. 4.—(COPY.)

40, Broad-street Buildings, Feb. 24, 1847.

SIR,—I have the honour to acknowledge the receipt of your note of the 22nd inst. Therein you inform me that "the Committee of the Astley Cooper Testimonial" have come to a final decision respecting the inscription to be placed thereon; may I tax your courtesy, as chairman of that Committee, so far as to request that you will inform me what that decision is? In the absence of other information,—Dr. Hawtrey having selected my inscription, and the whole matter having been submitted to his arbitration by yourself and co-committeemen,—I should conclude, as a matter of course, that you had acquiesced in the decision of the tribunal selected by yourself, had not the diplomatic style and ambiguous brevity of your note led me to surmise a different conclusion.

May I further request to be informed, whether it was denied, on the part of Mr. Callaway, that his communication to me was supposed by himself to be official? or whether you could suppose such a communication as that described by me in my former letter could be looked upon in any other light than as official? I did not deem for a moment, when dealing with gentlemen and men of honour, that so transparent an evasion would be had recourse to; otherwise I might have added further to what I then said, that Mr. Callaway stated he would have at once two copies made, one for Mr. Bailey, and one for the proctor who transacts such business on behalf of the dean and chapter of St. Paul's; that he also said he was glad the matter was at last settled, and congratulated me upon being the successful competitor.

I cannot believe that Mr. Callaway, your honorary secretary, can have so far exceeded the authority entrusted to him by the Committee as to request my sanction to certain verbal amendments in the epigraph selected by Dr. Hawtrey, without the Committee having agreed as to its adoption. As none of my statements are questioned, I presume Mr. Callaway, of whose honour and integrity I have the highest opinion, admitted their accuracy. I request, then, to be informed precisely whether my inscription has been received or rejected.

The Committee disclaim all discourtesy towards me; which disclaimer I of course am bound to receive; but I do not think that a distinct statement as to the previous, and if any, the present objections to the receipt of my inscription, (and if the latter, a copy of the inscription adopted,) would have been any extraordinary extension of courtesy towards the author of the inscription selected by Dr. Hawtrey as the best, and which, upon being submitted to him a second time, he declares to be in every way worthy of the subject, and to be exempt from the grammatical errors ascribed to it by the Committee over which you have the distinguished honour to preside.—I am, Sir, your most obedient servant,

Benjamin Travers, Esq. JOHN JACKSON GOSSET.

* The honorary secretary of the Committee.

## ON THE MISCHIEF OF THE SELF-ADMINISTRATION OF MEDICINES.

*To the Editor of* THE LANCET.

ENGLAND is the place for "pills," and Englishmen are the dupes that swallow them! Right or wrong, let them be big, little, round, oval, flat, or square, John Bull's stomach is always ready, and down they go with a merry welcome! Rather a curious propensity for otherwise sensible people, but no less curious than true.

Let the veriest knave or idiot only set a pill-machine to work—christen his little globular masses by a strange name—advertise them well, as being made from an invaluable and never-failing recipe, which, of course, everybody must implicitly believe, and John Bull, his wife, and all their little pill-taking pledges, will instinctively open their mouths, like unfledged rooks, and swallow away, without rhyme or reason!

"Englishmen are a pill-taking people. It may be their boast that, as they eat more roast beef and plum-pudding than any other nation, so do they, with a courage peculiar to themselves, bolt more drugs, mineral and vegetable, than the rest of the world beside. Indeed, make anything into a pill, and John Bull will swallow it. Verily, he hath a courageous stomach!

"The British government, too, overtly aids and abets the medicinal doings of its children, who have good leave to experimentalize on their intestinal machinery, so that they pay for it. By virtue of a stamp, a man may take the safest and most legal cut from this world into the next. If, with a criminal contempt of the pill-vendor, he jumps into the Thames, or inserts his neck into a noose, what a fuss there is with the coroner, the jury, the witnesses—what reflections upon the sanity of the deceased. Now, let him make away with himself by means of pills, and he goes out of the world like a respectable man—pays government duty for his death—and there is no beadle to summon a meddling coroner, and curious jury. Hence, our advice is, to all weary of this rate-and-tax-paying world, not to bring any discredit upon themselves, by a rash appeal to water or rope, but to subside from life in a quiet, respectable manner, paying a government duty for death, and thus emulating the self-devotion of the old Roman. Dulce et decorum est pro patriâ mori! It is a sweet and gracious thing to die for the stamp-office."—*Punch's Pocket Book.*

It clearly matters not to John, whether the pill be really suitable for his case or condition; he wastes no time about that; and, if he did, it would be impossible for him to discover a difference between it and any other pill, because he could only judge from size and outward appearance; so he cuts all reflection short, by dropping the bolus into his stomach, where he knows, at least, that it will be out of sight,—and "out of sight out of mind" is an adage as old as John himself.

It seems quite sufficient for this unreflecting man to be convinced that he has perpetrated the act of swallowing a pill; and though it may never do him any real good, because misdirected, yet it affords an inexhaustible fund of self-satisfaction. Thus he undeceives himself, day by day, while a superlative halo floats around his ethereal brain that he is preparing himself to live for ever! What a pity to undeceive this calm, contented, open-your-mouth-and-see-what-God-will-send-you philosophy!

At a late trial at Exeter, Mr. Baron Platt intimated, in summing up the case, that medical men were desirous of prohibiting parents from administering rhubarb and magnesia to their children. This is childish enough, to come out of the mouth of a judge; at the same time, I firmly believe that the more children are injudiciously physicked, the more frequently is it necessary, generally speaking, to have recourse to proper medical advice. I feel no hesitation in broaching another simple fact, which numerous observations have verified, and that is, that when a parent, lacking knowledge, administers medicine to his children, he often finds himself in the same predicament as the countryman, who rashly thought he could mend his watch. With all due deference to Mr. Baron Platt, I would maintain, that what would have been a very simple procedure in the hands of an educated and skilful practitioner, often becomes, by trifling and meddling, a serious and complicated case. Moreover, when it is proved that a fellow-creature dies in consequence of the gross ignorance and neglect of a would-be medical attendant, and he is arraigned at the bar of justice, other words, of greater solidity and force than an allusion to rhubarb and magnesia—words of caution and reproval, should, at the least, have escaped from the lips of a just judge.

Now, it must be very apparent to all who examine the words and the decisions which emanate from the bench, that the highest legal authorities take a strange and contracted view of the terrible mishaps which result from the practice of uneducated persons. Every man of ordinary intelligence would have supposed that, on the bench and at the bar, the profession of medicine would have found able and conscientious advocates; and that the promulgators of quackery, the ignorant and the unprincipled, would, in like manner, have received, on every fitting occasion, their most earnest and solemn condemnation. The bench, the bar, and the coroner's court, have often an imperative duty to perform—the duty of teaching reckless empirics that life and health ought not to be sacrificed with impunity—the duty of cautioning the unwary, repressing the evil-doer, and of enlightening the public mind. Would that this duty were performed with that energy which society has a right to demand, and that they were impressed with that becoming gravity which belongs to functionaries so exalted! Knavish pretenders to medical skill, and cruel quacks of every grade, would then receive that salutary check which the enormity of their misdeeds so loudly and urgently claims. The poor and the ignorant ought, in mercy, to be protected, and not left to be victimized by the crafty, the calculating, the heartless, and the selfish. The bench and the bar—indeed, the educated of every class and denomination—should step between the poor and their fell destroyers, and should vigorously shield them from the merciless knaves. Government, too, should set a bold example, and, without further delay, institute the most energetic means of discountenancing all trade in life, and of preventing uneducated persons from tampering with the health of the community. Such is no less a duty than is the punishment of rogues, vagabonds, and thieves of other kinds; moreover, society demands it as a protective right.

But it may be said—Why should John not "rub in" or "swallow" anything he pleases? His body is his own, and his skin and his stomach belong to it; then why should he not do what he likes with his own? Absorption and digestion are processes too mystified and subtle for him. Potatoes, pudding, and pills, are regularly consigned to the dark tomb of his stomach, and are as much lost as if they had been dropped into the mouth of a coal-pit! He suffers no compunction, but fervently hopes that all will work together for his good.

It is, however, right to tell him, that such blind treatment is very injudicious, and lays the foundation of much serious mischief. His ignorance of these matters is what we have to condemn; because, if he could keep his eye on every pill he takes,—if he could trace it, and mark its effects, as it passes through the labyrinth to which he has so thoughtlessly consigned it,—he would find that pill-taking, like everything else, required both knowledge and judgment; and he would soon arrive at the conclusion, that unless directed by these two attributes, it was not only a mischievous farce,—a happy-go-lucky chance,—but positively attended by frequently fatal results.

And so it is,—but not one-half of the mischief ever comes to light; and John reasonably supposes, that if the Government of a country will permit pills, and other medicines, to be made and sold wholesale, and will further provide them with a stamp, he cannot be far deceived in making a purchase. Surely a Government would never wilfully do anything that was grossly wrong—absurdly foolish—or calculated to mislead a simple man in any degree! But what is the fact? Let us tell John a secret: Government is as ignorant as he is, both of the parties who make his pills, and of the ingredients which enter into their composition; at all events we may safely say, that it cares nothing either about the one or the other. This seems a strange piece of duplicity, but it is no less strange than true. All that Government wants is payment for the stamp which the quack pastes on his pill-box; and after that is secured, John may either live or die. What does Government care about health, disease, and premature death, if it can only secure pay for stamps?

If the recipes for these pills were duly examined by Government, and regularly published, then we should know what we were doing. But what would become of quackery? Secrecy is the charm: unveil these wonderful cure-alls, and John would be in danger of laughing himself to death—the sheer humbug of the thing would well-nigh kill him.

And will the Government of the British dominions continue gravely to lend itself to such a sneaking and destructive system as this? If they will be pill-mongers, and encouragers of "poisonous preservatives" for the mass, it is only fair to expect that they should be intimately acquainted with what they sell; and it is but just that they should be enabled to recommend their stock in trade. No man should be allowed to deal in and distribute what he does not thoroughly understand; and for Government to palm on the public, medicines, of the composition or properties of which it knows nothing, and cares less, is not only to cheat them out of their health, but is inexplicable by any law of justice or propriety.

Government may educate medical men as stringently as it pleases; but pray, when their education is obtained, let them not have to contend with the concoctors of patent medicines, and those wholesale dealers in mischief, the proprietors of purgative pills. Let these things be expunged from the duties of the Stamp Office; let them be declared, as they undoubtedly are, a deadly nuisance, and infinitely beneath the intelligence and requirements of the age; and let quack advertisements be prohibited as equally injurious as those of foreign lotteries, with this addition, that they are a thousand times more meretricious and a thousand times more demoralizing and fatal.

Let our law-makers direct their attention, in these particulars, to many continental countries, and they will find, as already shown, that quackery and attempts at imposition are not only altogether discountenanced by the authorities, but rigorously punished as a crime. They will find that health and life are there esteemed too highly to be permitted to be trifled with, or placed in jeopardy by quacks and nostrums; and I sincerely hope that England will not longer allow such an Augean sink of griping destruction to remain uncleansed, a disgrace to her knowledge, and a gross deception on her hardy and better-deserving sons.

And now, John Bull, you addle-pated man, come hither, and let us put a few serious questions to your simple self. Do you not think it strange that people should regularly dose themselves with purgatives of all descriptions, without knowing anything of their eligibility, and only because they see them advertised, and because they have a three-halfpenny piece of paper called a government-stamp most injudiciously appended to them? How are the bills of mortality ever to be reduced, if the bowels of the people are to be systematically tortured after this fashion? Is it not marvellous that, among a people with habits like these, the average rate of mortality should even be as low as it is? Is there any reason displayed when—we blush to mention it—a solid-looking man like you is found buying purgative pills, of the propriety of taking which you know nothing? And is it not strange, that for mere revenue Government should permit, and even tempt, the mass to take physic of their own accord, without having first examined it carefully, and ascertained the probable effects of its extended application? Government entirely neglects a proceeding so rational and necessary, and the whole transaction is characterized by folly, recklessness, and cruelty. Are the health and lives of the people, in the estimation of Government, worth only a three-halfpenny stamp? Parliament should be seriously implored to contemplate the dreadful effects which must necessarily accrue to the mass from such an insane meddling with vital functions, and a self-directed application of all sorts of patent medicines, made only to sell and to deceive. Heartless, indeed, must be that Government which will continue to permit patent medicines and lying advertisements, to filch from the poor the little health they have, and actually to mow down thousands of unsuspecting people, who are lulled into

security by false representations, promulgated, too, by that press which should ever be ready to warn, to guide, and to shield. Venal, indeed, must be that system which holds out encouragement to impostors and rogues.

Sir, your obedient servant,

Halifax, March, 1847. FRED. SMITH GARLICK, M.R.C.S.

## ON THE TERM "CEREBRO-SPINAL."

*To the Editor of* THE LANCET.

SIR,—I read in Mr. Wharton Jones's critical letter to the President and Council of the Royal Society the expression, "*cerebro-spinal system.*" Have I misunderstood your late articles on the subject when I supposed them to imply that this expression is incorrect? Is there such a system? Is not this supposed cerebro-spinal system in reality two—*the cerebral* AND the *spinal?*

It has often struck me that *two* words, properly employed, would give the least thinking person a good idea of the divisions of the nervous system. The cerebral relates to all that is *without* us; the spinal, to all that proceeds *from without to within, and from within to without;* the ganglionic, to what passes *within* us.—I am, Sir, your obedient servant,

March, 1847. SPECTATOR.

## THE PHYSIOLOGICAL COMMITTEE OF THE ROYAL SOCIETY.

*To the Editor of* THE LANCET.

SIR,—As the authors of the Report of the Physiological Committee of the Royal Society, which is impugned in a document furnished by Mr. Wharton Jones in the last number of THE LANCET, we beg leave to say, that while we altogether deny the justice of the imputations conveyed in that document, whether they regard our good faith or our scientific accuracy; and whilst our opinion as to the excellence and originality of Mr. Beck's researches, remains unchanged, we are, nevertheless, disposed to submit to any imputations from the same quarter, rather than take any share in prolonging an agitation set on foot by disappointed expectants, on the character of which an opinion has been already pronounced in the Society itself, by a very significant majority.—We remain, your obedient servants,

W. SHARPEY,

London, March, 1847. R. B. TODD.

## HOLLOWAY'S "LIFE" PILLS.

*To the Editor of* THE LANCET.

SIR,—The whole profession is under great obligation to you for your exposure of quackery, and especially of the wickedness and knavery of the advertisements and paragraphs so liberally scattered through the columns of the journals of this country. The following case appears to me to support your position:—

On Tuesday last, my partner was summoned to visit an old man, aged seventy-seven years, said to be dying. On his arrival, he found that, lured by the specious promises of a "speedy cure" for "the gravel," under which he supposed himself labouring, held out in the advertisements, the old man had purchased a box of "Holloway's life pills," and had taken them, according to the direction, in increasing doses, till at length a severe diarrhœa had set in, under which he sunk, three or four hours after my partner had seen him. We have made a return of his death to the registrar-general, and have fully stated our opinion of the cause of death.

There is, perhaps, no part of the kingdom in which quackery, in all its forms, is so rampant as in the manufacturing districts of West Yorkshire. The proprietors of "Sartin cures for rheumatiss," "Worm powders," and "Paste for toothach," take their stand in rows in our market-place; bone-setters and professed curers of "certain diseases" fill our second and third class public-houses; while, last but not least, that worse than "do-nothing absurdity," homœopathy, has found a professor in—I regret to say it—a regularly educated surgeon, who, having retired from his profession, has succeeded a well-known political enthusiast in the stewardship of the Fixly estates, in this neighbourhood, and is blowing his "bubbles"—a better term, I think, than globules—in every direction through the district.

Do you not think it possible, Mr. Editor, that the comfortable position of the stewardship of Fixly may be tainted with some infectious miasma, which is certain to produce the disease of quackery in some form, political or otherwise?—I am, your very obedient servant, ANTI-QUACK.

Halifax, Feb. 1847.

## REGULATIONS OF THE NAVY.

*To the Editor of* THE LANCET.

SIR,—My object in troubling you with these lines is to direct your attention to the injustice sustained by the medical profession in the Royal Navy, in being obliged to pass through the gun-room.

Having completed their professional education, and arrived at adult age, they are placed on an equality with young officers who are learning seamanship, or clerk's duties, who have been afloat from their boyhood, and are unacquainted with the necessity of retirement for the purpose of study. Being without a cabin, they are obliged to spend their time with these young gentlemen, in whose society they too frequently neglect scientific pursuits, and the prosecution of their professional studies.

The assistant-surgeon is the only officer entering the service at an adult age who is placed in the gun-room; for the chaplain, naval instructor, and second lieutenant of marines, go into the ward-room at once, and have a cabin; and efforts are now being made to put the first engineer into the same mess, and give him the rank of a commissioned officer.

Surely it is time that young medical men should receive their due. They are an educated and a gentlemanly class, and of all the officers in the service, the most capable of advancing our knowledge of natural history; but to do this effectually, they require encouragement; for in their present position, retirement and study are almost impossible.

If placed in the ward-room, and granted a cabin, the assistant-surgeon in the navy would only be on an equal footing with his brother officer in the army.

No inconvenience could follow this arrangement, unless a respectable uniform and increased pay might succeed to it, and be so considered; whilst the service would be benefited by the entry of gentlemen of property, as well as of talent, as is the case in the army.

There are many of high attainments now in the navy list; but the number would be increased by the alteration, and the country repaid by the prevention, perhaps cure, of the diseases of our stations, as the pathology of these fevers, so necessary to a rational mode of treatment, would be studied with that ardour characteristic of scientific men.

I beg leave, Sir, to request that, being a member of the medical profession yourself, and the editor of a journal devoted to the support and improvement of that profession, both in itself and its external relations, you will advocate the rights of the assistant-surgeons of the Royal Navy, asserting their claims to be made ward-room officers, with a cabin, and a respectable uniform.

Changing the title to second surgeon might contribute to overcome that jealousy which would exclude an assistant-surgeon from the upper mess.

In concluding, I venture to predict as great an improvement among the medical officers of the service, as first and second surgeons, as that which has already taken place since the days of the old surgeons and their mates.

I enclose my name and address in confidence, and beg to subscribe myself your humble servant,

March, 1847. AN ASSISTANT-SURGEON IN THE ROYAL NAVY.

## DISPUTED PERIOD OF GESTATION.

*To the Editor of* THE LANCET.

SIR,—I should be much obliged if yourself, or some of your numerous correspondents, could throw some light upon this case, which involves the welfare, almost existence, of a young and at present deserted child:—

Two men, A and B, had intercourse, unknown to each other, with a young woman of delicate health; and after many years, she was delivered of a female child, nine calendar months and three days after sexual intercourse with A, and nine calendar months less five days after similar intercourse with B; or at the end of 279 days after intercourse with A, and at the end of 271 days after intercourse with B—that is, a period of eight days elapsed between the periods of intercourse between the two men; and the woman had no female ailment in the meantime, and it is not believed she knew any other man. She went her full time, had a good labour, and produced a fine healthy girl; had a plentiful supply of milk, and had better health during her pregnancy and suckling than at any other time. She, however, suckled her child too long, got excessively low and nervous, it is believed worried herself

as to which of the two men was the father of her child, and has since died.

During her last illness, she said that she always thought that the child must be the child of A, as she had once before miscarried by him, and had great affection for him, and her feelings made her think it was his; but that she did not know, as the time was beyond nine calendar months, (she entertaining the opinion that a woman could not go beyond nine calendar months.)

These circumstances have now become known to both A and B, and both refuse to maintain the child. A contends, that as the woman was not delivered until nine months and three days after connexion with him, it is physically impossible the child can be his. B contends that that has nothing to do with it; that 280 days, and not nine months at all, is the period of gestation; and that the child, being born at 279 days after connexion with A, and only at 271 days after connexion with B, the probabilities were, that the child was the child of A, particularly coupled with the fact, that the woman had once before miscarried by A, and that she had stated, during her last illness, that her feelings told her it was the child of A.

There is no perceptible likeness of either of the men in the child, but a marked likeness of the mother.

Either of the men would maintain the child if he could be satisfied he was the father of it; and in the hope that you or your correspondents will kindly give such information upon the subject that may satisfy one of them, I remain, Sir, your constant reader, GILBERT SMITH.

London, Feb. 1847.

## Medical News.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination, and received Certificates to Practise, on Thursday, March 4th, 1847:—Peter Brady; Thomas Orton, Rothwell; William Cumming; Edmund John Burman, Banstead, Surrey; James Graham, Liverpool.

MEDICAL APPOINTMENTS.—Dr. R. F. Lindoe has been elected physician to the Eastern Dispensary, Bath, in the room of Dr. Tarleton, resigned.

DEPUTATION TO SIR GEORGE GREY.—We are authorized to state, that a deputation from the Council of the Provincial Medical and Surgical Association, has had an interview with the Right Hon. Sir George Grey, and that from the result of this interview, strong hopes are entertained that a settlement of the questions connected with medical reform, satisfactory to all branches of the profession, may be obtained. These hopes are, however, dependent upon some approach to unanimity, in the concession of minor points, being manifested by the different sections of the profession.—*Provincial Medical and Surgical Journal.*

The Medical Society of London held its seventy-fourth anniversary at the Albion Tavern, Aldersgate-street, on the 8th inst.,—the President, W. C. Dendy, Esq., in the Chair. The ballot was declared to be as follows:—*President:* W. C. Dendy, Esq.—*Vice-Presidents:* Theophilus Thompson, M.D.; John Bishop, Esq.; H. Clutterbuck, M.D.; John Hilton, F.R.S. —*Treasurer:* Nathaniel Clifton, Esq.—*Librarian:* W. H. Willshire, M.D.—*Honorary Secretaries:* James F. Clarke, Esq.; W. Smiles, M.D.—*Secretary for Foreign Correspondence:* Thos. Davidson, M.D.—*Councillors:* W. Eales, Esq.; F. Hutchinson, Esq.; E. H. Linnecar, Esq.; James Middleton, Esq.; George Pilcher, Esq.; G. Owen Rees, M.D., F.R.S.; C. J. Roberts, M.D.; Silas Stedman, Esq.; J. C. Taunton, Esq.; Forbes Winslow, M.D.; A. B. Garrod, M.D.; Frederick Bird, M.D.; Henry Oldham, M.D.; Richard Rowland, M.D.; Golding Bird, M.D., F.R.S.; Edward Headland, Esq.; W. D. Chowne, M.D.; W. A. Harrison, Esq.; W. Kingdon, Esq.; Henry Hancock, Esq. Fellow to deliver the Oration, 1848, Francis Hird, Esq. Dr. Golding Bird then delivered the Oration, which will be found in another page. The Forthergillian Gold Medal was then awarded to Silas Stedman, Esq., for an Essay on Insanity. The First Silver Medal to W. A. Harrison, Esq., of Keppel-street, on his retirement from the office of Secretary, for general services rendered to the Society; and the Second Silver Medal to D. M. Hughes, of Guy's Hospital, for a paper read before the Society, on Chest Disease, and published in THE LANCET. The award of the Medals was accompanied by a very appropriate speech to each of the recipients, by the President. The fellows and their friends afterwards partook of a sumptuous dinner, and good fellowship and conviviality were kept up to a late hour. The dinner party consisted of a greater number than usual.

MEDICAL CERTIFICATES OF INSANITY.—Amongst the improvements recently made at Bethlem Hospital, one was a new form of certificate respecting the insanity of patients applying for admission, in which the exact qualification of the practitioner signing must now be stated before it is received, and then only if the party belongs to one of the medical corporations of England, or is a graduate of a British university, and entitled to practise. It is reported that the new system works well, and so far from difficulties being encountered, the profession have uniformly aided the authorities by adopting the plan recommended; and as Bethlem Hospital is not under the jurisdiction of the Commissioners in Lunacy, and only one certificate of insanity is required at this institution, instead of two, as in ordinary cases, it became more necessary to obtain such a document from a legally-qualified practitioner, so that no lunatic might be improperly confined. In illustration of the advantages of this change, and the way in which it operates, we may mention, that very recently a certificate attesting the insanity of a person sent for admission, which bore the signature of a graduate of a foreign university, was refused, and the patient not admitted, until another certificate, signed by a member of an English medical corporation, was presented and approved. This proceeding is worthy of imitation; and if all public bodies, as well as private individuals, would act upon the same principle, and employ none but properly qualified medical men, there would be fewer coroner's inquests reported in the newspapers; whilst quackery would be a less profitable trade than it has hitherto proved throughout the British empire.

OBITUARY.—February 26th, aged fifty-eight, of angina pectoris, George G. Bompas, Esq., M.D., of Fishponds, Bristol, long a member of the Provincial Medical and Surgical Association, and President-Elect of the Bath and Bristol Branch. Dr. Bompas was possessed of considerable scientific attainments, especially in his own branch of the profession—the relief of mental disease. He was of mild and amiable deportment, a model of the Christian gentleman, and all his actions were influenced by a feeling of deep responsibility. These characteristics were especially manifested in the performance of his professional duties, and although not an implicit follower of what is called the non-restraint system, his judicious and gentle management of the patients entrusted to his care effected the successful restoration of the mental powers in a very remarkable degree.

## CORRESPONDENTS.

*Mr. King's* paper shall appear in an early number; a press of contributions has prevented its insertion earlier.

*S. C.* should address a letter of inquiry to the secretary of the Hanwell Asylum.

*A Constant Reader.*—B should have been the special witness to the facts of the post-mortem examination, as the ordinary medical attendant; the examination of C, D, must depend on the judgment of the coroner.

*A General Practitioner.*—The queries shall be answered in our next.

*A Constant Reader from the first* may depend that we shall not grow weary of exposing quackery: we hope his own shoulder is at the wheel. We are obliged to him for his awakening note.

*Medicus.*—We believe not.

*Dr. Orpen.*—The circular enclosed certainly substantiates entirely the assertions of Dr. Orpen. It appears that the governors of the Birkenhead Hospital and Dispensary have provided that no physician shall hold any office in their institution. Such an interference with ordinary professional usages is highly impertinent and improper. Query: Would these governors, if ill, refuse, in a medical case, the consultation of a physician? Let them do for the poor as, we doubt not, they would be quite ready to do for themselves.

*A Very Old Subscriber.*—The surgeon could not recover in an action at law, in such a case, unless he had an agreement with the party properly drawn in writing.

*A. B. C.*—In reply to question No. 1, we should say that all are about of equal value in England. No. 2. They are all recognised by the College of Physicians, London. No. 3. The examinations only occupy one day. No. 4. The examinations for the greater part are *vivâ voce.*

*I. O. U.*—The fee might certainly be taken with propriety.

*Dr. Radford's* valuable paper on uterine hæmorrhage shall appear in our next.

Communications have been received from—Mr. Roger S. Munn, (Colchester;) Mr. T. Wilkinson King; Mr. Semple; Dr. Ormerod; S. C.; A Constant Reader; Mr. E. B. Neil; A General Practitioner; M. H. H.; Spectator; Dr. Allnatt; Medicus; A Constant Reader from the first; Mr. Prior; Mr. J. A. Dorr; Mr. Gossett; Dr. R. G. Mayne; An Anxious Inquirer; Mr. Edward Daniel, (Newport Pagnell;) Somebody; Dr. T. W. J. Merriman; Cephas; Mr. Reginald Orton; Dr. Orpen, (Birkenhead;) Mr. John Wood; Mr. Burnett; Mr. McEvoy; Dr. Burrows; Dr. Wickstead; Mr. T. Willan; Mr. Adny; Messrs. Deighton and Co., Worcester, (with the engravings;) Mr. Anderson, (Bellinghay;) Calligium; Dr. Radford, Manchester.)

MEDICAL PARTNERSHIP.—A Gentleman, many years established in excellent Practice, within easy distance of London, is desirous of receiving a PARTNER. The neighbourhood is highly respectable, and peculiar opportunities exist for extending the Practice. It is particularly requested, therefore, that no one will apply who is not fond of, and attentive to, his profession, and of active habits, or who cannot command at least £500.—For particulars, address to D. C., care of Mr. Orridge, 30, Bucklersbury.

MEDICAL PARTNERSHIP.—A General Practitioner near the Southern Coast is desirous, on account of ill-health, to meet with a Gentleman, possessing the double qualification, as PARTNER, who may ultimately succeed to the entire Practice, which has been established more than half a century, and yields an income of £700 per annum. Full introduction will be afforded, and about £1200 required to complete the whole purchase.—For particulars, apply to F. W., care of Mr. Orridge, 30, Bucklersbury.

TO GENERAL PRACTITIONERS.

A COUNTRY PRACTICE, of long standing and high respectability, in one of the Midland Counties, the receipts of which average £500 per annum, may be entered upon under peculiar circumstances, on very liberal terms. House-rent low, and £150 per annum derived from Union and Clubs.—For particulars, apply (if by letter enclosing a town reference) to Mr. Orridge, 30, Bucklersbury, Cheapside.

TO MEDICAL GENTLEMEN.

TO LET, at Byfield, Northamptonshire, a most desirable Residence, in the occupation of a Surgeon, eighty years of age, who has carried on an extensive Practice there for the last fifty years, and is leaving at Lady-day. Byfield is a large village, with twelve more villages within four miles, and no Medical Practitioner in either. The premises are newly-built, on the high road from Banbury to Weedon Station, and within four miles of the station on the Oxford and Birmingham Railway.—Address to Mr. Simpson, 129, Oxford-street, London.

MEDICAL.

A MEDICAL GENTLEMAN, in full practice, is wishful to meet with a SUCCESSOR, as he is about to retire to take up an M.D.-ship. The practice is situate in the vicinity of one of the most populous and rapidly increasing towns in the kingdom. It participates in the summer season in the practice of a most fashionable marine resort, and has an extensive and respectable residuary practice. Any gentleman of good address, talent, and application, (being duly qualified,) by embracing this opportunity, may at once place himself in a lucrative practice. No medical agent or other person need apply who cannot command from £500 to £700.—Address to J. W. C., Thos. Marsden and Son's, Queen Street, Cheapside.

MATRON WANTED for the GLASGOW ROYAL INFIRMARY.—In consequence of the retirement of Miss BRODIE, the situation of MATRON in the Glasgow Royal Infirmary will become vacant at Whitsunday next, and the Managers request Candidates for the office to lodge applications, stating the age and former employment of each applicant, accompanied by Testimonials, with the Secretary, on or before the 10th of April next.

The salary and duties required will be learned on application to James Lumsden, Esq., Treasurer, 20, Queen-street; or James Leechman, Esq., Convener of the House Committee, 7, Garthland-street, who will furnish all other information that may be requisite.

By order of the Directors,

29, St. Vincent-place, Glasgow, 5th March, 1847. ROB. LAMOND, Sec.

ST. MARYLEBONE.—SURGEON.—The Directors and Guardians of the Poor will meet at the Workhouse, in Northumberland-street, New-road, on TUESDAY, MARCH 16th inst., at Eleven o'clock in the Forenoon, to examine Applicants being then in attendance, and possessing the legal qualifications for the Office of Visiting Surgeon for one of the Medical Districts of the said Parish. Salary, £60 the first year, £70 the second, £80 the third, with Board, Residence, and Washing. Diplomas and other professional documents to be forwarded to the Secretary prior to the 16th March.

By order,

March 6th, 1847. THOMAS THORNE, Sec.

MR. UNDERWOOD begs to call the attention of Medical Gentlemen to his List of Practices in various agricultural and town districts, varying in amount from £200 to £2000 per annum; some for Succession to, some for Partnership. He has this day added to his list, among others, a highly-respectable PRACTICE, of £500 per annum, in a market town twenty miles from London, in which the appointments realize near £200 per annum. Terms will be found moderate. Office, James-street, Adelphi.

TO BE DISPOSED OF, by Chance, Twenty-three ANATOMICAL PLATES by Dr. M. J. Weber, on Wednesday evening, the 31st March, at Eight o'clock precisely, by Eighty Members, at Ten Shillings each. May be seen, and Tickets had of Mr. Smith, Bartholomew's Hospital, and Mr. Wilmot, London Hospital.

WANTED, by a Gentleman who has completed his Lectures and Hospital Attendance, a situation as ASSISTANT, either in Town or Country.—Address to J. A. T., Mr. Colville, Stationer, &c., Southampton-street, Strand.

MEDICAL PARTNERSHIP.—A Gentleman, possessing high testimonials and references, is anxious to obtain a PARTNERSHIP with a Practitioner in London, its vicinity, or a good provincial town. Advertiser has no objection to Partnership, real or nominal, with a respectable Surgeon about to retire from the profession. No agent need apply.—Address, D. M., Mr. Renshaw, Strand, London.

WANTED IMMEDIATELY, a well-qualified Medical ASSISTANT, to Visit and Dispense. Respectable testimonials as to character and conduct will be particularly required. He will have extensive opportunities of seeing practice.—Apply to A. B., Mr. Johnson's, King-street, Reading.

A PRACTICE, of £300 per annum, FOR DISPOSAL, situate in an Agricultural District. No medical resident but the vendor.—Apply by letter, prepaid, to C. M., Mr. Ostell's Circulating Library, 24, Hart-street, Bloomsbury-square.

TO CHEMISTS AND DRUGGISTS.

A GENTLEMAN, M.R.C.S., wishes to Purchase a PARTNERSHIP with some respectable Chemist and Druggist, and would ultimately not object to take the whole.—Address, J. R., Mr. Rooff's, Chemist, &c., 26, Stanhope-street, Park-place, Camden Town.

MEDICAL PRACTICE, in a large Town, TO BE DISPOSED OF, in consequence of the proprietor's ill-health. Receipts £350 per annum, and steadily increasing.—For particulars, address, post-paid, F., care of Mr. Fraser, 68, Chancery-lane.

WANTED, a DISPENSING ASSISTANT in a large Medical Practice in London, where there is a senior Assistant. The most satisfactory references will be required.—Apply, by letter only, stating full particulars, to P. P., care of Mrs. Cooper, No. 2, Stebborn-place, at the back of the London Hospital, Whitechapel.

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TO BE SOLD, by a Gentleman who is leaving the Country for London, a MEDICAL PRACTICE, of between £200 and £300 per annum. A Union is attached. A Premium required. Stock and fixtures must be taken.—Apply, by letter, post-paid, to M. W., Mr. Pitts, Chemist, 8, St. Giles-street, Norwich.

UNDERCLIFF, Isle of Wight.—Invalid accommodation in the house of a Physician at Ventnor, limited to a select class of patients, to whom the climate of the Undercliff, in connexion with domestic comfort, agreeable society, and medical superintendence, might be a recommendation.—For terms and particulars, apply, prepaid, to Dr. Keele, Hillside House, Ventnor.

VICTORIA LIFE ASSURANCE COMPANY,
No. 18, KING WILLIAM STREET, MANSION HOUSE.

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Sir Jas. Duke, Ald., M.P., Chairman | Benj. Hawes, Esq., Deputy Chairman
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Life Assurances are effected by this Company on every description of risk, on a profit or non-profit scale. Credit of half the Premiums for the first five years allowed on Policies effected for the whole term of life. Payment of Premiums so arranged as to meet the convenience or wishes of the Assured. A Policy may be made an absolute security. Advances continue to be made to Assurers on real or undoubted personal security, for terms of years, repayable by instalments. Particular attention is requested to the detailed prospectuses of the Company.

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## STANDARD LIFE ASSURANCE COMPANY,

(Constituted by Act of Parliament, 1825.)

GOVERNOR.

His Grace the Duke of BUCCLEUCH and QUEENSBERRY.

DEPUTY-GOVERNOR.

The Right Hon. the Earl of ELGIN and KINCARDINE.

The TWENTY-FIRST ANNUAL GENERAL MEETING of the STANDARD LIFE ASSURANCE COMPANY was held within the Company's Office, 3, George-street, Edinburgh, on Monday, the 15th day of February, 1847, in the terms of the Act of Parliament by which the Company is constituted.

JAMES MONCRIEFF MELVILLE, Esq. in the Chair.

A report on the progress of the Company's business during the past year was submitted by the Directors, in which the following results were communicated:—

The new Policies issued from the 15th of November, 1845, to the 15th of November, 1846, the Company's business year, amount to 592, the number of proposals made to the Company during the same period being 763.

The amount of new Assurances covered by the 592 new Policies is £368,679 7s. 10d. (an average of £625 for each policy); the amount of Assurances applied for during the year being £476,135 17s. 9d.

The Revenue of the Company is upwards of £120,000 per annum.

The claims have been moderate, both in number and amount, and considerably less than shown by the mortality tables on which the Company's calculations are founded. The results in other branches of the business have been favourable.

The business of the Commercial Life Assurance Company of Scotland has been transferred to the Standard Company during the past year, being 398 Policies, covering about £200,000 of assurance, and being in addition to the new business of the year above reported.

The business of the York and London Assurance Company, which was transferred to the Standard Company in 1844, continues to exhibit satisfactory results in its progressive development.

The report then alluded to the great extension of the Company's business in Scotland generally, and to the rapid progress of the Company in England, also in Ireland.

The increasing success of the Branch Office opened by the Company in Glasgow was a subject of congratulation, and the establishment of Local Boards in Aberdeen and Inverness were reported.

The following new Directors were elected:—

David Smith, Esq., W.S., Edinburgh.
Eagle Henderson, Esq., Merchant, Edinburgh.
James Condie, Esq., Perth.
John Lindsay, Esq., Lawrence Pountney-lane, London.

By order of the Directors,
WILLIAM THOS. THOMSON, Manager.

The Standard Life Assurance Company is so constituted as to afford the benefits of Life Assurance to all who may seek its protection in that form which is best suited to attain the particular object in view; while to those who look to the advantage to be derived by way of bonus to their Policies from the favourable results of the business, there is every inducement to connect themselves with the Company.

The annual contributions demanded for Life Policies have been fixed on the most approved information as to the value of life, and the Company have published an extensive set of Life Tables, (eighteen in number,) setting forth its terms for all ordinary transactions; so that its principles are fully before the public.

Bonus additions to Policies have been declared on three occasions—in 1835, in 1840, and in 1845.

The following are examples of the additions made:—

| | | | | | | |
|---|---|---|---|---|---|---|
| Policy of 1825 for £1,000 increased to | | | | £1,600 | 0 | 0 |
| Do. | 1830 | do. | do. | 1,412 | 10 | 0 |
| Do. | 1835 | do. | do. | 1,225 | 0 | 0 |
| Do. | 1840 | do. | do. | 1,087 | 10 | 0 |

An investigation of the Company's affairs, and a division of profits, are made every five years, the next being in 1850.

The system of bonus being an advantageous one for Policy-holders, the Directors of the Standard Company, in fixing the mode of division which they have adopted, gave the subject much attention, and after the most particular inquiry into the practice of other Companies who had divided profits, they adopted the survivorship principle followed by the Equitable Society of London, under which system a policy has been known to realize at death six or seven times its original amount. The Standard Company do not hold out the prospect of similar results as regards the amount of additions to their policies, for there are peculiarities in the arrangements of the London Equitable conferring Class Benefits, and there were advantages which arose in its earlier years, which are not in the present day open to any office. But it is the principle of division which is referred to as common to both Companies, and which has been highly conducive to the production of the great results alluded to.

To the terms and conditions of Assurance the Directors of the Standard Company have directed their particular attention, satisfied that the more liberal these are made, the wider will the practice of Life Assurance be extended.

PETER EWART, Resident Secretary,
82, King William-street.

Forms of proposal and every information may be obtained at the Company's offices, 3, George-street, Edinburgh; 82, King William-street, London; 66, Upper Sackville-street, Dublin; 35, St. Vincent-place, Glasgow; or at any of the Agencies which are established in the principal towns of Scotland, England, and Ireland.

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DRUG PRICE CURRENTS forwarded, free of Postage, on application, by Messrs. HEWLETT and GODDARD, Wholesale Druggists, 6, Arthur-street West, Upper Thames-street, near London Bridge, Removed from Hatton-garden; containing the Ready Cash Prices for Drugs and Pharmaceutical Preparations of the purest quality. Messrs. H. and G. solicit the attention of the Medical Profession resident in the Provinces, Infirmary Committees, Dispensaries, &c., &c., to the advantages attendant upon the above Price Current.

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PROLAPSUS SPRING BANDAGE, unequalled for Cleanliness, Ease, and Utility, and quite original in its construction. To be had only of the Inventor, Mrs. HEEPS, 17, Eldon-street, near the Ophthalmic Infirmary, Finsbury Circus, price 10s. and 12s. Medical Testimonials may be seen.

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THE WELLINGTON SURTOUT, a new LIGHT REPELLENT OVER-COAT for the SPRING.—Registered 6 and 7 Vict., cap. 65.—PATRONIZED by H.R.H. PRINCE ALBERT, the ROYAL FAMILY, His Grace the COMMANDER-IN-CHIEF, the PRINCIPAL NOBILITY, and OFFICERS of the GUARDS.

This gentlemanly garment, cut without the usual seams at shoulders, so as to improve the figure, and which (owing to its elasticity) fits equally well, either as an over-coat or a LIGHT SUMMER FROCK, is made of a peculiar cloth, manufactured in the West of England, expressly for this coat, of double twist warp and weft, and finest Saxony wool. It is guaranteed to endure and maintain its primitive appearance at least twice the time of ordinary cloth, however good the quality, as it does not wear white or rough, and although repellent, is perfectly porous. The sleeves are lined with a rich durable silk, so that the coat slips on and off easily, and, owing to its softness, lightness, and elasticity, the wearer experiences perfect ease and freedom when the coat is buttoned.

The WELLINGTON SURTOUT commends itself to all who desire a quiet, elegant, gentlemanly appearance: it is kept in every size and leading colour, ready for immediate wear, price two guineas and a half, net cash on delivery. Every genuine coat has a stamp bearing the royal arms, with the name and address of the patentee, JAMES FOUGERE, 6, CONDUIT-STREET, REGENT STREET, and 11, POULTRY, near the Mansion-house, London.

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ETHERIAL INHALER, as used by Mr. ROBINSON, and at most of the metropolitan and provincial hospitals. Mr. HOOPER having been favoured with an unprecedented demand for this Inhaler, he has concluded an arrangement which will enable him to reduce the price to TWO Guineas and a Half.

He has much pleasure in now introducing one of a more *portable* character, which can be carried in the side pocket; *no glass is employed nor any metal independent of the mouth-piece.* To the Army, and Navy, and Provincial Surgeons, it will be of the greatest utility. The quantity of ether required is only about *half or one-third* of that for other instruments; it is not liable to get out of order, neither heat nor cold affects it, and its durability will be a great recommendation to its general use. Price Twenty-five Shillings. One sent on approval by giving a satisfactory reference in town.

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MINERAL SPA of BATH.—The celebrated Hot Mineral Waters of Bath possess all the curative properties of the most esteemed Mineral Waters of Germany, and present a most valuable remedy in all rheumatic, gouty, paralytic, and chronic affections; in contractions and lameness arising from the above disorders; in sprains, or other local injuries; in all cutaneous diseases; biliary and glandular obstructions, and uterine affections, as well as in complaints referable to the female constitution: they are also most beneficial in hypochondriacal and hysterical affections, and in general disordered health, with impaired digestive powers. The most eminent physicians and surgeons, including Sir James Clark, Dr. Locock, Sir Alexander Crichton, Sir James Johnstone, Dr. Granville, Dr. Chambers, Dr. Barlow, Sir Astley Cooper, Sir Benjamin Brodie, Mr. Guthrie, &c. &c., have testified to the highly valuable curative properties of these mineral waters, which is further evidenced by the large and increasing number of invalids who annually resort with such signal benefit to these mineral springs.

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Messrs. Green and Simms, Lessees of the Establishment of Pump-Rooms and Baths, of whom every information may be obtained.

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Just published, price 4s., boards, 186 pages.

A PROPOSED PLAN FOR THE EQUALIZATION OF THE POOR RATES THROUGHOUT THE UNITED KINGDOM, providing for the Abolition of all Parochial Settlements, Pauper Removals, and Parish Litigation; saving annually thousands of pounds to the Rate Payers, and greatly benefiting the Poor. By G. L. HUTCHINSON.

London: Hansard, Lincoln's-inn Fields, 1847.

OPINIONS OF THE PRESS.

"The author earnestly and ably treats the subject."—ADVERTISER.

"The inequality and consequent injustice of the tax (poor rates) as it is now levied appears by a series of tables compiled by Mr. Hutchinson, in his very useful work on the Equalization of the Poor Rates."—CENSORIUS' LETTERS.

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"There is an honest earnestness of purpose to benefit all classes shown in the work of Mr. Hutchinson which should meet with grave attention and public support."—DOUGLAS JERROLD'S NEWSPAPER.

"The writer (Mr. Hutchinson) has handled one of the most difficult subjects with a master hand, and produced a multitude of facts undeniably in support of his views, which are in every respect practicable."—FARMER'S JOURNAL.

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"We very earnestly recommend it to our readers; it is written in a very agreeable and popular style, and even as a work of reference is invaluable."—SUNDAY TIMES.

The Author has also had the pleasure to receive the most gratifying testimonials from many Clerks of Guardians and Overseers of THE PRACTICAL UTILITY OF HIS LABOURS.

# Hospital Reports.

## CHARING-CROSS HOSPITAL.

### AMPUTATION OF THE UPPER JAW.

ISABELLA T——, aged fifty-eight, residing in London, was admitted into the Charing-cross Hospital, under the care of Mr. Hancock, on the 4th of March, 1847, with malignant disease of the left superior maxilla.

She stated that the disease commenced, eight months previously, with slight pain and inflammation in the interior of the mouth, and that she thought it was a gum-boil. At this time, there was no external swelling. The mischief being attributed to a carious tooth, one was extracted in June last, but without any benefit resulting; and as the pain increased, and the swelling became very perceptible, both externally and internally, she applied to Mr. Hancock for admission into the hospital.

At this period, the following appearances were observed:—A dense, defined tumour, over the left upper maxilla, immovable, and but slightly painful on pressure. Her pulse was natural; appetite good, but she experienced considerable difficulty in masticating her food; tongue clean; and general health good. She stated that for the most part the pain was constant, but occasionally remittent, being worse at night than during the day; that it was mostly dull and aching, but sometimes sharp and lancinating, depriving her of rest at night, as she rarely obtained two hours' sleep at a time.

Previous to her admission she had received no surgical aid. Sometimes she applied warm poultices or fomentations, but without deriving any perceptible benefit. She was ordered morphia two or three times a day, and the part to be kept cold with lead lotion, with decided relief, as she was enabled to sleep at night, and was altogether easier, and more free from pain.

A consultation having been held, it was decided that the operation for removing the upper maxilla should be performed; and the patient having consented, Mr. Hancock operated on the 11th March, 1847, assisted by Messrs. Avery, Hird, and Canton.

He commenced by carrying an incision from the inner angle of the left eye directly downwards by the alæ of the nose through the upper lip; a second incision was then carried outwards from the edge of the ala nasi to within half an inch anterior to the lobe of the ear; and a third upwards from the latter to the zygomatic arch, just behind the malar bone. These were followed by some smartish bleeding, which, however, was quickly arrested by pressure of the fingers, and the lower flap was then carefully dissected from the tumour, and reflected downwards, after which the upper flap, being raised as far as the lower margin of the orbit and upper edge of the malar bone, was turned upwards, and retained in that position by one of the gentlemen who assisted; whilst Mr. Hancock detached the cellular tissue and origin of the inferior oblique muscle of the eye from the floor of the orbit, so as to expose the orbital plate of the superior maxillary bone, and allow the eye to be drawn up out of the way. Having thus, as far as possible, separated the soft parts from the bone, Mr. Hancock cut through the hard palate from before backwards, in the mesial line, with strong bone forceps. He next, in the same way, cut through the nasal process of the superior maxilla into the ethmo-maxillary suture, and in the same manner divided the malar bone into the spheno-maxillary fissure. The orbital plate of the superior maxillary bone was next cut through by a single stroke of the mallet and chisel, and the connexions with the soft palate having been separated by carrying a knife from without inwards along the horizontal plate of the palate bone, the upper jaw being drawn forwards by the hand, the operation was completed. The patient, who bore the operation remarkably well, lost comparatively but little blood. During its performance, some time was allowed, before the wound was closed, to ascertain whether any bleeding would occur from the divided vessels; but as none took place, notwithstanding the application of warm sponges, and as the pulse became very fair, the flaps were brought together by hare-lip pins and sutures, a light dressing applied, and the patient sent to bed.—Six P.M.: Going on favourably; she has recovered considerably from the effects of the operation, but complains of pain; has been sick, and threw up a quantity of coagulated blood; pulse soft. To have twenty drops of Battley's solution of opium immediately.

12th.—Has passed a good night, and is quite free from pain; pulse 90, but soft; skin moist. To have milk diet.—Two P.M.: Is not so well; pulse 96, and fuller than in the morning; skin hot and dry; has passed but little urine, and is more restless; face slightly swollen. Acetated liquor of ammonia, one ounce; spirits of nitre, two drachms; camphor mixture, six ounces. Fourth part every six hours. Repeat opiate at bedtime.

13th.—Better; pulse softer; skin moist; has slept well, and is going on well in all respects.

14th.—The outer dressing was removed to-day, and a great portion of the wounds found to have united by the first intention. Pulse 94, soft; skin cool; says she is perfectly comfortable; the face, which is not at all drawn, is less swollen, and she appears to be going on favourably.

15th.—The eyelids are a little puffy; bowels were not relieved yesterday; pulse 94; skin rather heated; says she has passed an excellent night. Some of the sutures and the hare-lip pins were removed, and the wounds found united in those parts; quite free from pain. To have four grains of calomel directly, and a cathartic draught in six hours.

After the patient was removed, Mr. Hancock explained the nature of the case to the students, and the steps of the operation. He had adopted the method pursued, which was first recommended by Gensoul in preference to that frequently performed, of making a triangular flap by means of two incisions, one commencing at the inner angle of the eye, the other at the zygomatic process of the malar bone, both terminating at the angle of the mouth, as in the former there was less probability of dividing Steno's duct and the branches of the facial nerve.

The operation lasted about eight minutes. The bones were divided with great facility by means of the cutting pliers. The operation was completed in the most satisfactory manner, and with less apparent suffering than usual in these cases.

## ROYAL FREE HOSPITAL.

### OPERATIONS ON PERSONS UNDER THE INFLUENCE OF ETHER.

By JOHN GAY, Esq., F.R.C.S., Surgeon to the Hospital, &c. &c.

JAN. 15th, 1847.—A young man, with ulceration of, and fungous growth from, one side of the great toe, in consequence of the nail encroaching upon the soft parts, was subjected to ether inhalation for the space of four minutes; half the nail removed, requiring considerable violence; perfectly insensible to pain, although not entirely unconscious of what was going on around.

Jan. 19th.—A stout Irishman, aged forty-three. Phymosis, with phagedænic sore on the glans penis. He was made to inhale the vapour for three minutes, and the prepuce was then divided. This man did not submit to the operation of inhaling in a manner which was calculated to ensure its being successful, the result of which was, that he roared heartily as soon as the incision was commenced, and continued to do so for some minutes after the operation was completed, but afterwards confessed that he suffered very little pain indeed.

Jan. 26th.—A young man, with phymosis and condylomata. After five minutes' inhalation, he became perfectly unconscious and insensible. The prepuce was divided, and the parts dressed. He woke up asking for his wife, and saying that he had been drinking at an ale-house. He soon recovered.

On the same day, another man with phymosis and phagedæna of the glans. After inhaling for three minutes, the operation was performed without his suffering the slightest pain. He became sensible, however, before the sewing-up was finished, and entreated, whilst a stitch was being put in, to be allowed another dose of the vapour.

It is right to add, that this patient had subsequently a sharp attack of fever, with erysipelas of the scrotum, terminating in deep sloughing of the integuments, of which, however, he ultimately quite recovered.

Feb. 5th.—Two patients were operated upon whilst under the influence of the ether. One, a young man, the half of whose toe-nail was removed with considerable violence. He became insensible after inhaling about two minutes and a half, and did not feel the operation. The other, a lad aged fourteen, with a large abscess of the thigh. He became apparently insensible in two minutes, and although he cried out loudly whilst the puncture was being made, he recovered, not knowing afterwards what had been done.

Feb. 9th.—An Irishman, aged forty, with chancre at the tip of the forefinger, spreading to the soft parts around the root and at the edge of the nail. The whole nail was removed

after three minutes' inhalation, without the least pain or even appearance of suffering.

Feb. 12th.—A young man, with phymosis, resulting from the cicatrization of a sore at the end of the prepuce. It may be premised, that it is very rare that phymosis from this cause requires to be relieved by operation, as the parts generally yield after a little time. Operation performed after two minutes' inhalation, without any pain.

AMPUTATION OF THE FOOT AT THE MESIO-TARSAL ARTICULATION.

Feb. 12th.—A feeble girl, aged twenty-one. admitted with a very large sore on the anterior portion of the foot, resulting from the loss of several of the metatarsal bones and phalanges by mortification, above two years ago.

The operation being determined upon, the etherial vapour was administered in the presence of Drs. Conquest and Jones, Thomas Wakley, Esq., jun., and other gentlemen. In one minute, she became perfectly insensible; the amputation was effected in another minute; and the wound dressed within four minutes from the commencement of the operation. The girl then recovered, quite ignorant of what had transpired, began to joke with those around her, and afterwards stated that she had been dreaming. The stump has since healed, and the patient appears to have every chance of being able ultimately to use that extremity almost as well as the other.

In performing this amputation, usually called Chopart's, I recommend the articulating ends, both of the astragalus and os calcis, to be removed by the saw—a procedure which adds but little to the time required in the operation, and greatly facilitates the subsequent processes of healing.

LITHOTOMY.

March 8th.—A child, four years old, was placed on the operating table. Present, Drs. Conquest, Peacock, Roe; Messrs. Coulson, Childs, Wakley, junior, and many other gentlemen. The ether was administered, and in a minute and a half the little patient was perfectly insensible. The stone was extracted in a minute and a half by the usual operation; the child remaining for some minutes afterwards apparently in a deep sleep, and perfectly insensible to pain. The child cried a little whilst taking the ether; but no difficulty was experienced in making him inhale. The hands and feet were bound together during the process, and the staff introduced immediately on the coma becoming apparent. The inhalation was continued for about half a minute after the operation was commenced.

REMOVAL OF A CARIOUS PORTION OF THE UPPER JAW-BONE.

The two following operations were performed on the same day:—A Dane, aged thirty-one, muscular, and of the sanguineous temperament: in consequence of inflammatory action setting up in the neighbourhood of the bone, about eight months ago, nearly half of the upper maxilla, involving that portion of the alveolar process which contained the cuspidate and front molar tooth, the inner wall of the antrum, and its nasal process, perished. Abscesses had formed, which discharged by one sinus near to the inner angle of the eye, and another into the mouth. It was deemed desirable that the necrosed bone should be removed.

The ether was administered for five minutes, when the patient became restless and talkative, so that it was necessary to hold his hands, and difficult to continue the inhalation. After the lapse of two or three minutes he became more quiet, and the ether was again given. He respired the vapour for some minutes without any increased indications of approaching coma, and the process was again discontinued. He was still talkative, but appeared to be unconscious of what he was saying, and appeared stupified. I immediately commenced the operation by making an incision through the integuments of the cheek, from just below the inner angle of the eye to the mouth, dividing the lip. The integuments were then slightly reflected, and the dead bone removed by a strong pair of bone forceps. The patient attempted to talk during the operation, and evidently did not suffer pain. He recovered partially, however, before the sutures were put in, and then complained of the pain, at the same time stating that he had felt none before. The wound was dressed, and the patient is doing well.

FEMORAL HERNIA.

A spare woman, aged seventy-six, was brought to the hospital in the evening, with a strangulated and irreducible hernia. The intestine had often descended, but there had been on no occasion before any difficulty in returning it. It had now been down three days: the abdomen was tense and painful, and vomiting had just set in. Tongue furred slightly, pulse 92. The usual means having been adopted, without having the slightest effect on the tumour, the ether was given, and insensibility having been produced after three minutes' inhalation, I proceeded to operate. After reaching the sac, and dividing the stricture on its outside, the intestine was returned, leaving the sac, which was firmly adherent to the sides of the femoral ring. The patient, during the operation, was perfectly insensible to pain, but as the inhalation was discontinued immediately after the operation was commenced, the patient recovered before the sutures were completed, and complained slightly of the needle. She afterwards fell into a sound sleep, and is doing well.

# Original Papers.

ON THE

## SUPPRESSION OF UTERINE HÆMORRHAGE WITHOUT ARTIFICIAL ASSISTANCE.

By THOMAS RADFORD, M.D. &c., Manchester.

A knowledge of the inherent powers of the living body to stop hæmorrhage from the uterus is of the highest importance to the obstetrician. Without an intimate acquaintance with their mode of operation, he can never practise successfully. All the principles of our art ought to be based on a clear and comprehensive knowledge of the plans adopted by Nature when danger exists and threatens the destruction of life. On this account, I have not hesitated to lay a brief statement of them before the profession. Although the following observations may not possess the attraction of originality, yet I believe that every well-thinking and judicious practitioner will admit the value of such, if judiciously made. The following is an enumeration of the natural anti-hæmorrhagic powers:—1st, syncope; 2nd, coagulation of the blood; 3rd, effusion of lymph, and obliteration of the vessels; (?) 4th, reunion of the detached portion of the placenta to the uterus; (?) 5th, death of the child; 6th, uterine contraction; 7th, spontaneous rupture of the membranes; 8th, spontaneous separation of the placenta.

Complete or partial syncope sooner or later is induced, when blood is discharged from the vascular system. The difference depends on a variety of contingent circumstances which may exist at the time. When we wish to make a quick and powerful constitutional impression by venesection, we make a large orifice, so that the blood runs *pleno rivo;* we place our patient erect, and if of feeble constitution, or if the habits are bad, the effect is sooner produced, and continues longer. So, in floodings, we find the relative effects very different. Some women bear an immense loss without apparently suffering much from it; whilst others rapidly succumb from the same or even a less amount of discharge. Sudden and profuse gushes of blood speedily produce fainting; but slow and dribbling hæmorrhages continue for a considerable length of time without producing this effect. Although these latter kinds of flooding do not so suddenly depress the vital powers, yet they insidiously undermine them; and in many of these cases, the life of the patient is ultimately placed in more jeopardy than in those of the former class, provided the patient, in these cases, is not immediately destroyed.

Great caution is necessary, not to allow a principle based on false security to lead the practitioner to procrastination in adopting active measures. His judgment ought not to be led astray by the quantity of blood which has been already discharged, or is now being lost; but he should invariably direct his attention to the influence produced on the vital powers, as the immediate and remote effects of loss of blood are, relatively, so different in different women.

These different relative effects depend on a variety of circumstances: on the age, habits, and constitution, of the woman; on the condition of the brain and general nervous system; on the functional and structural organic state of the thoracic and abdominal viscera; on the state of the uterus; on the position of the patient when the accident happens; and on the mode by which the blood is discharged, &c.

When we are considering syncope as a natural and sanitary effect, capable of producing such favourable changes in the general circulation, and also in the vessels from which the blood is poured, which tend to suppress the hæmorrhage, we

ought not to overlook the fact, that syncope is sometimes the precursor or harbinger of death. Our diagnosis here should be as exact as possible to judge between salutary and mortal syncope.

If this state of the vital powers is produced by a large and sudden, but not continued, gush of blood, or by a less quantity lost when the patient is in the erect position,—then, conditionally, it may be considered as likely to be useful; but if, on the contrary, the hæmorrhage has been going on for a long time, although slowly, yet insidiously, and thereby at last producing the accumulated effects of loss of blood upon the system, we must view it as the prelude of death. By its salutary power, the action of the heart and arteries are at first totally suspended, and afterwards lessened in force and frequency, by which less blood is sent to the uterus, and time is afforded for coagulation to take place within or in the immediate vicinity of the vessels.

When blood is effused it speedily coagulates if there exists any substance which affords a *point d'appui* for the commencement of this process. It is said by physiologists, that the blood is more disposed to assume this change in case of excessive hæmorrhage. When one of the umbilical arteries or veins is ruptured within the substance of the placenta, and the structure of the uterine and fœtal surfaces are uninjured, the effused blood, being confined, soon forms a clot which effectually stops further bleeding. Other similar accidents happen during the same pregnancy in different parts of the placenta; but if the injury extends through either surface, coagulation does not so readily take place, as the blood so readily escapes, externally into the vagina, or internally into the amnion bag, according to the situation of that portion of organ which is disrupted. The pathological characters of clots which form and are seen on the substance of the placenta, vary according to the length of time which has elapsed since the accident. Sometimes hæmorrhage happens between the uterus and the placenta, and is confined in the centre by the circumference of this latter organ firmly maintaining its adherence. If this effusion is not great, coagulation takes place, and subsequent changes are accomplished, so that pregnancy goes on.

In disruptions of the placenta, the coagula form in its interstitial structure. In several fatal cases of post-partum hæmorrhages, in which I have examined the uterus after death, I have found a small portion of adherent placenta, whose structure was so entirely pervaded with coagulated blood, as at first to be mistaken for a clot, but on a more minute examination, its true character was discovered. In another fatal case of this kind, the practitioner, in his report of the post-mortem examination, represented the infiltrated portion of placenta as a polypus.

Coagula form within the uterine venous openings, upon and in the interstitial tissue of the placental tufts which enter into them, and are found left after the separation and expulsion of the placenta. The meshes of the decidual membrane afford a surface upon which coagula form and adhere. Dr. Blundell and other writers speak in the highest terms of the anti-hæmorrhagic powers of the large clots of blood which form in and fill the vagina, but which, in my opinion, are overrated. Although I do not admit that they prove as valuable a resource in flooding as has been mentioned, yet I would caution the obstetrician not to rashly remove them, for if they do not directly arrest the bleeding, they indirectly assist, by giving support to those formed above the interstitial, placental, and decidual substance, which are of the greatest utility. Nevertheless, the presence of coagula in the vagina ought never to interfere with our more important duty to explore, so as to ascertain the condition of the os and cervix uteri, the presentation of the child, or if the placenta is abnormally fixed.

The important and valuable principles first fully developed by Dr. Jones, are admirably, and indeed effectively, adapted to prevent bleeding from arteries laid open by injuries, or by surgical operations in other parts of the body, but are not applicable in cases of uterine hæmorrhage. Although the uterine arteries have a similar organization to that possessed by those elsewhere situated, yet they differ in size at different periods, and perform very different offices in the ungravid, in the gravid states, and during the parturient and puerperal period.

It is stated by some writers, that a reunion takes place between the uterus and the detached portion of placenta, and that a return of flooding is thereby prevented; but my opinion is entirely at variance with this assertion, and from a great number of observations, made by examination of the placenta after its expulsion, I am convinced that a recurrence of the hæmorrhage from the placenta is alone prevented, by a change which takes place in the organization of the detached portion.

The death of the child in utero may be immediately produced by hæmorrhage, or it may more remotely happen by the impairment which its organic system has sustained. But it is not to be understood that the child is invariably or inevitably destroyed when hæmorrhage occurs, but, on the contrary, it is born alive in the great majority of these cases. However, statistics show that this event happens sufficiently often to justify the opinion that I have formed, that flooding does not take place, or if it does, is very moderate in degree in such cases.

Under normal circumstances, the utero-placental and the placenta-fœtal circulations exercise a reciprocal, although not an equal, influence on each other; and that there exists on the part of the placenta-fœtal, a great and essential derivative power. But the death of the child, immediately to a certain degree, and ultimately altogether, changes the functional and structural condition of the placenta. "The stimulus of necessity" on the part of the child, for a supply, has ceased, and consequently is altered; the arteries convey to the uterus less blood, and so there is less accumulated in the veins, to be returned to the general circulation. The passage of blood is most likely first stopped in the umbilical arteries, and very soon after, if not simultaneously, that through the umbilical vein also ceases, and, consequently, both the arterial and venous ramifications in the placenta would have no blood passing through them. The placenta would therefore, at first, be in a somewhat similar condition to that which exists after the birth and separation of the child; but after a short time it undergoes further progressive changes in its organic condition. Its structure becomes less spongy and more firm; the calibres of the vessels are lessened and filled with fibrin; its decidual surface has a dried and shrivelled appearance, and is dotted with small coagula of different aspects, some being recent, while others look old and fibrinous.

During my practice, I have attended a great number of labours in which the child was dead, and I have invariably observed that there was little or no sanguineous discharge when the placenta was expelled, or afterwards, as that which is termed the lochia. There were four cases of placenta prævia in this number, which I shall briefly cite. In one case the hæmorrhage happened at the sixth month. Cold water, &c., and the plug were used; opium was administered, &c. These means effectually restrained the bleeding: it, however, returned with violence in a fortnight, and again the same plan was successfully adopted. After this time, the movements of the child became gradually more imperceptible, and at last ceased altogether. Six weeks after the first attack of the hæmorrhage, labour came on, but there was no bleeding; the placenta separated on one side, so that the head passed by it. When the child was born, it had the appearance of having been some time dead. The placenta was also considerably changed. There was no further loss of blood.

In the second case, an excessive hæmorrhage happened at the seventh month. There were no pains; plugged successfully; cold applications, &c. In a month the bleeding recurred, but as there was no evidence of labour, the plug was introduced, and the means before mentioned used. The hæmorrhage ceased. The death of the child was indicated by the usual mammary changes, &c. At the end of a fortnight, labour pains came on, and as the os uteri allowed, I passed the hand, separated the edge of the placenta, and turned and delivered the child, which had evidently been dead some time. There was no flooding.

In case third, the flooding first took place from the seventh to the eighth month, and was afterwards several times repeated. The last attack was so violent as to threaten danger. The os uteri being rigid, the plug was introduced, an abdominal bandage applied, &c. She never felt the child after the last attack. The labour did not come on for a fortnight, but there was no fresh loss of blood.

The fourth case was excessive flooding at the eighth month; there being no signs of labour, and the os uteri being firm and undilated, the plug was introduced, and the abdominal bandage applied, &c. The child had been vigorous up to this date, but since has not been felt to move. She went on to her full period, and as there was no flooding, the placenta was partially detached, the membranes ruptured, and the uterus acting well, the case was left to Nature. The child was putrid, and the placenta was much altered; no after-discharge occurred.

The gravid uterus mainly consists of muscular fibres, which are greatly developed at the end of pregnancy. The blood-vessels, arteries, and veins, have acquired a great size, especially the veins. The muscular fibres are longitudinal, circular, and oblique, each set being entertained with the others. Portions of this tissue are intimately distributed around the

arteries and veins, and indeed the outer coats of these latter vessels are composed of it. The arteries, which are considerably elongated, take a spiral and tortuous course through this texture. The veins are situated in different tiers in it, and each division freely intercommunicate by oblique openings with each other, and with those which lie nearest to the uterine cavity. Mr. Owen makes the following appropriate remarks:—"Every vein, however, when traced to the inner surface of the uterus, appeared to terminate in an open mouth on that aspect; the peripheral portion of the coat of the vein, or that next the uterus, ending in a well-defined and smooth semicircular margin, the central part adhering to, and being continuous with, the decidua.

In the course of this dissection, I observed that where the veins of different planes communicated with each other in the substance of the walls of the uterus, the central portion of the parietes of the superficial vein invariably projected in a semilunar form into the deeper-seated one; and where (as was frequently the case, and especially at the point of termination on the inner surface) two, or even three, of these wide venous channels communicated with a deeper sinus at the same point, the semilunar edges decussated each other so as to allow only a very small part of the deep-seated vein to be seen. It need scarcely be observed how admirably this structure is adapted to ensure the arrest of the current of blood through these passages upon the contraction of the muscular fibres with which they are everywhere immediately surrounded."—*Note to the paper, "On the Structure of the Placenta," in John Hunter's Works, edited by Palmer, p.* 68.

Mr. John Goodsir passed a probe in a vein, and then slit it up with scissors, and repeated the same plan whenever he found the entrance of another branch. He found the anastomosis of the veins increase as they approach the internal surface of the uterus, "the spaces which they inclosed presenting the appearance of narrow flat bands. At last, in introducing the probes under the falciform edges of the venous orifices, it was found to have arrived at the placental tufts, which could be seen by raising the edges of the falciform edges," &c.

The tissues of the fundus and body of the uterus are first developed, and afterwards the cervix and os. These changes are progressive, and gradually enlarge the cavity as the fœtus and appendages increase in size. In normal pregnancy, the muscular fibres are quiescent, and passively yield to the law which has been imposed on the organ for the safety and growth of the ovum. But as soon as the fœtus is matured, so that it is capable of extra-uterine existence, a new law predominates, and contraction follows.

The body and fundus being more muscular, are endowed with greater irritability and contractility than the cervix, and at first they are chiefly employed in expulsion. Some writers deny the existence of muscularity, and consequently contraction, in the cervix; but the great majority admit that it is possessed of a great number of circular and some few longitudinal fibres. Its first change in labour is to dilate, to allow the passage of the child and secundines. This is said by some to be the effect of a wedge, formed by the membranes, and mechanically forced down by the power above. Others again say it is a muscular act. My opinion is, that it contracts when required in the process of labour. Anormal causes applied, induce irregular contraction. Dr. Campbell says that a contraction of this portion of the uterus is mistaken for what is described as hour-glass contraction of the body of this organ. Normal uterine contraction, which is of two kinds,—1st, temporary or alternate; 2nd, permanent or tonic,—is able to perform the parturient function, when every circumstance which acts directly or indirectly upon this process is equally favourable for this end.

By its power, the child and placenta is expelled, and the woman is secured against the dangers of flooding. It must not be partial in its operation, in order to achieve these important objects; but it must be universal—every muscular fibre must be actively engaged to afford a sanitary and protective influence. It is necessary to remember the length and tortuous course of the arteries; and also the course, relative position, and the peculiar valve-like openings of intercommunication of the veins; the embedment of these vessels in the muscular tissue, and surrounded by it. We must also not overlook the fact, that the calibre of these vessels are fully occupied by the blood passing in this state through the parietes of the full gravid uterus, whose superficies is extensive. Then we can be at no loss to understand why uterine contraction is so powerfully anti-hæmorrhagic.

The measurement of the surface of the gravid uterus at the end of pregnancy, or beginning of labour, compared with the same organ when regularly and tonically contracted, after the expulsion of its contents, is very different indeed. Dr. Blundell emphatically remarks, that the muscular fibres act as so many ligatures upon the vessels.

Notwithstanding the beautiful adaptation of the means to the end, when all is in a normal state, we frequently find, in practice, that there are constitutional and local conditions, physical and moral causes, which produce upon the uterus anormal effects; and hence we find its action perverted, or altered in power, and in some cases altogether suspended. This anormal state of uterine energy exists in every degree, and comes on at all times during or after labour, constituting what is usually called cases of complete or partial atony, or irregular contraction.

Partial contraction assumes the character of spasm, and may seize any portion of the uterus, to any extent, and to any degree of intensity. The fundus may firmly contract, whilst the body and cervix are in a relaxed state. The circular fibres of the body may contract, and yet the fundus and cervix be uncontracted, and thus constitute hour-glass contraction. Sometimes the os and cervix contract, and the upper portions of the organ are atonic, thereby affording a shut-up cavity, in which the placenta is sometimes incarcerated, and sometimes a large quantity of blood is effused into it, which is called internal flooding.

Different sets of muscular fibres irregularly and successively contract, and changing in such a way as to form small chambers, which open out of the general uterine cavity. I will briefly cite a case, selected from many others, illustrative of this capricious state (if I may use the term) of the muscular fibre.

I was requested by Mr. P—— to visit a patient who was flooding, one child being born, and another thought to be still in utero. Upon my arrival the hæmorrhage continued. On placing my hand on the abdomen, I found the uterus large, and generally doughy. About the middle was a hard and resistant portion, at the boundary of which there was felt a vacillatory sensation, which continued some time. It yielded in a short time, and another hardened portion was found. The sensations produced by these contractions led to the notion of the existence of a second child. I now introduced the hand, and only found the placenta and some coagulated blood. My attention was called to a circular opening at the anterior part of the womb, through which I could pass two fingers. To my surprise, this spasm yielded, and was soon succeeded by a similar state in another part. I endeavoured to produce uniform contraction, but this migratory irregular action continued for some time, notwithstanding a large dose of laudanum was given. Irregular contraction of a portion of the uterus, in the vicinity of the placenta, causes a partial separation of its organs, and flooding happens. Again, one portion of the uterus in the same neighbourhood may be atonic, and the rest of the organ well contracted, and so flooding continues. Whenever, and by whatever cause, a partial separation of the placenta happens, irregular contraction of a portion of the uterus is nearly sure to take place. Spasm, or irregular uterine contraction, causes hæmorrhage in two ways: 1st, by directly producing a partial disunion of the placenta from the uterus; 2ndly, by acting mechanically, so as to impede the free return of blood along the veins to the heart.

In all cases of flooding, except when the placenta is anormally fixed to the uterus, regular, equal, and firm uterine contraction will always secure the patient against the dangers of the accident. I hesitate not to say always, because an extensive hospital practice has enabled me to speak positively on this subject. But if the uterus is in any degree atonic, or its action irregular, however partial, hæmorrhage will happen, which can alone be arrested by restoring uniform contraction, or an equilibrium of action throughout the entire uterine muscular tissue. These remarks are made with a knowledge of Dr. Gooch, Dr. Rigby, Dr. Ingleby, and Velpeau's opinions. Dr. Gooch relates a case of post-partum hæmorrhage, in which he says the uterus was firmly contracted, and depended on the exalted state of the general vascular system.—*Med. Chir. Trans.*, vol. xiii. Part I.

Mr. Robertson has already shown that Dr. Gooch's inferences are not true, (*North of England Journal.*) I, however, do not think that he has explained the existing cause of this discharge in Dr. Gooch's case, in supposing that the uterus relaxed. My opinion is, that there existed irregular contraction, some portion of the organ being in an atonic state not accessible to Dr. Gooch's hand externally applied on the abdomen. In placenta prævia the hæmorrhage is increased by uterine contraction as long as the placenta is partially adherent. Spontaneous rupture of the membranes, and the discharge of the liquor amnii, induces uterine contraction, which

effectually restrains hæmorrhage in the majority of cases of accidental, and in those cases of unavoidable floodings which are caused by a partial implantation of the placenta over the os uteri.

The natural powers are equal to the achievement of most important ends during labour, when mechanical causes exist which oppose the passage of the child in labour. When the placenta is placed centrally, or nearly so, over the os uteri, it is sometimes spontaneously expelled before the child, an event which happens more frequently than has been usually supposed by obstetricians. Hippocrates was acquainted with the fact, that the placenta is sometimes spontaneously expelled before the child, and knew the danger of this event to the child. He says, "that the after-burthen should come forth after the child, for if it come first, the child cannot live, because he takes his life from it, as a plant doth from the earth."

The father of medicine no doubt knew that the coming forth of the after-birth before the child was not attended with the same risk to the mother as to her offspring, or he would have recorded his opinion upon this point.

Obstetric writers, up to comparatively a recent date, since the time of Hippocrates, have not mentioned this subject, although they must have met with cases, and have been acquainted with his writings. Whenever the placenta is partially detached in cases of placenta prævia, and the child is still alive, hæmorrhage inevitably happens. The quantity of blood discharged is not always the same, but is more or less profuse, according to the concurrence of a number of contingent circumstances.

Sometimes the discharge is very excessive, when the placenta is only slightly separated; and sometimes the hæmorrhage is moderate, when the placenta is extensively loosened. But the aspect of matters is changed by a complete separation of the placenta; the variation in the degree of discharge remarked above is not now observed to exist; there is a total cessation of the bleeding; and it forms an exception to the general rule when hæmorrhage happens after the placenta has been completely loosened from its attachments, and protruded from the uterus into the vagina.

On the 10th day of December, 1844, I delivered a lecture on galvanism applied to the treatment of uterine hæmorrhage, in which I then stated that, without any great pains, I had brought forward before the profession "thirty-six cases illustrative of her (Nature's) powers in expelling the placenta before the child."

This number might have been very considerably augmented by bringing cases which were then already published; but my object was not to make a great parade of authorities, but only to mention such as were in the reach of every obstetric practitioner. At the time I made the following remarks:—"Now the bulk of these cases, gentlemen, have been detailed without any specific practical object, and, consequently, are more valuable to my present purpose than if they had occurred to myself, and had been brought forward to serve my own particular views. You may refer to many of them yourselves, and you will find in nearly of all them that the hæmorrhage was suppressed after the placenta was thrown off."—*Provincial Medical and Surgical Journal.*

Since then, Dr. Simpson has published (in the *London and Edinburgh Monthly Journal of Medical Science*, No. 51, March, 1845) tables of 141 cases, some of which, however, were not cases of spontaneous expulsion. These tables include those which had already been brought forward by me, and some others, which were afterwards communicated by me.

By the kindness of several professional gentlemen, I have collected sixty, which show the following results:—In all, the hæmorrhage was great before the placenta was loosened; in fifty-five of this number, it was completely suppressed after the separation of the placenta; in three, it continued, in two of which it was slight, in one it was profuse; in thirteen, it was forcibly expelled, followed immediately by the child; in twenty, two to three hours elapsed; in twenty-seven, the child was turned, and extracted immediately; forty-five women recovered; fifteen died; fifty-five children lost; five only living.

In the above-mentioned cases, there is only one case in which flooding to any degree continued after the placenta was completely separated, and this proved fatal. In the remaining number of those who died, the fatal impression was made before the separation was accomplished. In a few cases already published, slight hæmorrhage continued, and some deaths occurred not dependent on the after-bleeding, but, as above mentioned, from the effects produced before. These cases must not be allowed to invalidate the inference, "that hæmorrhage ceases when the placenta is completely separated." We can readily understand why this should happen, if we physiologically investigate how the utero-placental and the placenta-fœtal circulations are carried on.

When a partial separation of the placenta takes place, whilst the fœtus in utero is still living, hæmorrhage is sure to occur, because two sources exist from which blood can escape, (*vide* THE LANCET, No. 9, February 27, 1847;) one current of blood comes through the medium of that portion of the placenta which still adheres to the uterus, and it is discharged from the surface of that portion of the placenta which is detached. The supply of blood is demanded by the child from the maternal system, and when sent, it cannot, from the nature of the accident, return, and therefore is lost. The other current of blood which runs away comes from the uterine venous openings.

But when there is a complete disjunction of the placenta from the uterus, the case stands quite different; no maternal blood can be discharged from the placenta, because it is now placed in the position of a foreign body, having no structural or physiological relations to the womb. Rupture of the membranes either simultaneously happens, or precedes the separation and expulsion of the placenta, (except in cases where the entire ovum is expelled at once, which very rarely occurs.) Uterine contraction, which must at this time have been strong, is now increased, which brings the presenting part of the child to occupy the lower segment of the uterus, and to bear mechanically on the exposed venous openings. The calibres of the vessels are also diminished.

Notwithstanding the truth of the above conclusion, that complete detachment of the placenta suppresses hæmorrhage, yet we must not allow ourselves to fall into serious error, to wait in expectation of such an event, because, first, there do not exist signs which will lead us to expect such a termination; secondly, the vital powers may be completely sunk before the separation is achieved. Hamilton, Collins, and Dr. Ramsbotham, senior, were all acquainted with this fact.

March, 1847.

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## THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

(*Continued from page* 253.)

### VII.—THE PROCESS OF NUTRITION, OR THE RECIPROCAL ACTION BETWEEN THE BLOOD AND THE SOLID TEXTURES.

THE growth and preservation of all parts of the human body, and the renewal of its textures and secretions, whether healthy or diseased, depend upon a reciprocal action between the blood and the solid parts, termed the process of nutrition, in which certain elements or forms of matter withdrawn from the circulating current become portions of the fixed solid. If the newly withdrawn matter assume the form of the pre-existing elements of the solid, and the quality of the pre-existing secretion, the process is said to be normal or healthy; but if the elements of the solid be changed, or the quality of its secretion altered, in consequence of any unusual change or unconformable transformation which the new matter undergoes, then the process is said to be abnormal or unhealthy.

If the circulation of the blood be observed with the microscope, in the nutrient vessels of a transparent texture in the living animal, without any previous rude handling or irritation, the stream is seen rapid and uniform; and it is impossible, from the rapidity of the current, to discriminate its cellular or corpuscular elements, except that here and there colourless cells are seen clinging to the walls of the vessels, slowly gliding along in close contact with them. If the part under observation be irritated, the regularity of the stream is immediately disturbed in a very remarkable manner; and, as if in consequence thereof, colourless cells, in increasing numbers, are observed separating themselves from the red current, and becoming fixed to the walls of the vessels. Soon afterwards, a clear colourless material appears between the stream of red blood and the solid texture, in which the colourless cells seem to be imbedded; so that the irritating cause, of whatsoever nature it may be, is productive of an actual and visible separation between the colourless and the red elements of the blood, which is seen to take place within the vessels, the red flowing onward, sometimes with the utmost rapidity, whilst the colourless remain stationary, and form a new interior

coating to the vessels, (the protoplasma.) We are precluded from making this direct satisfactory and conclusive observation in the human body, because there is no accessible part sufficiently thin and transparent for the purpose; but we have cogent reasons in the analogies of life and function—in the composition of the textures and the blood—for concluding, that in man analogous or similar irritants are followed by similar results. This conclusion, drawn from analogy, is substantially corroborated by the fact, that in the human body colourless cells greatly abound in the blood drawn from vessels that are experiencing any irritative or inflammatory action.

But the real nature or meaning of the phenomenon, thus seen in the living vessels of animal structure, and presumed from strong analogies to exist in the human body also, must be interpreted by the result or product; and this clearly proves it to be a phenomenon of nutrition, for the irritated animal textures become thicker, and new layers and new matter appears. So, in the human body, where textures are becoming thickened—where new products and new results are appearing, in pimples, boils, and vesications—in the skin, in scarlet fever and erysipelas,—colourless cells are exceedingly abundant in the nutrient vessels, sometimes equalling in amount the number of the red cells.

Hence, therefore, it appears, from proofs accumulated on all sides, that the separation of the colourless cells and protoplasma, or lymph of blood, from the red cells, and their distribution in a stationary form over the interior surface of the nutrient vessels, are phenomena of nutrition; and it would further appear, from the cellular or corpuscular nature of pus, and from the ready healing by pressure of wounds discharging pus, that if the colourless elements withdrawn from the blood fail to undergo a conformable metamorphosis, or the cells to deliver up their contents, they change the character of the walls of the vessels, alter the anatomical type of the texture, and subsequently appear in the discharges or secretions, in

Fig. 1.—Half the diameter of a small bloodvessel in the transparent membrane of the human embryo, at two months:—*a*, column of red blood; *b*, layer of colourless matter, with cells, granules, and molecules, between the red blood and the coherent wall of the vessel; *c*, a texture composed of fibres, cells, and nuclei, forming the wall of the vessel; *d*, the coherent cellular texture forming the membrane.

Fig. 2.—A section of the same vessel perpendicular to the axis, showing the same series, blood, protoplasma, texture, (πρωτον ὑφασμα,) and cellular parenchyma. It appears to me, that the subject of secretion, the growth of the embryo structures, and the phenomena of inflammation, would be more intelligible, were we to use terms expressing more accurately the stages of nutrition, as revealed by the microscope:—*a*, blood; *b*, protoplasma; *c*, prot-uphasma; *d*, parenchyma. I well remember the late Dr. George Pearson, five-and-twenty years ago, insisting upon the distinctions between coagulable and coagulated lymph.

which case, the whole thickness, and the whole of the matter in the walls of the vessels, experience a progressive alteration from within, there being no membranous septum or structureless membrane under these altered conditions, standing as a barrier to the retrograde morphology.

The process of nutrition, here described from observation and experiment, comprises three intelligible and visible stages:—First, the separation of the colourless cells and protoplasma of the blood from the red current; secondly, the metamorphoses of these colourless elements in their progress through the walls of the vessels; and thirdly, the ultimate product which constitutes the permanent form or textural type. The first stage takes place within the vessels, along their interior boundary; the second takes place in, and gives the form of, the elements of the walls of the vessels; and the third, or ultimate product, appears at the outer margin, and is, in fact, an extension, of the vascular wall.

These stages of nutrition will be more readily comprehended by referring to the wood engraving in the previous page, which represents one half of the diameter of a small bloodvessel in the transparent membrane of a human embryo, at two months —that is to say, in a texture in a state of rapid growth or active metamorphosis. It was copied from the microscope, and is magnified 750 diameters linear. The dark portion, *a*, is one half of the column of red blood lying in the centre of the vessel; the red cells are many of them nucleated, and larger than in the blood of an adult, and lying obscurely amongst them are several colourless cells, various in dimensions, some very large, and filled with a colourless matter, mixed with molecules. At *b* is a transparent layer of colourless matter or protoplasma, lying between the column of the red blood and the wall of the vessel; in it are seen several colourless cells of various sizes, filled with molecules, also smaller granular particles; and numerous isolated molecules. At *c* is the wall or coat of the vessel, (the prot-uphasma, or first texture,) composed of numerous colourless cells or nuclei, embedded in a mass of nascent fibrils, which have, in this example, hardly more coherency than the fibrils of a tough mucus. Granular particles and molecules are seen within these colourless cells or nuclei, and the fibrils pass around and between them. Numerous red cells, of irregular shape, are seen mingled with the colourless elements,—cells, nuclei, and fibrils,—of the vessel's wall or coat; but these have all the appearance of being accidental and due to the manipulation necessary to render the texture a microscopic object. At *d* is a portion of the transparent cellular membrane itself—the parenchyma; it is evidently an extension or expansion of the wall of the vessel, and no unalterable barrier exists to separate it from the protoplasma—every element is in progress of change.

If a section of this vessel were made across it, perpendicular to its axis, we should have a column of blood in the centre, *a*, consisting of red and colourless incoherent cells, suspended in the blood-fluid; next to it will be a layer of colourless lymph or protoplasma, *b*, consisting of a viscous matter, mixed with molecules and colourless cells; next to that is the proper coat of the vessel, *c*, the first texture varying with the morphology, and consisting in this case of delicate fibres, intermingled with molecules, granules, and colourless cells or nuclei; and lastly, as an extension of the vascular wall, the proper texture or parenchyma, *d*,—this texture showing what the morphology has been, and the existing vascular wall indicating what it is or will be. A similar section of a vessel that has been irritated in the frog's foot would exhibit the same thing. Hence, then, the conclusion stated in the "First Series of Researches," p. 30, respecting the analogies between active growth and inflammation, is fully borne out by these subsequent investigations.

These things, let it be observed, are not matters of surmise and conjecture, but of demonstration, and cannot, therefore, be set aside because they do not square with received and hypothetical notions. It is very easy to throw discredit upon microscopical facts and conclusions by a flourish of the critical pen, and a flippant style of remark, little suited to the occasion; but Nature marches on, although the critics write, and is ever ready with intelligible answers to those who faithfully interrogate. A florid appeal to existing sympathies may be for a time successful. Warm-hearted spirits contend stoutly for their convictions; and settled opinions are difficult outworks to carry, though Nature herself be battering at the walls. But those who, in the ardour of their defence, merely uphold their own opinions, when truth and science are rolling onward in new directions, must find themselves at last protecting shadows in the rear.

In bringing my observations for verification to the test of the microscope, I would fain remark, that the observer should bear in mind the minuteness and delicacy of those portions of structure that can alone be submitted to high microscopic power, and the unavoidable disturbances that necessarily ensue when it is requisite to take very thin sections, and therefore that decisions pro or con should be based not so much upon the isolated results of one or two hasty trials, but rather on the tenour of the indications derived from a greater number.

In any departure from the law of the nutrition of a texture,—from the law of the morphology,—it must be a very difficult question to determine where the first unconformable step commences, whether in the blood, *a*,—in the lymph or protoplasma, *b*,—in the wall of the vessel, *c*,—or in the texture, *d*? It is very common to read about diseases of the blood, yet all must be dark and unsatisfactory to any one that has observed the relations between the blood and the textures by means of adequate power through the microscope; and certain it is, that no practical conclusions can be established respecting health and disease until the stages of nutrition, the reciprocal actions between the blood and the solid textures, be established. At present, the notorious fact of red blood administering to the rapid increase or deposition of colourless textures, lymph, mucus, and pus, remains, in respect of any well-directed scientific investigation, a glaring instance of theory, hypothesis, and conjecture.

### VIII.—INFLAMMATION.

When the growth and nutrition of a texture of any kind, whether animal or vegetable, is normal, its elements are reproduced or multiplied, its form evolved, and its characteristic qualities and secretions established by a metamorphosis of the nutritive elements, supplied from without, in accordance with the law originally in force in the primary conformation of the parent organism from which it sprung. Every change, every metamorphosis, every action, and every product, yielding or conforming to the law, is an integral element of the complex phenomenon termed health; and every action or product deviating from it is an element of disease.

It is not my intention now to enter upon the multiplied details of inflammation or inflammatory products; hereafter we shall have occasion to return to the subject, and examine more particularly the nature of its manifold results.

We have seen that any irritation of a vascular texture is productive of an increased amount of nutritive matter, which is deposited from the circulating blood, upon the walls or inner boundary of the vessels. The increased amount of matter so deposited is a deviation from the law of the texture, and therefore a phenomenon of disease; but the sensible or visible effects upon the texture depend upon the times, stages, and forms, of the subsequent morphology, which may conform to the law of the texture, or deviate from it. For example—the fibrous textures are not secreting textures; they do not evolve a viscid mucus mixed with cells; this is not the law of their nutrition. These textures are therefore, on this account, called serous textures. But there are other textures that do evolve a viscid mucus, mixed with numerous colourless cells, and these are therefore termed mucous textures. Now, an unusual amount of nutritive matter deposited upon the walls of the bloodvessels, of a fibrous texture, and a conformable morphology, necessarily give rise to an increased amount of the elements of the texture, which becomes thickened by abnormal fibres; and if adhesions are contracted between contiguous surfaces, it is by fibres; and the serous fluid which naturally lubricates the texture is increased in quantity. On the other hand, an unusual amount of nutritive matter deposited upon the walls of the nutrient vessels, of a mucous texture, and a conformable morphology, give rise to an increased quantity of mucus, mixed with a larger number of colourless cells. In either case, an unconformable morphology would produce different forms and qualities—fibrous forms, for instance, upon the mucous textures, and corpuscular forms upon the fibrous textures.

"Inflammation," says a recent and talented author, "must needs occupy a large share of the attention both of the surgeon and of the physician; it is continually the object of his treatment and watchful care. It affects all parts that are furnished with bloodvessels, and it affects different parts very variously." —"A great majority of all the diseases to which the human frame is liable begin with inflammation or end in inflammation, or are accompanied by inflammation during some part of their course, or resemble inflammation in their symptoms. Most of the organic changes of different parts of the body recognise inflammation as their cause, or lead to it as their effect; in short, a very large share of the premature extinction of human life in general is more or less attributable to inflammation."—

"Again, inflammation is highly interesting, not only in its morbid phenomena and destructive consequences, but in its healing tendencies also. It is by inflammation that wounds are closed, and fractures repaired; that parts adhere together when their adhesion is essential to the preservation of the individual; and that foreign and hurtful matters are conveyed safely out of the body. A cut finger, a deep sabre-wound, alike require inflammation to re-unite the divided parts. Does ulceration occur in the stomach or intestines, and threaten to penetrate through them? Inflammation will often anticipate and provide against the danger, glue the threatened membrane to whatever surface may be next to it, and so prevent that worst and universal inflammation of the peritonæum, which the escape of the contents of the alimentary canal into that serous bag would infallibly occasion. Inflammation, limited in extent, and moderate in degree, becomes conservative by preventing inflammation more severe and more widely spread, which would be fatal."*

This being the graphic picture of inflammation, by a practical physician, the question very naturally arises, what can this inflammation be?

In the first place, the answer appears to me to be clear upon this point,—that the inflammation which is conservative, closes wounds, repairs fractures, has healing tendencies, and preserves the life of the individual, must be different from the inflammation which produces destructive consequences, morbid phenomena, organic changes, and prematurely extinguishes human life; and therefore that two very different, nay, opposite and incongruous things, are brought together under the unscientific term of inflammation. The difficulties of the subject obviously arise, not from an oversight of the primary phenomenon, the disturbed circulation of the blood, and the increase of nutritive matter in the vessels of the affected texture, but from an utter neglect of the physiological elements involved, and therefore, necessarily, of the conformability or unconformability of the morphology. A nutritive element,—that is, an element of growth, nutrition, or secretion,—which is conformable and therefore healthy in one texture, is unconformable, and therefore an element of disease in another and different texture. An unusual abundance of colourless corpuscles or cells, and an increased mucous secretion in a mucous texture, may pass under the term inflammatory product; but mucus and mucous cells are conformable products, and an unusual amount denotes no more than an increased amount of the elements natural to the texture; whereas, the very same elements in a fibrous or serous texture, or in the fluid evolved from it, are the proof of an unconformable metamorphosis, because such incoherent forms are not natural to this texture.

If so complex a subject as normal and abnormal nutrition, of conservative and destructive inflammation, be susceptible of a short definition, it may be said, that simple healthy inflammation consists of an increased amount of protoplasma with a conformable morphology; and destructive unhealthy inflammation, of an increased amount of protoplasma with an unconformable morphology; the terms conformable and unconformable referring to the law which governs and determines the physiological form and function of the texture in health, and which must be known before the nature of diseases can be understood. It is not necessary to this definition of simple healthy inflammation, that all the nutritive elements furnished by the blood should undergo a conformable metamorphosis; it is sufficient that they do so within a reasonable time, to the extent of restoring the irritated, wounded, or inflamed texture to its normal state and function.†

Practical medicine is based upon the recognition and appreciation of visible or sensible signs: the physician cannot treat diseases ascertainable only by the microscope; but if this instrument carries our analysis of change of texture into hitherto unknown regions, the medical practitioner must be prepared to accept or reject its testimony *in toto*. There can be no halting between the microscope and the eye,—interpreting one part of physiology and pathology by the vision of Nature, and another by the improved vision of art. If the microscope is to be relied on as an analytical means, then not only is every post-mortem examination imperfect and the majority useless without it, but we must no longer speak of vessels or ducts secreting. Vessels convey or transmit incoherent corpuscular forms, and are the means of their accumulation, and ducts convey them away out of the body. Transformations of matter are affected, or secretions formed, within the cells.

*(To be continued.)*

* Lectures on the Principles and Practice of Physic, in the *Medical Gazette*, by Dr. Watson.

† The phenomena of inflammation, although very multitudinous, may, in fact, be resolved into the morphology of the contents of individual cells, the conformability or unconformability of the product being dependent upon the normal or physiological type of the elements of the texture, and the form resulting from the last stage of the inflammatory metamorphosis. This is shown by the phenomena of inflammation in the several textures of the lung,—pleurisy, (fibres,) bronchitis, (cells and mucus,) and pneumonia, (a mixed product.) I would beg to suggest to Mr. Hassall the benefit he would confer on physiology and pathology, by extending his "Microscopical Anatomy," so as to include the elements of the various parenchymata, and the structure of their nutrient vessels in the embryo and in the adult, viewed with a power of 600 or 700. If these were correctly established, the phenomena of scrofulous diseases and inflammation would be rendered more easy.

ON

# SOME OF THE INJURIES OF BONES, ARISING FROM ACCIDENTS.

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## No. IV.

*Severe compound comminuted fracture of the femur, partially implicating the knee-joint, successfully treated.*

The surgery of accidents is so important a branch of the profession, that, as opportunities offer, we seldom recur to it without interest, or the certainty of finding some novelty in the detail of circumstances, or deriving some practical advantage from the study. Varying a good deal from disease, injuries from violence are characterized by much less regular indications. The great majority have each something of a character of their own; and therefore it is that every peculiarity in appearance or symptoms is worth recording for future guidance in the management of others; and as their characters differ, so will their treatment require a greater or lesser degree of ingenuity from the surgeon, which is often exacted from him on the spur of the moment, when he has had little time, either to revolve the matter in his mind, or to consult authorities where his judgment may be in doubt.

In continuing the subject, it was not expected, when concluding a former paper, (The Lancet, May 31st, 1845,) to have so speedy an opportunity of adducing another example of bringing to a fortunate issue what at first seemed to be irreparable injury to a limb. In this instance, likewise, as on a former occasion, decided opinions prevailed that I should not succeed; the result, however, is most satisfactory, and may tend to check that imprudent haste for amputation, of which some eminent members of the profession are accused, and which is, no doubt, too frequently characteristic of its younger members. In some other practical points of view, it fully bears out the remarks made in the first paper, (The Lancet, December 21st, 1844,) and it is hoped may be deemed another step in the direction of what is there presumed to be called "conservative surgery."

August 7th, 1845.—Thomas F——, aged twenty-seven, engine-fitter in the steam factory of the Royal Dock-yard at Woolwich, while attending the working of a new iron-planing machine, moving horizontally to and fro, was caught in the ham of the right leg, while standing with his back a little obliquely towards it, by the nob of what is termed the set-screw, projecting from its edge; and the limb, being carried forward a few inches, was jammed against a fixed upright iron bracket, or pillar, connected with the apparatus as one of its supports. By the force of the moving power (steam), the thigh bone, thus placed, as it were, in a powerful vice, was crushed in a moment, just above the condyles, with an audible noise, stated to have been heard some yards distant; the popliteal space torn irregularly open, the knee-joint unavoidably much bruised, and the injury altogether apparently so extensive, that he was brought directly to the Naval Hospital, with no other hope, by the medical officers who saw it, than immediate amputation.

I saw him about three-quarters of an hour after the accident, (half-past four P.M.) and found it, from peculiar complications, one of the most unpromising description. The wound in the ham, in its whole extent, was about five inches across; jagged and irregular, from the obtuse nature of the body which occasioned it. The deeper part of the opening freely admitted three fingers; a piece of large nerve, (the peronæal) nearly four inches long, and disconnected from its upper and lower attachments, lay loosely within the cut edges; the tendinous sheath of the long head of the biceps flexor cruris, ten inches in length, and about two in breadth, studded with a good deal of muscular fibre, had been dragged by sheer force out of the thigh, in consequence of the head of the screw getting underneath it, which, had it been a sharp,

instead of a round body, would have made a clean cut, and this hung loosely down the calf of the leg. On introducing my fingers into the wound, a detached piece of the shell of the femur, of triangular form, measuring two inches and a half long, by about one at its base, was found, and removed from some slight muscular attachments. Another piece, above an inch long,* had been previously taken away by the assistant-surgeon on duty, who received the case, which, from the position it occupied, seemed to be splintered from the external condyle; and his general report to me, literally, though painfully, accurate as it proved, was, that "in whatever direction the fingers were pushed, broken surfaces only could be distinguished."

Nearly an inch of my little finger passed freely into the cavity of the femur, among the cancelli, through the opening made by the removal of the triangular fragment; around were the irregular edges of the lower portion of femur; downward, the external condyle felt as if splintered or fissured, or both, but to what extent its coverings did not permit to be distinguished. The patella and skin in front remained unbroken, owing to his standing, as stated, in an oblique position—one of those fortunate, though scarcely explainable escapes, not uncommon in accidents; but both had been severely squeezed, and a puffy swelling, showing effusion to some extent, occupied the place of its ligament, which at first presented the appearance of being partially ruptured. The only favourable point in this mass of injury was the integrity of the blood-vessels, which it formed my first object to ascertain. This exemption, as in that of the patella, arose from the manner in which the man stood at the moment; the screw-head had merely grazed the integuments covering them, plunged at once to the bottom of the popies, and probably, by twisting the limb a little, saved the joint from utter demolition. The hæmorrhage, it appeared, had not been considerable.

Formidable as the injury seemed, I thought it but fair, after a little consideration, to give the patient a chance for preserving his limb, notwithstanding prevailing opinions of its hopelessness. The encouraging circumstances were his age, the reported regularity of his habits, improved still further by having been recently married; the circulation being entire; sensation, on the whole, pretty good, though with partial numbness, in the course of the extensor muscles; some power, though much impaired, in moving the toes; and a seemingly equable temperament; for though at first exhausted and depressed, the administration of a stimulant produced the best effects, and he seemed to bear up under his misfortune manfully. The fractured bones, which had exhibited great deformity on his admission, were therefore, as nearly as possible, got into place, the loose fragments of muscle removed, and the long sheath of the biceps hanging down the leg cut off. The wound, which gaped largely, showing nearly the whole popliteal space, was ragged in its edges, and somewhat zigzag in form, presenting a tongue of integument in the centre. To secure the whole required eight sutures; pledgets of lint, dipped in blood, were placed on these, and a tailed bandage over all. The easiest and best position for the limb seemed that in which it lay at the moment, slightly flexed, the knee inclining inward, for the purpose of having ready access to the wound; the whole well supported by pillows. Directed constant use of a lotion thus composed:—Rectified spirit of wine, four ounces; solution of diacetate of lead, half an ounce; water, twelve ounces. Mix. The following mixture was likewise ordered:—Solution of acetate of ammonia, two ounces and a half; spirit of nitric ether, antimonial wine, of each three drachms; tincture of opium, one drachm and a half. Mix. Three tablespoonfuls to be taken every two hours. Strict fever diet, which, with us, gives half a pound of bread, some tea, and about half a pint of milk.—Half-past nine P.M.: Considerable pain around the knee-joint, to which the lotion is incessantly applied, and to be carefully kept up during the night by reliefs of nurses.

8th.—Limb easier; had a few minutes' sleep occasionally in the night; sharp jerking and twitching of muscles, with frequent startings on the least inclination to dose; pulse 84, full; tongue tolerably clean; experiences numbness in the gastrocnemii, peronæus, and tibialis anticus muscles, extending downward, and round to the instep, as well as to the sole of the foot. Let twenty-four leeches be applied around the knee-joint; continue mixture and lotion.—Two P.M.—Seven P.M.: Had three hours and a half sleep since the morning visit; leeches have bled freely.

9th.—Had about four hours' sleep altogether, in very brief snatches; seat of injury uneasy, yet free from very serious pain; spirits good, his temper being naturally easy and placid—a fortunate circumstance for one labouring under such an affliction; pulse 84; no stool since his admission into hospital; tumefaction of parts not more than might be expected under such circumstances. Apply twenty-four leeches; continue other medicaments as before.—Two P.M.: Let him have the common hospital aperient draught, with the addition of three drachms of tincture of senna.—Seven P.M.: No stool from aperient, which was repeated in diminished quantity.

10th.—Bowels moved three or four times in the night, which necessarily interfered with continued sleep. Some tendency to reaction appears in the system; pulse 94; considerable thirst and heat of skin; twitching and starting from slumber frequent and distressing; puffy swelling below the patella of what appears to be effusive fluid, increased in size, with occasional uneasy feelings in the joint. Apply twenty-four leeches on and around the knee; continue mixture and lotion assiduously.—Two P.M.—Seven P.M.: Pulse up to 100, moderate in fulness; flatus very troublesome, probably from the quantity of opium taken—an effect which I have occasionally observed from its use. Ordered the following draught, and to be repeated occasionally:—Tincture of ginger, compound tincture of cardamom, of each one drachm; water, one ounce. Mix.

11th.—Going on most favourably; has had full six hours' sleep, interrupted, as before, by fearful dreams, or by those violent startings, or "shocks," as he terms them, common to such injuries; limb in general easy, though painful at times around the patella; pulse 96; tongue clean; spirits and countenance promising; flatus subsided; one stool. Let twenty leeches be applied on and around the knee-joint; other remedies as before.—Seven P.M.: No material change since the morning's visit.

12th.—As yesterday, excepting that the pulse is down to 88. Uncovered a portion of the wound for the first time, in order to give exit to an oozing of discharge. Some pain on the upper margin of the patella. Apply twenty leeches on and around the joint. Continue other remedies. Seven P.M.: Finding at the evening visit an increased flow of pus, dressed the whole of the wound afresh. It looks pretty well; union seems to have taken place in part, though first appearances on such occasions often prove fallacious; and the edges are without that florid appearance I like to see. No apparent irritation exists from the presence of the sutures, which are therefore not disturbed, the extent of cut surfaces requiring all the support that can be given them.

15th.—Dressings renewed twice daily since last report. Pulse from 82 to 90, and about six hours' sleep each night. Measured the extent of the wound, for greater accuracy, and found it five and a half inches in length transversely across the popies, though superficial only at each end. Discharge from it continues moderate in quantity, the pus being mingled with blood. Forty-four leeches have been applied on and around the knee-joint during this and the past two days, making the whole number so used, 156. The quantity of opium taken, up to the evening of this day, of which an exact account has been kept, is three ounces, two drachms. Continued its use in the diaphoretic mixture, but in diminished doses. Hitherto he has been confined strictly to our fever diet; but from the absence of all serious inflammation, directed to-day half a pound of beef to be made into tea for him. Occasional "shocks," as he calls them, or sudden startings, which shake the frame powerfully for the moment, and disturb the limb in its position. Ordered an aperient. Continue the use of the spirit lotion to the knee and limb generally.

16th.—Pulse 82; has had his usual good sleep. A difficulty now occurred in the management of the injury, which, although not unforeseen, it was not easy to obviate in a manner quite to my satisfaction; and as one of the occasionally puzzling details met with in practice, may be mentioned here. The reduction of the femur, in consequence of its shattered state, had been accomplished in the first instance with ease, previous to drawing the sutures together; but the difficulty was to keep the ends of the bone in due apposition. Extension, and the application of a splint or splints in the usual manner, were in this case inexpedient, as being sure to tear asunder the lips of the wound. The position already stated—that of the knee, being slightly flexed, and inclining towards its fellow, so as to leave the breach in the popies accessible for dressing at the proper season—was therefore adopted as the best that circumstances permitted, and as likely to meet pretty equally the rather conflicting claims of wound and fracture. A firm longitudinal compress was secured inside the thigh, where deformity had been most

* Both pieces of bone, the nerve, and tendinous sheath, are preserved in the Hospital.

marked, so as to answer the end, for a time, of keeping the fractured extremities together. But strong muscular action had now come on; the usual effects were soon apparent in displacement and shortening; and in order to avoid deformed union on one hand, or severance of the wound on the other, a middle course was adopted. Very gentle and continued manipulation gradually brought the ends of the bone as I wished, and with as little strain on the sutures and adhesions as might be. A short splint replaced the compress; but the support given could be only partial, from the situation of parts, as in dressing the wound twice daily, its removal for the time was unavoidable. The delay of a week, before this necessity arose, proved useful by producing union of the wound at its extremities. The centre, although unavoidably placed more on the stretch than was desirable, still slightly adhered in parts; but though the discharge was inconsiderable, it could now be expected to close only by granulation.—Seven P.M.: Found considerable pain and uneasiness produced in the limb by the splint applied in the morning, carefully as it had been secured; œdema and pain likewise in the foot; puffy swelling below patella not diminished, and continues to give an impression of the ligament being crushed or torn, or the head of the tibia injured. Obliged to adopt various contrivances, in consequence of the site of the wound, in order to change the dressings without disturbing the fracture. Pulse up more than usual.

19th.—Wound gapes in the centre rather more than hitherto; as much, perhaps, from the natural cavity of the part giving little attachment to the integuments, as from the unavoidable disturbance produced by the effort to keep together the broken bones. One of the sutures came away yesterday with a small portion of slough; wound looks healthy, granulates kindly, and the patient is in every way going on most favourably. Takes an aperient occasionally; mixture and spirit-lotion continued, though less frequently, and to-day was placed on our half-diet list.* The effect of this change was to raise his pulse at once from eighty to ninety-four.

22nd.—Goes on without a single bad or doubtful symptom. Dressed with soap-plaster strapping passed round the limb, and over the wound, in order to consolidate its parts, leaving spaces for the issue of pus, which is healthy, and moderate in quantity.

25th.—Has shaken the limb severely of late by those sudden startings, which even opium, however liberally given, does not quite subdue. Found the injured member to-day about an inch shorter than the sound one, which, from the extent of loss of substance in the femur, and the usual process of absorption, is perhaps less than might be expected. Observed, also, for a few days past, fulness around the patella and condyles, which, on slight pressure by the fingers, produced a stream of pus from the wound, giving rise to some apprehension for the state of the joint, although the constitution is quiet. This fulness and discharge were, however, greater two or three days ago than at present. Some pricking pain on the outer side of the thigh has existed occasionally for some time past, possibly from the presence of a fragment of bone.

29th.—Granulations luxuriant; discharge healthy, excepting when disturbed by violent startings from sleep, which continue to shake the limb so severely as frequently to tinge the discharge deeply with blood. Pulse 80; tongue clean; sleeps and eats well.

Sept. 1st.—All the functions now go on as regularly as in high health; nor is more required than some attention to position of the fracture, and to dressing the wound as often as necessary, which has hitherto been twice daily. It looks extremely well; discharge healthy; granulations florid, and so luxuriant as to require restraint.

In this satisfactory state, with no adverse circumstances to apprehend, and when time alone was requisite to complete the cure, I could now leave my patient with confidence. Private affairs had called me away a fortnight before; but unwilling to quit the case while there remained the slightest doubt of the result, the journey had been hitherto postponed. These hopes of success were fully verified. My wishes were implicitly followed, in every respect, by Messrs. Derriman and Alexander Brown, particularly the latter, to whom, as having first received the case, and assisted me in its arrangement, I had given the patient more especially in charge.

No check took place in the process of cicatrization, which went on slowly, though kindly, with no other variation than a catarrhal attack, frequent pricking in the thigh, threatening the issue of a spiculum of bone, and the discharge of pus, often deeply tinged with blood. Union of the femur was fully accomplished by the beginning of October, the limb being then moved with facility.

On my return at the end of the month, the wound had contracted to the size of a fourpenny piece; he had been enabled to quit his bed ten days before, and by the aid of a sling-stirrup and crutches, get about the ward. On examination, the same puffy swelling which had existed from the first between the patella and tubercle of the tibia, communicating the feeling of fluid to the touch, continued nearly undiminished in size. He experiences also some pain, with a sense of tightness and constriction in attempting to bend the knee.

Nov. 10th.—Grating sound in the joint on using passive motion, and some pain extending directly across it, for which a liniment with opium was used. The wound finally closed a few days afterward; and dispensing with the use of crutches at the same time, he was discharged by his own wish on the 28th November, and in a week afterward was again at work in the dockyard factory as before.

March 8th, 1846.—Saw him to-day for the first time since quitting the hospital, he having called on several previous occasions, without my having had an opportunity of inquiring as to his progressive amendment. Has been constantly at work ever since, in his former situation, which, it appears, requires the standing position. Feels the limb strong and useful for every purpose of life, though about an inch shorter than the other, a defect satisfactorily obviated by a high-heeled shoe. Walks to Greenwich and back, a distance of six miles, with perfect ease to himself. The only real inconvenience resulting from the injury, although comparatively a small one, is inability to flex the great toe in walking with the same freedom as formerly, having lost much of its natural springiness. The partial loss of sensation in the extensor muscles of the leg, of which he complained from the first, likewise continues; it takes principally the course of the peronæal group, extends downward to the external malleolus and instep, as well as to the sole of the foot, and runs along the tendon to the great toe. The cause obviously is the loss of the large nerve torn away by the machine. He expressed himself extremely thankful for the preservation of his limb, and gratified in a high degree that so few ill effects remained after so formidable an injury.

July 29th, 1846.—Saw him again, during a visit to the factory, where he attended me round it for an hour or two. Walks with very slight lameness, or rather shuffle, and thinks the numbness much diminished since our last interview in March, so that in time it may wholly disappear.

On the same occasion, I saw with great pleasure, near him at work, Egan, whose case is reported in The Lancet of Dec. 21st, 1844. His arm has continued perfectly efficient for all his duties; and motion in the elbow is so much restored, that he can put his cap on and off without difficulty.

The case here given, as affording some useful practical hints, would have been reported sooner, but for the desire to see whether the results were perfectly satisfactory. It is now fairly tested by the lapse of time; and we find that the femur may be extensively crushed, a wide and deep wound inflicted, a large nerve destroyed, so great a portion of an important texture drawn out of the thigh, and much violence done to the knee-joint, not only without requiring removal of the limb, but without seriously impairing its efficiency. To what precise extent the articulation was effected could not indeed be accurately ascertained without aggravating the mischief. That it was considerable, admitted of no doubt, when we consider attendant and subsequent circumstances—such as the greater prominence of the joint, when pressed between the opposing forces of the screw-head and the pillar, at the moment of collision; the extent and depth of the wound down to its posterior surface; the impression of broken surfaces conveyed to the finger in every direction; the first fragment of bone which was removed being, to appearance, chipped from the external condyle; the subsequent occasional fulness on each side of the patella, and free issue of pus, upon slight pressure by the fingers; and puffy swelling below it—all corroborate the belief, that the degree of disorganization was not trifling.

In the treatment, it will be seen that the system advocated on a former occasion (The Lancet, Dec. 21st, 1844) was kept steadily in view. The extreme degree of injury sustained gave reason to apprehend corresponding excess of inflammation. To prevent so serious a matter in so irritable an organ as the knee-joint, became, therefore, a primary object. Local depletion, as a prudent precaution, was, in consequence, largely employed—more extensively, perhaps, than to some

* The particulars of the various articles are given in The Lancet, May 31st, 1845, page 610.

may seem necessary, where no very active symptoms appeared to require it. My aim, however, was rather to prevent such a troublesome symptom than to subdue it when once excited; nor did any reason exist why it should not have been carried further had such measure been required. Partly with the same view, and from having a good opinion of its sedative and soothing, as well as, I believe, often healing, properties, opium, administered through the medium of a diaphoretic, was given with a freedom that many may not be disposed to imitate; nor was it discontinued till a late period of the cure. All the good effects expected from the use of so powerful an agent upon the system were experienced, unattended by one unfavourable or unpleasant symptom.

The result gives countenance to opinions previously advanced, that however serious the accident, if the system be uncharged by indulgence in bad habits, or unworn by disease, much may be done by curative means, under grave consideration of all the circumstances, even where large articulations are affected. Resort to the knife is so grievous a misfortune, admitting that it succeeds, that some little risk should be run in order to avert present pain, subsequent danger, and permanent mutilation. Where the preservation of a limb may seem doubtful or hopeless, as in this instance was thought to be the case, the moral courage of the surgeon must be occasionally exercised in making the attempt. He will in this, as in many other points of medical practice, now and then fail; but failure, in the eyes of the considerate, where there exists no invincible obstacle to success, as perhaps would have been the case in this instance had the bloodvessels been ruptured, forms no just ground for reproach.

It is true, that in ordinary circumstances of private life the practitioner is less favourably placed for close and continued observation of his patient than we are in the public service. Take, for instance, the case of an eminent surgeon, either in the metropolis or provinces, summoned to an accident ten, twenty, or more, miles distant, who is expected to decide, with the least possible delay, whether a limb is or is not to be removed. The situation is sufficiently responsible, and where doubts exist, not a little painful. Were he within a moderate distance, time might be taken to watch the symptoms and shape the treatment as appearances vary; but as he may not see the patient again, or only at a considerable interval, it becomes necessary to act at once, even when the decision does not always satisfy himself. Facts, the only basis of all sound knowledge under such circumstances, then come to his aid. With these before him, added to moderate experience and discrimination, he must trust to his own judgment under all such sudden and trying emergencies. It is necessary that he should there be something more than the mere creature of schools and systems. And it is with the view of enforcing this upon younger professional men in the naval and military services, not from any idle feeling, that the words of an eminent and experienced surgeon, when the details of this and another case were mentioned to him, are ventured to be transcribed. These cases do good by their publication. "According to the rules of the schools, you should have cut off the arm and the leg; but by the exercise of better rules, those of a sound discretion, you have saved the patients their limbs, and the country the payment of two pensions."

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*Wound of the external condyle of the femur, followed by synovitis, cured without ill consequence to the joint.*

The following, though an injury of a different kind, bears on one of the subjects alluded to in this as well as in a former paper; and if, perhaps, less an injury of bones than of the sensitive textures which cover their extremities, is to be considered a contribution to the history of knee-joint accidents, and may find an appropriate place here.

Feb. 5th, 1846.—On the 30th of January, Samuel E——, a tall, athletic young man, aged about twenty-eight, while at work as shipwright in the Royal Dockyard at Woolwich, received a wound by the corner of a chisel, which fell from a height of fifteen feet upon the outer condyle of the left femur, cutting through his trousers and the soft parts, till stopped by the resistance of bone. The nature of the instrument left no doubt of some injury to the latter, and at first the patella also was thought to be slightly grazed; but as the wound did not materially gape, the exact extent of lesion beneath did not appear. On being taken to the dockyard surgery, it was brought together in the usual manner, a suture being added to the adhesive strapping; and the patient directed to go home, live low, and keep himself quiet. About the middle of the night of Feb. 3rd, violent pain and inflammation in the knee came on, accompanied by sharp pyrexia, for which leeches and a poultice, in addition to other remedies, were used. Next morning, there being severe headach, hot and dry skin, pulse above 100, and the knee not relieved, he was bled to sixteen ounces, and a mixture of sulphate of magnesia and tartarized antimony given in frequent doses.

On the morning of the 5th, the seventh from the accident, he was brought to the hospital, obviously suffering from severe synovitis. Found the knee much swollen and painful; skin hot and dry; no sleep; eyes suffused; tongue foul; pulse 126, not full; occasional rigors; bowels freely opened yesterday. The suture had been removed from the wound, which has freely penetrated the joint; and there is considerable discharge from it of turbid, discoloured, synovial fluid. Introduced the probe above an inch, and but for obvious prudential reasons could have carried it much farther. At the evening visit, the pulse having got up to 140, pretty full in volume, with some flushing of the face, he was bled to fourteen ounces, which proved to be much buffed and cupped. Leeches (eighteen in number) were applied to the joint; fomentations and cataplasms continued; a bolus of two grains of chloride of mercury, and ten grains of the compound powder of ipecacuanha, given every six hours; and a draught, composed of nitre, and something more than half a grain of tartarized antimony, every three hours.

6th.—Pulse 112, moderate in force; slept pretty well after the leeches ceased to bleed, having had no rest the previous night; bowels moved twice; knee swollen, with fulness on each side of the patella, though a little easier. Free communication with the wound exists all round the joint; for slight pressure on any part of it produces flow of a thin yellow, and slightly flaky fluid, not at all like pus. Seat of the greatest pain is over the surface of the inner condyle. Apply eighteen leeches to the part; fomentations and cataplasms; bolus and draught as before.

7th.—Pulse 116, sharp; pain considerable; countenance not good; thirst; uneasiness; much irritability, his natural temperament being of that description. Continue medicines and applications, and apply twelve leeches to the joint. In the evening, finding the symptoms not improved, he was bled to twelve ounces. This also was found to be buffed and cupped. Eighteen leeches were again applied. To each draught was added twelve minims of the sedative solution of opium, or nominally, (though not actually, perhaps, in consequence of sleep,) about one drachm and a half in the twenty-four hours, in addition to a diaphoretic draught, with twenty minims, at bedtime.

8th.—Pulse 112; slept six hours; knee easier; no stool. Continue the medicines; apply twelve leeches. In the evening, the pulse being much fuller and sharper, it was judged necessary to take eight ounces of blood from the arm, and give three pills, composed of calomel and colocynth. On measuring the affected joint, it was found to be about an inch and a half more in circumference than the sound one. Attempts have been made to keep the limb perfectly straight; but he expressed so much pain, and evinced so much irritability, that they were obliged to be abandoned.

11th.—Since last report the pulse has kept at the same degree of frequency, sometimes fuller and sharper than usual; occasional heat and irritability, both local and constitutional, which latter appears in some degree to influence the former. On the 9th, twelve leeches were applied to the joint; on the 10th, the bolus was discontinued; the mixture, night draught, fomentations, and poultices, repeated.

16th.—Little alteration for these few days past; heat and uneasiness in the joint undiminished, the latter prevailing chiefly on its inner side; limb kept in the easiest position to the patient—that is, slightly flexed; but so susceptible is it, that he cannot bear the slightest degree of involuntary motion without calling out; discharge from the wound pretty free, is of the same character as at first, and appears to come now from the outer aspect of the joint, the chief seat of pain and enlargement being on the inner. During the five days past, thirty-two leeches have been applied at different times, and other remedies continued as before; but finding little advantage from the warm local applications, they were exchanged for a lotion constantly applied, composed of four ounces of spirit of wine, half an ounce of solution of diacetate of lead, and twenty ounces of water.

21st.—Considerable improvement; pain and swelling in the joint abated, being now only about half an inch larger in circumference than the opposite one; pulse varying between 100 and 116. Since last report, twenty-eight leeches have been applied; the lotion and night draught continued; but yesterday, in consequence of some heat and dryness of skin, the mixture was exchanged for the following:—Solution of

acetate of ammonia, two ounces; tincture of opium, one drachm and a half; spirit of nitric ether, wine of antimony, of each two drachms; water, five ounces. Mix. An ounce to be taken every two hours.

March 1st.—Goes on with slight yet gradual improvement; pulse down to 100, though a few days ago at 124. Finding so much less local pain, and less general querulousness of the patient, slight and very gentle passive motion of the joint was commenced under my own eye at the morning visit. In a short time it was used twice a day, taking care to give no uneasiness, and to cease the moment any such feeling was experienced, being then replaced in its usual slightly flexed position. Circumference half an inch more than the sound one. Discharge of turbid synovial fluid continues. On the 25th, it became more purulent, a lodgment of which seemed to have taken place near the head of the fibula, where there was some pain, which for a time extended across the joint. The existence of heat also induced the application of fourteen leeches at twice; mixture, night draught, and lotion, continued, with occasional aperients when necessary. The diet had been strictly fever up to the 24th, when it was changed for low, (which, with us, gives half a pint of broth, but no meat,) to which a little rice pudding was added.

7th.—A small blister was applied on the 2nd, an inch or more below the inferior edge of the patella, which, either from his peculiar habit or sensitiveness, seemed to produce uneasiness locally and generally, the pulse having gone up to 110, with some heat and parched mouth. Medicines continued, and sixteen leeches applied—a few at a time, as circumstances seemed to require.

17th.—Some fluctuations in the state of the joint since last report, without apparent cause; becoming, on the 10th, more painful and swollen, which, from the remedies used, again gradually subsided; pulse varying from 84 to 104; to-day, 96; wound now nearly closed, discharging only fluid enough to tinge the dressing in the slightest degree; extends and flexes the joint himself pretty freely, without apprehension or pain. Between the 10th and 13th, thirty-two leeches were applied; and on the 15th, a blister, placed, however, more upon the internal condyle than I had intended, owing to misapprehension of my directions by an attendant; this was kept open with savine cerate for several days. Mixture and night draught continued; aperients of mild character nearly every morning. On the 12th he had fish for dinner, and two days afterwards fowl, which were alternated according to his inclination.

25th.—Original wound, which had been gradually closing, became completely so on the 20th; and this day the blister, borne with his characteristic impatience, had also skinned over. Pulse, for the first time, as low as 80; motion of the joint perfect, and with but slight degree of that stiffness to be expected from more than six weeks' confinement, and the inflammation consequent upon what is so often a serious injury. It seems, however, if our measurements be correct, to fluctuate occasionally in size, being to-day three-fourths of an inch in circumference more than the sound one. Was yesterday placed upon half diet, which includes half a pound of butcher's meat, this being the first he has had since admission.

31st.—Has been using a strong discutient liniment, in order to disperse slight thickening over the internal condyle. Applied a bandage for support; moves about the ward freely.

April 7th.—Discharged cured, being fully able, as he states, to resume his duty, having now been sixty-two days in the hospital. Enlargement of the joint, at present, about a fourth of an inch, or less, than that of the opposite limb; and it continues slowly to diminish.

How far the condyle was injured, in this case, could not, when I first saw it, be discovered; but that the corner of the chisel had penetrated it freely, and of course the capsular ligament, (or synovial membrane,) by the momentum of the fall, there could be no doubt. This, as far as the bone was concerned, might be a slight matter. The situation of the wound, however, and division of soft parts, became of more importance, as they imparted to it the more serious character of punctured wound of a joint. The irritability of the patient's habit; the uneasy, quick, and small, sharp pulse; its standard for a long time, 112, which, after accidents, I have frequently found to indicate latent mischief; the degree of pain in the joint, and the discharge from it—made me apprehensive of some permanent structural disorganization. To meet this, the remedies were similar to those previously recommended, where the lesion had been of more formidable character, and with the same success. In addition to three general bleedings in the hospital, one took place at his residence previously, making together fifty ounces. Eight or ten leeches were applied before his admission, and 194 afterwards—always, I thought, with advantage; but as some of these were used a second time, the quantity of blood drawn in this way was not, perhaps, so great as may at first view appear, and the patient, as has been mentioned, was young and of powerful frame.

Opium, likewise, it will be seen, was given freely. In the first five days after admission, he took altogether above a scruple in the form of Dover's powder, and about three drachms or more of the sedative solution in a diaphoretic mixture. For a month longer, or till March 10th, the quantity taken daily, making every allowance for the interruptions caused by sleep, was a drachm and a half, or more—always, however, in combination with medicines having a tendency to the skin: these appear to add considerably to its usefulness, and to diminish the effect of what may be considered less desirable properties. Warm applications having been used locally in the first instance were continued for twelve days after admission, and then changed for an evaporating lotion, till March 4th. The latter application I prefer, though it may be necessary to be guided by circumstances, or the feelings of the patient.

Feb. 15th, 1847.—Meeting to-day with a medical officer of the dockyard, (Dr. Derriman,) who had been attached to the hospital when this case was under treatment, he informed me that the man continued perfectly well, and at work ever since his discharge.

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In The Lancet of May 9th, 1846, is given a severe case, occurring at Tunbridge Wells, of compound luxation of the knee-joint, terminating fatally in the attempt to save the limb. It appeared afterwards, that the popliteal artery was lacerated to some extent; severe hæmorrhage occurred at the moment, followed on the fourth day by a repetition of it, the loss of blood being so serious, particularly on the first occasion, that he survived amputation very few hours. In this instance, however, there is nothing to invalidate the opinion on such an unfortunate complication, advanced in a former paper, to which allusion has been already made. Rupture or division of the artery, added to severe injury of the joint, is one of the cases expressly excluded there from the list of those in which a cure may be safely attempted. Added to the evil of uncovered bones, the destruction of so many parts, as integuments, muscles, ligaments, and bloodvessels, scarcely admits of reparation, in an articulation so exceedingly irritable. It is otherwise with the shaft of a bone. Cases are known, where, in compound fracture of the femur, with wound of the main artery, the vessel has been secured, and the patient done well. In the case just mentioned, we are told that constitutional irritation set in before the performance of the operation; but, excepting the closure of the wound in the usual way, by sutures and straps in the first instance, the general or local treatment adopted is not mentioned.

Royal Marine Hospital, Woolwich, March, 1847.

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## ON THE NON-DUALITY OF MIND
IN ITS
## PHYSIOLOGICAL, PHRENOLOGICAL, AND PHILOSOPHICAL RELATIONS.

By THOMAS CATTELL, M.D., Braunston.

(*Concluded from p.* 280.)

Were a person to suppose his mind absent while he is conscious of its absence, or to suppose the presence of perception and the absence of consciousness, would, in reality, be supposing himself conscious of the absence of all consciousness. It would be proving the absence of mind by the presence of mind, which is a contradiction. Absence of mind cannot therefore be proved. Besides, in the example which Dr. Wigan has adduced, there must be the absence of perception, consciousness, and memory, for consciousness, by which we experience the fact, is supposed to be both absent and present at the same time. It is important to observe, that consciousness and our recollection of it are two distinct ideas—the former must exist previous to the latter: absence of the mind in reading, if it fail to leave any trace in the memory, cannot have produced a consciousness of the subject read. For the absence of memory must have been preceded by the absence of attention, and where there is the absence of both memory and attention, there cannot be consciousness.

The example, moreover, excludes the only two operations of the mind by which the consciousness of any fact can be ascertained; and makes the mind percipient and impercipient at the same time; percipient, by a transfer of its attention

to a new train of ideas, started into action, which bear a relation to the subject, by the laws of association, with the consciousness and recollection of those ideas; impercipient, by the assertion that the mind was absent; and in which must be included the absence of perception, of consciousness, and memory.

Such illustrations do, however, serve to demonstrate an important principle of our mental constitution—that a perception or an idea which passes through the mind may yet foster the introduction of other ideas connected with it by the laws of association.

In reviewing the various phenomena of mind, we may find numerous familiar examples perfectly opposed to Dr. Wigan's notion of duality of mind, as deduced from duality of attention. For the mind, in a great variety of cases, apparently excites different acts of attention at one and the same time; but a few slight illustrations will suffice to prove that these acts, though they seem instantaneous, are not mathematically coëxistent.

Take the case of the equilibrist and rope-dancer, which affords direct evidence of the possibility of the mind exerting different successive acts in an interval of time so short as to produce the same sensible effect as if they had been exerted at one and the same moment. In this case, every movement of the eyes precedes a thought of the mind; every thought, a volition; every volition, a separate action of muscular force; but in such rapid succession, that they seem instantaneous, not mathematically coëxistent.

In a concert of music, a good ear can attend to different parts of the music separately, or can attend to them all at once, and feel the full effect of the harmony; but the mind is constantly varying its attention from one part of the music to the other, and its operations are so rapid as to give us no perception of an interval of time.

In viewing a picture, the mind, all at one and the same time, perceives every point in the outline of the object, provided the whole be depicted on the retina at one and the same instant; for perception, like consciousness, is an involuntary operation; but as no two points of the outline are in the same direction, every point by itself constitutes just as distinct an object of attention to the mind as if it were separated by an interval of empty space from all the rest. As it is impossible, therefore, for the mind to attend to more than one of those points at once, and as the perception of the figure of the object implies a knowledge of the relative situation of the different points with respect to each other, we conclude that the perception of the figure by the eye is the result of a number of different acts of attention. These acts of attention are performed with such rapidity, that the effect with respect to us is the same as if the perception were instantaneous.

From these illustrations it will be evident that there is as much feasibility in the supposition of a plurality, as there is of the duality of mind.

There are mental phenomena otherwise inexplicable, except by a reference to the rapid succession of our thoughts; and it is no doubt the neglect of this highly interesting subject to which we may trace the error of Dr. Wigan's notions of a dual mind. The force of habit, as illustrative of this subject, is particularly observable in relation to every mechanico-mental act. Take the case of an expert performer on the pianoforte, who can either play so slowly as to be able to attend to every separate act of his will in the various movements of his fingers, and even to recollect those volitions subsequently, or who can so far accelerate the rate of his execution as to be unable to recollect these acts.

It is evident that these operations are carried on precisely in the same manner, and differ only in the degree of rapidity, proving that when this rapidity exceeds a certain rate, the acts of the will are too momentary to leave any impression on the memory. And this remark is supported by the analogy of many other facts in our constitution. Thus, an expert accountant can sum up, almost at a single glance of his eye, a long column of figures, including farthings, pence, shillings, and pounds, at one and the same time; he can tell the sum with unerring certainty, while, at the same time, he is unable to recollect any one of the figures of which the sum is composed. No one doubts that each of these figures has passed through his mind, or supposes that when the rapidity of the process becomes so great that he is unable to recollect the various steps of it, he obtains the result by a sort of inspiration.

It has been found, by actual experiment, that it is possible to pronounce about two thousand letters in a minute; and though the inconceivable rapidity with which our intellectual operations proceed render it impossible to discriminate the volitions of our mind, the articulation of every letter in reading aloud must be preceded by a separate volition. Here, then, we have evidence that the mind is so formed as to be able to carry on certain intellectual processes, in intervals of time too short to be estimated by our faculties; yet did our powers of attention and memory approximate nearer perfection than they do, so as to give us the same advantage in examining rapid events which the microscope gives us for examining minute portions of extension, they would enlarge our views with respect to the intellectual world, no less than that instrument has with respect to the material.

From the evidence which Dr. Wigan has adduced, by reference to the example which we have analyzed, we feel bound to say, that it is quite irrational to add as a corollary—"consequently there were two minds occupied at the same time on separate subjects;" but to affirm the proof as conclusive is far beyond a mere expression of surprise. Conclusive!—I readily admit of the individuality, but not of the duality, of mind.

### THE ESSENCE OF DR. WIGAN'S PHILOSOPHY CONSISTS IN THE USE OF THE TERM "DIVARICATION OF MIND."

In The Lancet, as before referred to, Dr. Wigan says that "the degree of divarication varies necessarily in different brains; it is the least common in those who have cultivated the joint power of the two in concurrent action, and have not been subjected to long-continued mental distress."

Divarication of mind, in any light in which it may be viewed, can only be a modification of the mind. This will appear evident, if we refer to the phenomena of the "double refraction of light," which bears strict relation to the subject, and may, I think, be rightly considered as a prototype of the doctrine of mental divarication. It would, however, have reflected greater mental discernment on the author of this theory, had he not have ventured farther than such a phenomenon justifies him, as he must then have observed that divarication of mind—admitting the full force of the analogy referred to—does not prove the duality, but strikingly illustrates the monality, of mind. Double refraction of light cannot demonstrate the abstract positive existence of two distinct rays, but merely the simple divarication or partition into two of one ray. If Dr. Wigan conceives that divarication implies two distinct abstract positive existences, then I would assert that it is no longer divarication that constitutes the point in debate; we are engaged in a mere logomachy too common among philosophers of his school. To talk of the divarication of a substance whose qualities cannot be dissevered is a palpable contradiction; and to consider the two minds as distinct from the two brains, while, by the hypothesis, both are supposed to be material, is a mere fallacy.

To suppose that the mere divarication or modification of the mind will enable it, purely from this modification or divarication, to be capable of producing phenomena with which the unmodified or undivaricated mind has no relation, is to suppose that it receives an additional power or quality, which nothing except modification or divarication can communicate; while, at the same time, this modification or divarication can have no existence but what it derives from the mind so divaricated or modified. This view of the case implies that the mind can possess no power or faculty, which is a plain contradiction.

The notion of a dual-mind, as founded on, or characterized by, divarication, must suppose the mind to be formed of parts, which, however united or divaricated, must be still the same; for that which is distinguished or separated by nothing but divarication,—or, in the language of optics, by nothing but "double refraction,"—must leave the natures physically alike. If the possibility of divarication of mind be still maintained, and if the mind be supposed to be formed of parts, then it must be admitted to be material—to be an extended substance, which involves a mass of absurdities and contradictions. It besides follows, that there can be no distinction between the mind and brain, or between the minds and cerebra, except in modification, which is equally contradictory. The reasoning which Dr. Wigan associates with the term divarication, does not in any way accord with the term itself—a term that cannot be transposed into two opposite meanings. Every whole must be formed of those parts which are necessary to its existence: it is consequently absurd to suppose that each part of this divided substance possesses, in its undivided state, the abstract positive existence of all those qualities which are necessary to constitute the substance as a whole in its undivided state.

Pursuing the analogy of the "double refraction of light," we might denominate the divarication of the mind into two

minds,—admitting such to be the case,—as the ordinary and the extraordinary mind.

If the extraordinary mind results from the divarication of ordinary mind, and this irrespective of the causes which may be assigned to produce it, is it not evident that one of the two minds had no existence previously to the manifestation of that divarication from which it results? The existence of the ordinary mind being admitted, that of the extraordinary mind must necessarily be posterior in point of time to that from which it results by divarication.

Hence it must be admitted that divarication implies the preëxistence of the ordinary mind; the extraordinary mind is therefore supposed to be the result of a divarication which depends on the ordinary mind for its own existence. But in this view of the subject we behold not only the pre-existence of the ordinary mind, but the preëxistence of that divarication from which the extraordinary mind must be supposed to result.

We further argue that if the extraordinary mind result from divarication, this divarication must have taken place without the existence of any mind; for divarication of mind does not only suppose the existence of one mind, but positively implies the non-existence of mind. And such is clear, if we suppose the extraordinary mind to result from that which is of itself destitute of the qualities of mind; for we should then suppose that which is could be produced by that which is not—that nonentity is capable of originating a real being.

Now, if two minds result from divarication, the perpetuity of that divarication is necessary to the existence of those minds which can only result therefrom. To urge the contrary destroys the hypothesis; and to admit the hypothesis is to admit a notion as repugnant to every principle of philosophy as it is false in fact.

Divarication implies the existence of parts; it cannot therefore be applicable to mind, because a relation of parts removes the idea of the positive existence of divarication, and suspends its existence further than it depends upon that in which, or by which, it takes place.

What possesses no positive existence can produce no effects.

Again: if a mere relation, as divarication, can produce a mind, or minds, this relation must be its cause; but to suppose anything to be a cause which has no positive existence, is to suppose it to act without a being. And such is the case, in whatever light we may regard divarication. For instance: if it be supposed to result from the cerebral mass, then it must repose in such a substance for its existence. To admit, therefore, the existence of either one or two minds, as the result of divarication of the brain, is to admit, that that which is so divaricated is capable of producing effects with which it could not, in its abstracted or undivaricated state, have any connexion.

Any other view of the case implies that divarication must act as an agent, and possess qualities which the mere physical parts of the thing divaricated cannot be proved to possess.

Thus the notion of duality, or divarication, of mind, viewed in what relation soever we may, terminates either in an absurdity or a contradiction.

Braunston, Northamptonshire, March, 1847.

## CASE OF PLEURISY & DOUBLE PNEUMONIA.

RECOVERY.—REMARKS.

By E. B. BOWMAN, M.D., Dalston.

Mr. P——, the subject of the case,* is a builder, aged fifty-two, of sanguine temperament, and rather robust in appearance. He had been under the care of an eminent physician, who, it was stated, had treated him for asthma. The aggravation of his ailments was attributed to recent exposure to the night-air, and the increased severity of the weather. On Friday night, Feb. 12th, he was brought home from a friend's house in a cab, very ill, and I saw him about eleven o'clock P.M. He complained of severe pain in the left side, between the sixth and seventh ribs, and shortness of breath. The pulse was frequent, full, firm, and sharp; tongue white; skin hot; cheeks flushed, &c.; in short, the usual symptoms of synocha, with acute lancinating pain in the side, aggravated by respiration, but not affected by motion or pressure. A physical examination detected dulness on percussion, and diffused mucous râles over the whole anterior part of the chest. Finding this to be a well-marked case of pleurisy, I bled him to the amount of thirty ounces, in the sitting posture, continuing until the pain and difficulty of breathing were relieved. He was then ordered to take half a grain of the potassio-tartrate of antimony, with one drachm of sulphate of magnesia, dissolved in water, every third hour.

13th.—The pleuritic stitch still continued, but less severe; pulse, full and frequent; dulness on percussion extended; and ægophony heard at the middle and posterior part of the chest, on the affected side. Ordered two grains of antimony in solution, and two grains of calomel, with half a grain of opium, every third hour. Twelve leeches to be applied over the seat of pain.—Evening: Leeches bled freely, and pain relieved; bowels not having been opened, a saline aperient was prescribed. To continue the antimony, and calomel and opium.

14th.—Bowels freely operated on by the draught; pain still exists on full inspiration; urine scanty, and high-coloured; pulse, full, firm, and frequent; increasing dulness on percussion. To reapply twelve leeches, and continue the antimonial mixture, and pills, with calomel and opium.—At four P.M., Mr. P—— was much worse; the breathing had become extremely hurried and anxious; the pulse was full, hard, and bounding; tongue furred; obtuse pain throughout the chest, with pungent heat of its surface, and increase of pain in the side; severe headach also attended, and pains of limbs. This aggravation of the symptoms had been preceded by rigors. On auscultation, the respiration was harsh and bronchial, with well-marked crepitant rhonchus of the lower and posterior part of the left lung. Venesection was again resorted to, and thirty ounces of blood abstracted, in the horizontal posture. In both bleedings the blood was exceedingly rich in fibrine, being strongly buffed and cupped. Continue the mixture and pills.

15th.—No pain, but occasionally a little catch in the breathing, at the side; pulse, frequent, soft, and compressible; crepitation extended, and heard over the posterior surface of both sides of the chest, denoting inflammation of both lungs; sputa very viscid and tenacious, with the pathognomonic rusty tinge. Apply a large blister to the side, and continue the mixture and pills.—Evening: Bowels confined, and hiccough very troublesome. To take an aperient, and a teaspoonful of ether, in water, for the relief of the hiccough.

16th.—The patient was much worse; the respiration was hurried, and intensely anxious; pulse small, quick, and irregular; expectoration suppressed; constant hiccough; subsultus tendinum; slight delirium, and increase of crepitation. To have aromatic spirit of ammonia, and sulphuric ether, each two drachms; syrup of ginger, half an ounce; camphor mixture, four ounces. Two tablespoonfuls to be taken every second hour, and three grains of calomel, and half a grain of opium, in a pill, every three hours.

In the course of the day, profuse diaphoresis occurred, and, in the evening, Dr. Cobb was called in, who prescribed, (the symptoms being as in the morning:)—Nitrate of potash, five grains; sesquicarbonate of ammonia, two grains; oxymel of squills, half a drachm; camphor mixture, five drachms; followed by one grain of calomel, and three of mercury and chalk, in a pill, one every two hours.

Three hours afterwards, the dyspnœa was more urgent; cough more troublesome; incessant hiccough, and intense anxiety. Cancelling the last prescriptions, the ether and ammonia mixture was again resorted to, and calomel and opium; at the same time, strong mercurial ointment was directed to be rubbed well into the lateral and posterior parts of the right side of chest.

17th.—Breathing much relieved; pulse full, regular, and compressible; bowels open; hiccough less troublesome; expectoration copious and viscid, but deeper in colour, presenting an appearance likened by the French to decoction of prunes; profuse diaphoresis. To take half a grain of antimony in solution, and continue the pills every third hour; also continue inunction.

18th.—All symptoms improving; diaphoresis continued and profuse; continue the same remedies.—Evening: Continued diaphoresis; urine depositing a copious lateritious sediment; the bowels not having been moved, an aperient draught was ordered. Mouth somewhat tender; omit calomel and opium; continue antimony, and take five grains of compound ipecacuanha powder every third hour.

19th.—Expectoration copious and purulent; continued diaphoresis; diarrhœa. Ipecacuanha wine, three drachms; oxymel of squills, half an ounce; compound tincture of camphor, three drachms; water, six ounces. Two tablespoonfuls every three hours.—Evening: Diaphoresis and diarrhœa continue; tenesmus very distressing, but relieved by a starch enema, with half a drachm of tincture of opium. Continue the antimony and compound ipecacuanha powder.

From this time the symptoms continued improving, the respiration being quite free, and auscultation only indicating

* Read before the Westminster Medical Society.

a little *râle de retour*. The case was conducted to a successful termination, and Mr. P—— is now perfectly well.

During the whole course of the disease, any alternation of temperature was sedulously avoided, the thermometer standing usually at 64°. As is usual, the decubitus of the patient was on the back, and he was obliged to be well propped up in bed, to relieve the dyspnœa and hiccough, which were instantly aggravated by the patient's lying low. At the onset of the disease, the expectoration was simply mucous, but as the crepitant rhonchus became more and more distinct, the sputa speedily acquired the characteristic appearances of increased tenacity, running together, and of a rusty tinge. On the fifth day from detecting the peripneumony, the expectoration became purulent, the crepitant rhonchus being no longer heard in some parts, but reappearing, as the sputa again acquired its former properties. No cavernous respiration could be detected. The disease at first attacked the lower lobes of both lungs, when the movements of the chest were obviously impeded; but, gradually, nearly the whole of their posterior surfaces became implicated, the left, however, to a greater extent than the right. The respiration was harsh and bronchial, acute and defined, and occasionally a sort of whistle occurred, as the ear was applied to the posterior part of the left side of the chest. In the anterior parts the respiration was puerile. Gradually, however, the natural breath sounds were restored.

*Remarks.*—Cases of double pneumonia are very rare, that is, both lungs are seldom affected together, and I believe, never in a like degree. It was this circumstance, and also the novelty of recovery taking place, that induced me to bring this case before the notice of the Society. Pneumonia lately has been rife; and as it is usually most prevalent during the months of February, March, and April, benefit will certainly accrue from discussing the subject at the present time. Cold exerts a greater power when acting locally or partially, and is thus the chief cause of pneumonic inflammation, pneumonia being twice as frequent among our soldiers in the West Indies, as at home; and more prevalent in Paris, Vienna, and other places on the Continent, than in this country, probably owing to their hotter summers and colder winters. To the same cause is attributable its greater frequency among men than women, the former being more generally exposed to alternations of temperature. In ninety-seven cases mentioned by Chomel, seventy-three men were attacked with pneumonia, and only twenty-four women. All ages seem subject to pneumonia, children not being exempt; but a peculiarity exists in them—viz., that the disease takes the form of lobular pneumonia. In this country, it is thought to be most frequent below the age of five, and above that of fifty. Lombard and Grisolle found a majority of cases between the ages of twenty and thirty. A table from Chomel gives the following results:—

| | | |
|---|---|---|
| From 20 to 30 ... ... ... ... | 28 | cases. |
| „ 30 to 40 ... ... ... ... | 9 | „ |
| „ 40 to 50 ... ... ... ... | 11 | „ |
| „ 50 to 60 ... ... ... ... | 8 | „ |

Of 125 cases collected by Garth, eighty-one occurred before forty, the remainder from forty to seventy, years of age. Briquet deems it most prevalent between seventeen and fifty. Above sixty the mortality is one-half of the cases that occur. The right lung is remarkably predisposed to pneumonia, more than the left, in support of which, such authorities as Briquet, Louis, Chomel, Andral, Bouillard, and Lombard, may be mentioned. Lombard thought that the cause of its greater liability to disease arose from its greater functional activity. Some affirm that it is on account of more muscular exertion on the right side; whilst others point chiefly to its relation to the liver preventing its expansion. Further, the lower lobes were more predisposed to pneumonia than the upper, and the amount had been estimated as, in the upper, eighteen, in the lower, forty-seven. Andral found the lower lobes affected in forty-seven cases, the upper in thirty, and both in eleven. Briquet, too, had stated the fact, that persons in whom pneumonia occurred in the upper lobes were of a scrofulous diathesis. This, in my opinion, would considerably modify the treatment. With respect to the treatment of pneumonia, I decidedly advocate, as superior to all other remedies, early, and if necessary, repeated bloodletting, holding as a truism Dr. Bateman's observation on inflammation—"that any constitution that is capable of taking on such disease is capable of tolerating the remedies necessary." There certainly is no disease in which the benefit of general bloodletting could more effectually be seen; and this could only be produced by the bleeding being large, and the pulse rendered soft thereby—an effect to be obtained by avoiding syncope, and bleeding in the horizontal posture. If such treatment is commenced on the second or third day, it will be in few instances that the patient will succumb to the disease; but if delayed until the fifty day, the chance of recovery will be very slight. In illustration of this, Dr. Alison had a case of a woman, who was largely bled from the fifth to the twelfth day, but died. At the same time, a full-blooded young man was bled, on the first day, to seventy ounces, on the second, to forty ounces, at two bleedings, and on the third day, to thirty ounces; in fact, he was bled daily, until the fifth day, when the inflammation subsided, and he gradually recovered. Indeed, the author remarks, it is very important to know how far this remedy has been carried with success, in order that we may, in well-marked inflammatory cases, be led to a prudent management of them, when the first bleeding has failed, or but slightly relieved the symptoms. Many cases of pneumonia have been recorded, of intense severity, in which seventy or eighty ounces of blood have been taken in twelve hours; others, in which an hundred ounces have been taken in twenty-four, and even in twelve hours, successfully: and in some of these, even further bloodletting was necessary before the disease was effectually controlled. The late Dr. Gregory had a case, where one hundred and twenty-seven ounces were taken in twenty-seven hours. Mr. Cline treated a case of concussion, in St. Thomas's Hospital, where three hundred and twenty ounces of blood were taken in three weeks, successfully; and I have heard Professor Alison mention a case, in which four hundred ounces of blood were taken, in the course of three months, from a patient, who ultimately recovered perfectly. Such cases, however, do not hold as models for imitation, but I think a knowledge of them very important. Brouilland employed general bloodletting alone, the amount of mortality being one in ten, and the recoveries taking place from the fifth to the seventh day, forming a remarkable contrast with the experiments of Louis, who employed venesection only to the amount of eight or ten ounces, and once in two or three days, but the mortality in his cases was very great. Local bloodletting is also very serviceable; I have seen cases attended with typhoid fever successfully treated by it, alternating it, however, with wine and stimulants.

But by far the most important auxiliary to bloodletting is the administration of the potassio-tartrate of antimony, with the view of producing a sedative or contra-stimulant effect. This method of employing antimony was first proposed by Dr. Marryatt, of Bristol, in 1790; but it acquired no celebrity until introduced into practice by Rasori and the Italian school. Its action is to lower the pulse, and arrest local inflammation, without inducing any of its familiar physiological effects; indeed, tartar emetic has alone sufficed for the cure of pneumonia; but the amount of mortality under such treatment has been greater, and Grisolle furnishes it as one in seven. Two very severe cases of pleuro-pneumonia, published in the *Annales de Therapeutiques* for January last, have been treated by M. Guerard with tartar emetic alone. No bleeding was had recourse to in either; but eighteen grains of the potassio-tartrate of antimony were taken by each daily. Both cases were women; the one fifty-four years old, the other sixty-eight. The superior lobe of the right lung was affected in each, and the disease had existed several days—advancing to the second stage—when they were admitted into hospital. The treatment lasted in both about ten days, and then they recovered. A combination, however, of the detailed measures, would doubtless be most available.

Calomel and opium are the next approved remedies, although I am doubtful whether the specific action of mercury can resolve or prevent the hepatization of the lungs. Reasoning from analogy, it could not be too much to anticipate that here, as in other parts of the body, mercury would control or absorb inflammatory effusions, especially of lymph; but recovery has taken place when no specific effect of mercury has occurred. I attribute much of the benefit derived from the exhibition of calomel and opium to the action of the opium alone, more especially when the most urgent symptoms have been first relieved by full bloodletting. At one period of the case narrated, the opium was suspended, and marked aggravation of all the symptoms occurred. The pulse became more frequent and irregular; there was extreme restlessness, and the cough became more troublesome; dyspnœa more urgent; slight delirium; incessant hiccough; and subsultus tendinum. On re-administering the opium, amelioration of all the symptoms took place—symptoms, doubtless, dependent on the "reaction after loss of blood." The cough and dyspnœa were remarkably relieved; and these, probably, were dependent on spasm, which the opium allayed. Calomel

is serviceable in preventing some of the deleterious effects of opium, and no better combination could be obtained to induce and sustain a diaphoretic effect. Besides, opium is the most approved remedy when troublesome vomiting and purging has arisen from the large contra-stimulant doses of antimony; and it is not too much to suppose that it may act beneficially by preventing these effects, and enable us more frequently to employ the antimony, the power of which cannot be doubted. Mr. P—— took twelve grains of calomel, and it was five days before the mouth was even slightly affected. This I attribute to tartar emetic acting as an antidote to mercurial action, and preventing, in this case, the specific effect of mercury being earlier induced.

March, 1847.

## Reviews.

*Notes on the Epidemic Cholera.* By R. Hartley Kennedy, M.D., &c. Second Edition, revised. London: Smith, Elder, and Co., Cornhill, 1846. pp. 279.

The recent outbreak of cholera in the East, clad in all the characteristics of its pristine malignity, has again called public and professional attention to the subject. Dr. Kennedy therefore "feels himself in a manner called upon, as the performance of a duty, and in the hope of usefulness, to solicit once more the attention of the public to his views on this frightful disease." This is the good and sufficient reason why a reprint of the present work is submitted to our notice. In commencing a few brief observations upon it, we feel bound to observe, that the results of a career extending over more than twenty years, "both as a practising and superintending medical officer," ought fairly to demand a careful investigation of the facts recorded, and the opinions formed.

There are some minds, possessing, to a marked degree, the power of observing and narrating circumstances, but apparently totally disqualified for their subsequent application to general results. Some favourite theory, cherished by its parent like a crippled child, in direct proportion to its weakness, and the slight tenure it holds on existence, is generally the cause of this mental incapacity. The very circumstances which should call for thoughtful scepticism, or at least for prudent hesitation, are warmly welcomed by such minds as the sure guardians and future supporters of their tottering offspring. Nature may have originally endowed these theorists with more than an ordinary share of the perceptive faculties, but, alas! of what avail is the most brilliant sunshine to those whose mental eye is obscured, "seeing, they do not perceive." What in a healthy mind would pass into the channels of doubt and anxious thought, before it could reach the sea of conclusion, in theirs rushes at once into the gutter of theory, and is there so thoroughly incorporated with the original dark current, the ancient and honoured tenant of the place, that all traces of purity or utility are soon lost.

To a certain extent, we fear we must charge this besetting sin on our author. Although discursive and parenthetical, he describes with candour, learning, and even occasional eloquence, but all his observations unfortunately end in a futile attempt to saddle the medical world with another theory on the nature of cholera.

Dr. Kennedy's views may be stated to consist in regarding this disease as one primarily affecting the nervous system. To use his own words,—

"I really cannot correctly understand how either the symptoms can be philosophically explained, or the diametrically opposite treatments which have been boldly recommended as successful, can be reconciled to any known theory, or any analogous operations of Nature, unless we consider some nervous shock, similar to concussion of the brain, to be what Lucretius calls the 'Lethi fabricator.'"—p. 37.

To support this opinion, our author adduces the history of the symptoms of the disease, furnished by the Report of the medical board of Calcutta,—

"The powers of voluntary motion were in every instance impaired, and the mind obscured. The patient staggered like a drunken man, or fell like a helpless child. Headack over one or both eyes sometimes, but rarely, occurred. In a few cases the hands were tremulous; in others, the patient declared himself free from pain and uneasiness, when want of pulse, cold skin, and anxiety of features, portended speedy death."—p. 38.

The Report of the medical board of the Bombay presidency is favourable to the opinions of our author, so far as it recognises, in common with him, "a *something* which presses heavily and suddenly upon the vital functions." From him, however, it differs in wisely doubting what portion of the human economy first receives the blow which prostrates the whole system. "It resembles the effect of a poison taken into the stomach, or applied to the blood; but whether it acts more immediately upon the circulating system or the nervous, we cannot determine." Such modest doubt forms no part of Dr. Kennedy's plan.

"This alternative of theories, this halting between two opinions, so long as it were a mere matter of speculation, and the patient did not suffer, would be of little consequence; but it is now high time for the profession to come to some decision, *if possible*, &c."—p. 41.

The last two words, which we have marked with italics, are probably the most rational part of the above expression of determined dogmatism.

Post-mortem appearances, according to Dr. Kennedy, invariably exhibit cerebral congestion. In not one case examined by him did he find it absent, (p. 44.) It is right to state, on the other hand, that in cases where he could distinctly perceive it, other medical men saw no more than could be accounted for by the large doses of opium which had been given to the patients. In the Calcutta Report, too, we find the following statement: "The brain was generally of a natural appearance."

We feel that these views require no detailed confutation. We must leave our readers to discover their obvious imperfections. In all serious diseases, the nervous system almost invariably gives the first indication of the danger. Take, for example, fever. Do we not find, in the very earliest stage, mental prostration, lesion of the powers of voluntary motion, and general marks of an abnormal condition of the sensorium and nervous periphery. The same may apply, although the symptoms are not so intensely marked, to inflammation, or disease of any important organ.

Dr. Kennedy's treatment is of course a consistent sequela of his opinions. He bleeds, to relieve the cerebral congestion, and gives castor oil, or sulphate of magnesia, to assist the salutary diarrhœa, which he believes to be a curative effort of nature. We regret he has not given us the numerical results of his mode of treatment. Strong general opinions on its propriety and correctness cannot supply their place in a matter of this importance. Some of the epidemics of the disease which Dr. Kennedy witnessed were of an interesting and anomalous character. We may, without fear of tediousness, transcribe one of these painful episodes in the practice of an Indian physician. The period at which the narrative commences was during a slight epidemic of the disease in Surat.

"The second battalion, third regiment of Native Infantry, was at that time in the garrison of Surat; and during the short prevalence of the epidemic in October, eight cases of cholera had occurred in it. The symptoms were in no instance severe, and all recovered; but at the end of the month, and early in November, there appeared in the corps no traces of the disease; at which period, being relieved by another battalion, it marched from Surat to Baroda, the place of rendezvous, where a field brigade was then forming for operations on the north-western frontier. I had in the meanwhile been promoted from my appointment at Surat to the medical duties of the Baroda residency, and joined my new station on the 30th of November, which was a few days subsequent to the arrival of the second battalion, third regiment, at the same station. On my route from Surat to Baroda, a distance of ninety miles, I neither saw nor heard of a case of cholera, nor do I believe it was anywhere raging as an epidemic, at that time,

in the province. Judge, then, my astonishment at finding the battalion, which I had seen a fortnight before march from Surat, leaving behind the sick and invalids, in all the pride and strength of perfect military efficiency, now almost disabled under the influence of the disease in its most malignant form, the casualties being from eight to ten daily, and one day fifteen, out of a total below a thousand.

"In the meanwhile, the weather, as is usual in the first weeks in December, was delightfully pleasant, I would say, remarkably so, being rather cooler than generally prevails until January. The rest of the cantonment enjoyed perfect health, though breathing the same atmosphere, drinking water from the same wells, and procuring provisions from the same bazaars, whilst the most unrestrained intercourse existed between the infected battalion and the other two healthy battalions of the station. The city of Baroda and its suburbs were reported to be unaffected, nor have I ever learned that the disease then existed in any of the adjacent villages; and yet this solitary, insulated body of hardy soldiery, in all the vigour of manhood and exciting preparation for field service, encamped upon a dry and open spot of as healthy ground as any in the neighbourhood, within the lines of a populous cantonment, and only a mile distant from one of the largest cities in India, seemed devoted alone to the pestilence that walked in darkness, and the destruction that wasted at noon-day, without any assignable cause, but that the seeds of the disease might have been sown in their constitution, during the month of October, in Surat. Finally, the pestilence ceased as inexplicably as it had commenced, after having, in less than three weeks, nearly decimated the battalion."—pp. 24—26.

In what way can we account for this? Is the disease a "tertium quid," the result of two concurrent agencies? But even supposing this to be the case, the present example is utterly at variance with the usual laws regulating contagious or epidemic disease. Individuals are known to be more prone to these influences after severe fatigue, such as a march in the climate of India would be likely to occasion. In this case, however, the order of sequences is reversed. Physical fatigue becomes the exciting cause, and the predisposition can only be discovered in the latent seeds of the disease, sown during their residence at Surat.

In concluding our very brief observations on Dr. Kennedy's work, we may observe that it is evidently the result of no small amount of personal observation. Much as we condemn his speculative opinions, we feel pleasure in adding, that it contains abundant proofs that the author not only *is* a well-read physician, but that he *has been* an energetic and talented medical officer.

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*Observations on the History and Treatment of Dysentery and its Combinations, with an Examination of their Claims to a Contagious Character, and an Inquiry into the Source of the Contagion in its Analogous Diseases—Angina, Erysipelas, Hospital Gangrene, and Puerperal Fever.* By WILLIAM HARTY, M.D. Second edition. Dublin, Hodges and Smith; London, Churchill, 1847. pp. 303.

THIS work, the first edition of which was published in 1805, has long since taken its place among the standard literature of its subject. It developed views which, if not entirely new, were before little known and indefinitely announced. The opinions advanced are—

"1st. That the genuine and simple dysentery is unattended by idiopathic fever, and is never of itself contagious.

"2nd. That every other form of the disease, when epidemic, is a combination of the simple dysentery, either with intermittent, remittent, or continued fever; and

"3rd. That the combination with continued fever alone is contagious."—p. 5.

When dealing with simple dysentery—that form of the disease to which the first of the above positions refers—Dr. Harty says,—

"Before I proceed further, it will be requisite to point out the unica species to which alone the name of dysentery ought to be assigned, and which I have stated to be unattended either by idiopathic fever or contagion. Cullen's definition, on the contrary, commences by affirming the disease to be attended with pyrexia, and that pyrexia to be contagious. Now to such a statement as a part of the definition I must object *in toto*, the disease being frequently unattended by pyrexia, and in many cases where it is so attended, that pyrexia not being contagious. The words conveying such an inference should therefore be excluded from the definition, which, in other respects, with, perhaps, one exception, will characterize a disease known by severe gripings of a peculiar sensation, and by the great frequency of the stools, which, when the disease is fully formed, never exhibit the natural contents of the intestines, but consist in a scanty discharge of mucus and serum, generally mixed with blood, and are always accompanied by a most distressing tenesmus. 'Cunctas dejectiones,' says Hoffman, 'quæ sunt numerosissimæ et ante cedunt et comitantur et sequuntur crudelissema tormenta, non in una loco fixa, sed per totum intestinorum canalem vago itinire progredientia et sub quavis sede sentitur molestissimus omnium quasi viscerum descensus.'

"These symptoms sufficiently distinguish the disease from diarrhœa and cholera, with both of which it has not unfrequently been confounded, and on occasions, too, when their histories plainly indicate very distinct diseases.

"Sporadic cases generally answer the description given of simple dysentery, being usually devoid of fever or contagion; whereas the epidemic cases usually exhibit the symptoms of the simple disease, united with fever of some given type, sometimes contagious, sometimes not."—p. 16.

The interesting pathological question of the affinity between dysentery and rheumatism is fully entered into in the second chapter, which concludes with the author's view of the nature of the disease:—

"Spasmodic constriction, which Cullen ingeniously, though not originally, supports as the proximate cause of this disease, I consider as an effect of that cause, whatever it be; for if we suppose spasmodic constriction existing to any extent in the intestinal canal, will that alone explain the phenomena of dysentery? Why should we have stools at all, or whence arises that inflammatory state which so peculiarly affects the coat of the large intestines?

"Besides, on those occasions when we know spasm to exist, do we ever find symptoms resembling those of dysentery? We must therefore look for some cause more adequate to the production of the several phenomena of the disease. That cause I would refer to an inflammatory action in the innumerable exhalant vessels on the mucous coat of the intestines, similar to that which takes place in serous membranes when affected by rheumatism. Under this state of vessels, the quantity of their secreted fluid is considerably increased, and its quality perhaps somewhat affected; the intestines by this stimulus are excited to spasmodic constrictions, and from both these circumstances united, all the other symptoms may be deduced: hence we have frequent stools, with coëxisting constipation: hence we have tormina, with tenesmus.

"I have the more readily embraced this opinion, from the insufficiency of other modes of explanation, and from the facility with which this accounts for the various phenomena of the disease; indeed, the symptoms which it presents, the treatment it admits, and, in particular, its close affinity to, and frequent alternation with, rheumatism, all countenance the doctrine. It explains why the dysenteric pains, which, in the language of Hoffman, 'per totum intestinorum canalem vago itinire progrediuntur,' are, like rheumatic, constantly shifting their ground; and why the dysenteric action, when disturbed in the intestinal canal by opiates and astringents, reappears in the joints under the form of rheumatism. It also explains why, in severe cases of the disease, whether arising from neglect or mismanagement, active inflammation is so much to be apprehended, and why, on the contrary, a chronic state so often supervenes."—p. 37.

The long and much-disputed point—the contagious nature of dysentery—meets with a complete investigation at the hands of Dr. Harty, who is, as we have already seen, what might be denominated a modified contagionist. Witness, again, a second expression of his third proposition:—"That the combination with typhus is alone contagious, that property originating, not in any virus specific to dysentery, but in the contagion of fever."

The numerous references given from authors of all countries give abundant evidence that the most laborious research has not been spared in this section of the subject, though we think that their opinions, with great advantage to the public, might have been expressed in a more condensed manner.

On the treatment of the disease Dr. Harty is not less pro-

fuse in authorities; but let us see what is recommended by the author himself:—

"In simple dysentery," he says, "of itself, in these climates, it seldom requires venesection; though in subjects of strong inflammatory diathesis that remedy may be employed with safety and advantage, and repeated, if called for by circumstances already detailed.

"Emetics are not often demanded on account of any great sickness at stomach, or for the purpose of unloading that viscous thing; they may, however, be administered, in conjunction with other remedies, either with a view of clearing the intestines, or of promoting diaphoresis.

"Purgatives are more or less essential to a cure in every form of the disease, though in some more than in others, as fæcal accumulation is apt to occur repeatedly in particular forms. . . . . After the bowels have been effectually cleared, then is the time to raise and keep up a gentle diaphoresis, to prevent a return of the tormina and tenesmus, and, in conjunction with other means, put a period to the disease. There is no necessity for carrying this plan to any great length; but it is requisite to keep the skin moist for some time, and carefully avoid all impressions of cold. In cases of severe tenesmus, leeches as well as fomentations to the anus have been found highly beneficial, as well as opiate suppositories. I have found equal parts of olive oil and laudanum, applied by means of lint to the anus, afford great relief."

In the treatment of the typhoid form of dysentery, after impressing the great importance of pure air and cleanliness, he rejects venesection, recommends caution in the administration of emetics and purgatives, and considers sudorifics not very admissible. "Blisters," he says, "are deserving of every commendation in this as well as in the other forms of the disease."

"But the influence which the presence of typhus exerts over dysentery is in no respect so strongly manifested as in the necessity it produces for the exhibition of cordials and tonics; and in this necessity it differs from all other forms of the disease."—p. 258.

The book concludes with an interesting chapter of diseases analogous to dysentery in the source of their contagion, from which we regret that our space will not allow us to quote, but with pleasure state our conviction of the great value of this work, and our belief that whoever possesses it has at his command all that is known on the subject.

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*Inaugural Dissertation on Yellow Fever, and on the Treatment of that Disease by Saline Medicines.* By G. F. Bone, M.D., Assistant-surgeon to the Forces. With an Appendix, *On the Principles to be observed in providing Barracks and Hospitals for Troops in the West Indies.* By H. Bone, M.D., Inspector-General of Army Hospitals &c. Edinburgh: A. and C. Black. London: Longman and Co. 1846. pp. 85.

Epidemic disease, viewed in relation to our political condition, has hardly attracted a passing attention from legislators. Yet there is no subject of more stupendous importance. No circumstance has so checked the progress of English rule as the maladies peculiar to tropical climates. And it is no exaggeration to affirm, that any means by which their intense mortality could be diminished would more effectually secure our domination than the most brilliant victories we have ever achieved. Not only does the expense involved in conveying troops to fill the vacancies in the decimated legions fall heavily on the parent country, but another result, more lamentable than any pecuniary loss, inevitably follows. A prestige of insalubrity hangs like a cloud over our colonial possessions. The soldier and emigrant leave home with a melancholy foreboding at the probable speedy termination of their career. Hence, the colonies unhappily become the resort of the desperate and reckless. The worst features of English society are there perpetuated with few of its excellencies. This affects the constitution of our army to an immense extent. The possibility of being transported to some unhealthy station deters the man who properly estimates the value of his life from so risking it. Hence, in some degree, the low moral standard of the British army; and hence the alleged necessity for that peculiar military discipline, the favourite feature of which is brutal corporal punishment. In spite, therefore, of Anglo-Saxon energy and determination, our rule can never be assured, either in the east or west, till such measures be adopted as may afford a reasonable chance for the preservation of individual life. The present pamphlet bears very appositely on this subject. It consists of an "inaugural thesis," by Dr. G. F. Bone, on the causes, nature, and treatment of the disease; and an Appendix, containing some excellent remarks, by the author's father, "On the principles to be observed in providing barracks and hospitals for troops in the West Indies."

We pass over our author's opinions on the nature and treatment of the disease. In the former particular, he adduces little that is deserving of serious attention; and in the latter, the profession have long been in possession of facts and opinions on the efficacy of saline remedies. We proceed to the most valuable portion of his inquiry—namely, the real cause or causes of the mortality attending this disease in our West Indian colonies. Dr. Bone thus sums up the predisponents to the yellow fever:—

"The predisposing causes are—a florid complexion, large diseased viscera of the abdomen, a fat, bloated, or drunken habit, low spirits, dread of the West Indies and of yellow fever, great fatigue, broken constitution, belief in the contagion of yellow fever, late arrival in the West Indies."—p. 11.

The exciting causes are, according to our author, much under our control:—

"The places where the causes principally prevail are the vicinity of drains, the leeward of foul marshes, the banks and channels of dry rivers," (i. e., rivers of which the channels are dry at certain periods,) "the leeward openings of gullies, and crowded and ill-ventilated rooms, and ships with foul holds."

Above all other causes,

"Crowding in barracks and hospitals has been the principal cause of the mortality of the troops in the West Indies, especially when aided by the suffocator window—i. e., a window of boards, hinged at the top, and opening outwards. Climate, rum, bleeding, and mercury, each have killed their thousands in the West Indies, but crowding and the suffocators their tens of thousands. Is it astonishing the soldier should die when allowed only twenty-two inches of wall for his hammock or bed, in a room hermetically sealed by the shut suffocator, or with the suffocator open, and a current of air blowing upon his heated body? The astonishment is that he could live."—p. 12.

Exposure of the body, "especially of the back and sides," when heated, to strong currents of wind, is a frequent cause of attack.

Dr. Bone strongly opposes the opinions of the contagionists, and instances some facts of a very conclusive character against them, (pp. 20, 21.) The following remarks deserve the attention, not only of our professional brethren, but of government authorities:—

"Very few medical men in the West Indies believe now that yellow fever is propagated by persons affected with the disease, or by emanations from them, and now the sick are not abandoned to ignorant Africans. The terror and long faces of the contagionists have been succeeded by the pleasant look recommended by Celsus; and the terrifying phraseology, 'suspicious looking cases,' 'malignant disease,' &c., and the use of oil-skin gloves and of oil-skin gowns, and the burning of bedding and clothes, and the tracing of yellow fever from person to person, and all the quarantine plagues, are now regarded in the West Indies as superstitions of other times.

"But if yellow fever be not contagious, nor imported into the West Indies, in what way can it be generated in the West Indies? Easily, and by the following receipt:—

"Take of soldiers lately arrived in the West Indies, any number, place them in barracks, in a low, wet situation, or in the mouth of a gully, or on the bank of a dry river, or on the summit of a mountain, and to leeward of a swamp or of uncleared ground, and where there is no water, or only bad water; give them each only twenty-two inches of wall in their barrack-room, let their barracks be built of boards, or of lath and plaster, and have neither galleries nor jalousied windows, but close window-shutters, and a hole or cellar under

the flooring, for containing mud or stagnant water, and holes in the roof, for the admission of rain, and the windows only eighteen inches from the floor, that they may be obliged to sleep in the draught of air; and let them have drill every morning, on wet ground, and when fasting, guard mounting, and all kinds of fatigue, not in the morning and evening, but during the hottest time of the day; when on sentry, no shed to keep off the direct rays of the sun; bad bread, putrid meat, few vegetables, plenty of new rum, especially in the morning; discipline enforced by terror and punishment, not by mind and prevention; an hospital similar to the barrack-room, without offices, always crowded, plentifully supplied with rum, scantily with water, and so ill regulated, that the men dread to enter it; a firm belief in the doctrine of contagion, and a horror of approaching any person affected with yellow fever. Let these directions be attended to in Trinidad, or even in Barbados; and, especially when the air is stagnant, or charged with noxious vapours, subsequent to long drought, the soldiers will soon die, some of them yellow, some of them with black vomit, and those first, in the rooms where these directions have been most carefully observed."—pp. 24, 25.

We trust that this receipt is never *compounded* at the present day. It is melancholy to contemplate a loss of life so dishonourable to us as a nation.

As before observed, the Appendix, by our author's father, contains many excellent suggestions, some of which we are happy to learn have been adopted by government.

In concluding, we regret to be obliged to express our disapprobation at the rugged and almost uncouth style in which this thesis is written. It much detracts from the pleasure we should have otherwise experienced in examining the facts here presented to our notice.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March 9.—J. M. Arnott, Esq., F.R.S., President.

On taking the chair, the President returned thanks to the Society for the honour of his election—an honour which was much enhanced by a reference to the many illustrious men who had preceded him. He made a brief statement regarding the very prosperous condition of the Society, of the value of its *Transactions*, its library, and meetings; and concluded by expressing his determination of encouraging conversation at the meetings, under all circumstances, and at all times. (Cheers.) Votes of thanks were then carried to the late President, Dr. Chambers, and the retiring secretary, Mr. Curling.

#### On Cynanche Laryngæa, or Acute Œdematous Inflammation of the Larynx. By George Budd, M.D., F.R.S.

The chief object of the author, in this paper, is to show that the disease known to practitioners under the above title is really erysipelas, commencing in the fauces, or in their neighbourhood; and that it has been generally supposed to be confined to the larynx, and has been termed laryngitis, in consequence of its often proving fatal before the erysipelas has had time to spread far from this part.

In support of this view, he relates five fatal cases of this disease that have recently occurred in London: one in his own practice in King's College Hospital; three in the Dreadnought, the particulars of which were given him by Mr. Hudson; and one in Charing-cross Hospital, under the care of Mr. Avery, the particulars of which have been published in the medical journals.

These cases, the author observes, were clearly examples of the same disease; but they did not all begin exactly in the same manner. In three, the inflammation commenced in the fauces; in one, it commenced in the parotid gland; and in one, the first appearance of it was an erysipelatous blush at the angle of the lower jaw.

In all the cases, the inflammation soon spread to the glottis, and produced there the same effects—namely, redness and great thickening of the epiglottis, and of the lips of the glottis, with effusion of sero-purulent fluid in the submucous cellular tissue—to such a degree as, in three of the cases, to produce almost sudden closure of the glottis, and consequent suffocation.

In three of the cases in which death occurred within a few hours after the inflammation of the glottis came on, and within twenty-four or thirty-six hours from the commencement of the malady, the inflammation had not time to spread far, and the air-tubes and lungs, and other organs, were sound.

In the other cases, which were more protracted, the inflammation had spread down the air-tubes, and there were marks of inflammation in the chest, and an infiltration of a serous purulent fluid in the loose cellular tissue of the neck.

The occasional connexion of laryngitis with erysipelas was noticed by Dr. Cheyne in his article on laryngitis in the "Cyclopædia of Practical Medicine;" and again by Mr. Wood, in a paper published in the seventeenth volume of the *Medico-Chirurgical Transactions*. The first person to treat expressly of it was Mr. Ryland, of Birmingham, in his work "On Diseases of the Larynx."

The author cites the facts related by Mr. Ryland, and observes that they prove conclusively that inflammation of the larynx, causing great swelling of the lips of the glottis, and infiltration of fluid in the submucous cellular tissue, and thus leading to speedy suffocation, occasionally results from the poison of erysipelas.

He considers the following circumstances favour the opinion he has expressed as to the nature of the disease:—That the inflammation spreads in the same mode as in erysipelas of the skin, presenting the deep redness and swelling, and infiltration of a serous or sero-purulent fluid, which occur in that disease; that it is more fatal than ordinary laryngitis; and that it occurs most frequently amongst the inmates of hospitals in which erysipelas prevails, and amongst such of them as are peculiarly liable to erysipelas—viz., convalescents from continued fever or eruptive fevers, and those labouring under secondary syphilitic ulcers.

The author concludes with suggestions respecting the treatment of the disease, and some general remarks on erysipelas.

Mr. Morton had listened with much pleasure to the paper just read, and agreed with the author that the disease to which it referred was closely related to erysipelas. In cases which had occurred under his own care, the ill-success of operations performed had resulted from the infiltration of the cellular tissues surrounding the organs leading to the lungs. He could not agree with the author respecting the part at which an operation should be performed. He (Mr. Morton) preferred the low operation, or tracheotomy, as an opening in the trachea gave the patient a better chance of escaping from infiltration surrounding the glottis.

Dr. Copland had seen many cases similar to those recorded in the paper. They were usually the result of disease, consecutive on some of the exanthemata, either scarlet fever, small-pox, or measles, the inflammation first attacking the pharynx, and then extending to the larynx and trachea. Most cases of erysipelas of the mouth and fauces were fatal from this cause, the disease being associated with a depressed condition of the system, and often apparently epidemic. With respect to treatment, tracheotomy certainly afforded some hopes of relief; but in a case which he had seen, in which this operation had been resorted to, death took place, and the lungs were found in a state of such extreme congestion, as to be sufficient to account for the fatal result. This congestion was too great for the relief afforded by the operation to overcome. He had expected to hear from the author some allusion to the treatment recommended by Trosseau and others, of applying stimulants, as the nitrate of silver, to the glottis itself, the use of calomel, &c. With respect to local external applications, he believed many of these were useful; but he would not enter on that portion of the subject.

Mr. Holmes Coote said that last summer, two cases of the disease under discussion occurred in St. Bartholomew's Hospital. One patient was just recovering from a large ulcer in the leg, when he was seized with great difficulty of breathing; leeches were applied to the throat, and antimony and other powerful remedies freely employed, but the difficulty increased, and laryngotomy was resorted to. The patient, however, sank, and, after death, the cellular tissue around the glottis was found in a state of inflammation, pus was infiltrated beneath the tissues, some portions of which were mortified. In another case, a patient, having a slight wound of the hand, and diseased wrist-joint, was suddenly seized, when recovering, with the same symptoms as those observed in the former case. The larynx was opened early, but without benefit. The disease seemed not only a consecutive one, but it appeared that it might come on at any time, as the result of some atmospheric influence. It did not seem to be the result of any particular disease, as there was none in the hospital at that time. With respect to treatment, he believed that in the more formidable cases we had no means of arrest-

ing its progress. He had no faith in local applications to the epiglottis, and thought that the treatment recommended by Dr. Budd was the most likely to be successful.

Mr. Busk agreed in the main with the author of the paper as to the pathology of the disease. He related two cases which had occurred in the Seaman's Hospital, for the purpose of recommending a mode of treatment, which in these instances had been found quite successful. This treatment consisted in making a great number of minute punctures on the back of the tongue, the uvula, and pharynx, with a sharp-pointed bistoury. The operation was repeated every half-hour for two or three hours. The parts should be afterwards gargled with warm water: there was a great discharge of serum, and the relief was sudden and decided. He attributed the recovery in the two cases to which he had alluded, to this plan of treatment. It was only carrying out the principle recommended some years since by Sir R. Dobson, to be followed in cases of erysipelas affecting external parts. He, Mr. Busk, believed that this proceeding would often prevent the necessity of laryngotomy.

Dr. Cursham thought that some of the cases referred to by the author of the paper, as recorded by Dr. Tweedie, were different from those which had occurred under Dr. Budd's own observation, Dr. Tweedie's cases being *diptherite*.

Dr. Budd assured Dr. Cursham, that the cases recorded by Dr. Tweedie were precisely similar to those detailed in the paper before the Society. He had not gone at length into these cases, for fear of making his paper too long. They were cases following scarlet fever. Being lately by accident in the Museum of St. George's Hospital, he saw three preparations of œdematous inflammation of the larynx. One of these cases was the result of erysipelas spreading from the face to the organs of voice. In the second case, the disease came on after an attack of scarlet fever; and the third instance occurred to the porter of the hospital, who had not been affected with any other disease at the time. The patients were all inmates of the hospital. The disease only differed from erysipelas of the face, simply from the locality affected.

Dr. Theophilus Thompson believed that, though frequently allied to erysipelas, the disease under consideration sometimes occurred with all the characters of common sore throat, becoming dangerous, and even fatal, from the œdema which ensued, and blocked up the air-passage. He had not been able to catch, during the reading of the paper, any allusion to constitutional remedies in the treatment of this disease. The operation was doubtless often necessary to save life, still the after-treatment was of the most vital importance. In this after-treatment he placed a high confidence in the effect of mercury. He related a case which he attended with Mr. Robarts, (and which, having been related at the Medical Society, was recorded in this journal at the time,) in which laryngotomy was performed, apparently on a dying man. The operation relieved him, immediate death, in fact, being averted. He was, however, not out of danger until the mouth had been made slightly tender by mercury, which was immediately exhibited. He believed that the patient would have died, except for this constitutional treatment.

The President, to show the erysipelatous nature of the disease under discussion, related the following cases:—A gentleman was seized with a pain in the back of the throat, attended by difficulty of swallowing. Nothing could be seen. Leeches were applied, and blood afterwards taken from the arm. The blood was buffed and cupped. He appeared better, but a few hours after was suddenly seized with dyspnœa, and died. The only disease found, was inflammation of the glottis, one of the margins of which had sloughed. Four days after, his wife, who had attended him, was seized with an affection of the throat; the tonsils were enlarged. Erysipelas of the head and neck shortly afterwards developed itself. The daughter, who came from the country to see her mother, suffered from inflammation of the larynx and pharynx, and afterwards from erysipelas of the head and face. When there was infiltration of purulent matter, he believed that in these cases the operation was always fatal. We did not know what to do after the operation in these cases.

Mr. Bransby Cooper spoke at great length on the subject; the chief point in his address referring to the general unsuccessful result of operations in chronic cases of affections of the larynx and trachea.

Dr. Barber related some cases in which erysipelas or inflammation of the glands of the neck proved fatal, without the occurrence of dyspnœa or other symptoms mentioned by Dr. Budd, but in which, after death, effusion was found under the mucous membrane lining the larynx. He thought these cases were very common.

## WESTMINSTER MEDICAL SOCIETY.

March 6, 1847.—John Webster, M.D., F.R.S., President.

The President, on taking the chair, expressed his thanks to the Society for having elected him, and assured them, that as former chairman and one of the oldest members of the Westminster Medical Society, he should endeavour, in every way, to advance its objects, which had ever been, and continued to be, the diffusion of medical knowledge. He congratulated the Society on its present flourishing condition.

Dr. Lankester exhibited some calculi, consisting of the triple phosphate formation, and of about the size of a child's tooth, which had been voided by a woman, thirty-three years of age. The history of the case was but imperfectly known; but it appeared, that after the receipt of an injury to the back, she was affected with pain in that region, unattended by paralysis or any other marked symptom, and that shortly afterwards she began to pass the calculi in question, each calculus having for its nucleus a hair, similar to the common short hairs of the body. These hairs, Dr. Lankester considered, were formations of the altered mucous membrane of the bladder.

Mr. Hancock remarked that the formation of the triple phosphate calculus after injury was rare. He had seen many cases in which the phosphate-of-lime calculus had been the result of injury to the spine. He related a case of phosphate-of-lime calculi which had formed round portions of hairpins, which had been introduced into the bladder by the patient, a woman, under the care of Mr. Gregory Smith.

Dr. Bowman read a paper, which will be found in another column.

The President corroborated the remarks of Dr. Bowman respecting the great prevalence of pneumonia in warm climates, as it was well known to be frequent and fatal in British Guiana, Italy, and other warm climates.

Dr. Snow, in allusion to the prevalence of pneumonia, as evidenced by the tables of the registrar-general, considered that these documents could not be relied on, as bronchitis was frequently confounded with pneumonia, particularly in children. The deaths were registered as inflammation of the chest, whatever the portion of the lungs affected.

Mr. W. Harding believed that bronchitis and pneumonia generally existed together in children, and that therefore the tables of the registrar-general would accurately define the cause of death.

Dr. Bowman stated, in answer to a question, that the remark he had made in his paper, to the effect that the combination of tartar emetic with mercury usually retarded the development of the specific effect of the latter medicine, was the result of observation, and that it was more particularly the case with respect to pneumonia, in which disease so much tartar emetic was used.

Dr. Ayres questioned if the retardation depended on the cause alluded to; he was of opinion, on the contrary, that it resulted mainly from the influence of the inflammation on the system, and he was more convinced of the truth of this remark, from its being found that mercury was long, comparatively, in showing its specific effect in cases of peritonitis in which tartar emetic was not used. He had analyzed the blood of a patient before and after salivation. In the latter case, it contained much less fibrine than in the former. He could not, with the author, attribute more good to the opium than the calomel, in the case related.

Dr. Lankester, in allusion to the remarks of the author in respect to the value of bloodletting in cases of pneumonia, stated, that in London there were many and numerous exceptions to the rule. Many cases of pneumonia which presented themselves to us in this great metropolis would not admit of bloodletting at all, not even topically. He related an instance of a native of British Guiana, who, having become the subject of pneumonia shortly after his arrival in England, was placed simply under the use of calomel. The specific effect of the medicine developed itself in thirty-six hours, and the patient soon got well. He regarded the tartar emetic as our sheet-anchor in the treatment of the pneumonia of children.

Dr. Chowne related the case of a patient, who, having first suffered from intermittent fever, and then from typhus, became, during the convalescence from the latter, and whilst under the use of supporting diet, the subject of pneumonia, and was bled for the attack. Under the use of antiphlogistic remedies he recovered. His experience led him to fear the plan of depletion in the inflammatory attacks of children, and he thought the gentler the plan of treatment in such cases the better.

Dr. Bowman had stated that there were exceptions to all rules of treatment in pneumonia, as he had particularly specified in his remarks.

Mr. Fisher had usually found calomel, when conjoined with antimony, more speedy in producing its specific effect. From a great experience among five thousand men in the police force, he set his face against the system of heroic bloodletting in pneumonia. He believed this remedy did much harm, and even when life was saved after its use, it left a depression of system from which the patient was a long time rallying.

A Member referred to the test mentioned by Dr. Hall in respect to the tolerance of bloodletting in cases of inflammation. He thought we underrated the value of opium in pneumonia, and proceeded to say that he usually treated the chest affections of children with the opiate liniment recommended by Dr. Bow.

Mr. Hancock had usually found the combination of tartar emetic with mercury assist the specific action of the latter.

Mr. Hird made some comments on the complexity of the means employed by Dr. Bowman in the treatment of his case. He thought it desirable to treat disease as simply as possible, and with one powerful remedy, if it could be done with safety. He questioned if, under any circumstances, he should feel inclined to bleed more than once in pneumonia, and should hesitate in carrying it to the same extent as had been done in the present instance. He referred to the plan of treating inflammation with opium, and stated that he knew a gentleman in extensive practice who had abandoned the lancet for opium, even in cases of severe peritonitis. He (Mr. Hird) placed his reliance on calomel and opium in inflammation. He recommended the elevation of the temperature of the room as a valuable auxiliary in Dr. Bowman's case; and said that in old cases of pneumonia with bronchitis he had found the most benefit from the old formula of decoction of senega with ammonia.

Dr. Bowman having explained, the Society adjourned until the 13th instant.

## British Medical Journals.

From a lengthened and laboriously compiled report, by Dr. Stark, on the sanitary condition of Edinburgh, we make a few extracts, which will be interesting to those whose attention is directed to this important subject:—

MORTALITY LESSENED BY SANITARY IMPROVEMENTS.

"From the table, it appears that (sinking fractional parts) from 1780 to 1789, one person died annually out of every thirty-four living. From 1790 to 1799, one died annually out of every thirty-six living. So that in proportion as Edinburgh was better supplied with water, and spread over the buildings of the newer parts of the town, the health of the city improved. From 1800 to 1809, there died annually only one out of every thirty-nine inhabitants; and from 1810 to 1819, only one out of every forty living. Thus it is seen, that in proportion as the town improvements went on, the mortality of the inhabitants diminished."

A retrograde movement appears in the rate of mortality during the two subsequent decennial periods—a change which is fully explained by the occurrence of epidemics, including cholera and influenza, and other causes totally independent of any which could affect the above conclusion.

COMPARATIVE HEALTHINESS OF DIFFERENT LOCALITIES.

"From the table, it appears that if the places therein named were arranged according to the smallness of the mortality as compared with the population, or, in other words, in the order of comparative healthiness, they would stand in the following order:—

| | | | |
|---|---|---|---|
| England and Wales lose one | annually | out of every | 45.4 |
| London, | " | " | 40.9 |
| Edinburgh, | " | " | 39.8 |
| Birmingham, | " | " | 37.6 |
| Glasgow, | " | " | 34.6 |
| Bristol, | " | " | 32.7 |
| Manchester, | " | " | 32.3 |
| Liverpool, | " | " | 28.9." |

Thus Liverpool is again shown to possess the unenviable notoriety of being one of the most unhealthy of English towns, whilst London and Edinburgh are amongst the most healthy; and again—

"Edinburgh loses annually, of children under fifteen, no less than one-third fewer than Glasgow, and one-half fewer than Liverpool. As a place of residence for children, therefore, Edinburgh, in point of salubrity, excels almost every town of Great Britain."

THE RELATIVE MORTALITY IN THE DIFFERENT CLASSES OF SOCIETY.

"The table and diagrams allow the comparison to be made between the relative proportions of living and dead at every age in the three classes of society, as compared with each other and with the whole population. They exhibit the astounding fact, that as many die during the first year of life among the artisan and labouring class as during the first four years of life of the merchant class, or the first twenty years of the highest class; and that of the second class as many die during the first year of life as during the first four years of life of the highest class. They also show that the lower the average duration of life in a class, the greater is the number of individual cases which attain extreme old age. Thus, of the first class, though ninety-nine out of the thousand survive their eightieth year, all have died by the time the one-hundredth year is attained. Though only fifty-nine of the second class survive their eightieth year, one of these survives the hundredth year of existence; while in the third class, though only twenty-six live beyond their eightieth year, two are still living above one hundred years of age.

"The comparison of the tables of mortality among the three classes of society, with that exhibiting the mean mortality of the whole population, renders it apparent that the first and second classes of society in Edinburgh are preëminently healthy, and that the whole excess of mortality is confined to the artisan and labouring classes."

To account for this great difference, the author next proceeds to discuss at considerable length the circumstances which might be supposed to influence the duration of life in the latter class, and he arranges his observations under the following heads:—

"1. Accumulations of filth within and around the dwellings.

"2. Want of drainage or sewerage; or, where sewers are present, their unwholesome state, from the presence of fœtid black mud closing up the sewers and cesspools.

"3. Closeness and want of proper ventilation within the houses.

"4. Crowding of families into the same confined chambers.

"5. Want of a proper supply of water.

"6. Prevailing habits of intemperance, mainly produced and kept up by the want of all comforts at home.

"7. Retaining the corpses of the dead in the apartment occupied by the living."

And to these may be added the generally degraded, both moral and physical, condition of the lower classes, particularly of the Irish residents. The author considers, then, in detail, how these influences act, and how they are to be counteracted. For these matters, however, we must refer to the original communication in the *Edinburgh Medical and Surgical Journal*.

ON THE VAPOUR OF ETHER IN ASTHMA AND HOOPING-COUGH.

Dr. Willis make the following observations on this subject in the *Medical Gazette*:—

"Ether, given by the mouth, has long been familiarly employed in the treatment of asthma. I have for many years been aware of the fact that it is vastly more efficacious administered directly in vapour by the breath. My plan of using it is extremely simple. I have had recourse to no kind of apparatus for this purpose, but have been content to pour two, three, or four drachms of the fluid upon a clean handkerchief, and to direct this to be held closely to the mouth and nostrils; a single short and difficult inspiration is hardly made before the effect is experienced; and I have occasionally seen the paroxysm ended in six or eight minutes, the respiration having in that brief interval become almost natural.

"It is not otherwise with hooping-cough: the paroxysms of coughing are positively cut short by having the ether and the handkerchief in readiness, and using them when the fit is perceived to be coming on. So effectual have I seen their immediate application, that I have even found it necessary to suffer the patient to have an occasional fit of coughing to its natural termination, with a view to clearing the chest from accumulated mucus."

# THE LANCET.

LONDON, SATURDAY, MARCH 20, 1847.


THERE are few amongst our readers who will not, we are sure, grant at once that a line of demarcation should exist between the conduct of a professional man and a tradesman, and between the qualified practitioner and the uneducated quack. No professional man can resort to the same means for obtaining practice as the tradesman uses to dispose of his wares, without committing an outrage upon his profession; and no qualified man can descend to the practices of the avowed quack, without lowering himself to the level of the pretender. We have, from time to time, inserted in the last page of THE LANCET, reprehensible handbills, cards, circulars, and advertisements, whether issued by quacks or regulars, with the hope, at least, of making all qualified men ashamed of the improprieties into which some medical persons have fallen. In spite of this, however, the evil has reached such a height, and we are so constantly receiving complaints upon the subject from our correspondents, that we are constrained to take up the subject in a more public manner, and shall continue to direct the attention of the profession to the evils in question, until these practices are abandoned by all except quacks and pretenders.

We know the disadvantages and difficulties under which medical men labour, and how hard it is, in many cases, to obtain station and practice. If we attempt to castigate those who may have been urged by the difficulties of the professional struggle to resort to practices they would fain avoid, they must bear in mind, that before we came to the poorer members of the profession, we attacked with unflinching severity those in the high places of medicine who have lent aid or countenance to quackery. With the poor professional man we would sympathize most unfeignedly at the same time that we exposed his errors; with the herd of quacks, whether rich or poor, we hold no terms, and offer them no quarter. If in our criticisms medical men are mixed up with impostors, they must not complain; unless they wore the same livery, and resorted to the same evil behaviour, such an admixture could hardly be made.

The first example of that of which we have been speaking exhibits a Member of the Royal College of Physicians of London in the part of a hydropathic boarding-house keeper, advertizing day by day for semi-boarders and semi-patients, in the columns of the *Times*. We put it to the College authorities, whether they ought not to reprimand members acting after so scandalous a fashion. It is a disgrace to the whole collegiate body that any member should be allowed to pursue this kind of mixed practice and trade by means of advertisements, circulars, and prospectuses. The hero of the subjoined advertisement stands No. 142 on the list of the Royal College of Physicians of London. We commend him to the Censors.

"HYDROPATHY.—Grosvenor House, Tunbridge Wells, Kent.—Resident physician, Dr. Heathcote, Licentiate of the College of Physicians, London, &c., who may be consulted the first Friday in every month, between the hours of eleven and one, at 37, Moorgate-street, London, where prospectuses may be had."

The following is from the handbill of a peripatetic pretender—it offers a good lesson to the Apothecaries' Society, who will neither prosecute such parties themselves, nor support a Registration Bill, which would at once cleanse the profession of such perilous stuff. The author of this infamous bill is the proprietor of sundry nostrums in the shape of worm balsams, royal antiscorbutic drops, female pills, drops for young or old age, pectoral pills, analyptic balsams, infant restoratives, and cures for itch, &c.

"Medical advice when this bill is called for by Mr. Taylor, surgeon, &c., Member of the Royal College of London, and Licentiate of the Apothecaries' Company, from his medical establishment, 63, Brook-street, Manchester, and now intends taking a medical tour in this neighbourhood every three months.

"Mr. Taylor having had ten years' practice in physic, has obtained the art and knowledge of curing most disorders incident to men, women, and children, and scarcely ever known to fail in curing any patient under his care troubled with deafness, although of forty years' standing, diseases of the liver, stomach complaint, disorders of the head and eyes, fistula and piles, coughs, asthma, consumption, nervous diseases, fits, dropsy, spitting of blood, palpitation of the heart, strictures, female complaints, likewise a certain cure for rheumatism. Mr. T.'s celebrated worm medicines cannot be excelled in Europe. Taylor's Specific Pills, 2*s.* 9*d.*, 4*s.* 6*d.*, and 11*s.* per box, the most effectual cure for stone or windy gravel, inflammations, and irritations of the bladder.

"Courteous Reader,—Every disorganization of the human frame requires great medical knowledge to remedy, and the public welfare is promoted when professional men (disregarding the suggestions of the envious and interested) travel in the most public manner for the benefit of the distressed part of mankind.

"*** It is particularly requested that any person having ulcerated legs, running sores, or white swellings, will speak when this paper is called for, as they are assured a method will be pointed out, when relief and cure in the desperate cases may be obtained, he having cured more running wounds than any medical practitioners whatever.

"*As bills are expensive, please to keep this clean and from the hands of children till called for.*

The next on our list is an advertisement from the *Drogheda Argus*, hardly distinguishable in spirit from the preceding. It will be seen that even the present distress and disease with which Ireland is overwhelmed is converted into a reason and a means of quackery. Quackery is never more odious—never more revolting, than when it affects to take the guise of philanthropy. What needy puffing tradesman ever resorted to a lower mode of appealing to the public than this?

"MEDICAL RELIEF.—In consequence of the high price of provisions, and the extreme poverty and great increase of disease which at present exists in this town and neighbourhood, and from the fact that the working class cannot procure proper medical advice and medicine at a sufficiently moderate rate, Robert A. Calvert, Member of the Royal College of Surgeons, London, Licentiate of the Lying-in Hospital, Dublin, and Member of the National Institute of Medicine, Surgery, and Midwifery, begs leave to state that he has been induced to lower his fees, so that medical relief may be readily obtained by the poor as well as the rich. The following, therefore, will be rate of charges, to which he will most strictly adhere—viz., for each midwifery case, attended in town, 5*s.* 0*d.*; for each professional visit in town, 2*s.* 6*d.* Attendance in the country on the same moderate terms, according to the distance of the journey. In secret cases, which require a prompt and correct treatment so as to ensure future health to the patient, and to which Surgeon Calvert has particularly directed his attention for the last eight years, (having successfully treated upwards of 2000 cases,) the following will be the charges—viz., for each primary case, (a cure engaged, medicine included,) 7*s.* 6*d.*; for each secondary case, ditto, ditto, 15*s.* 0*d.* Patients living at a distance, by stating their symptoms minutely, or in bad cases paying one personal visit, will obtain such advice and medicines as will perfect a cure without further loss of time. All fees must be paid in advance. N.B.—As there are many persons in such distressed circumstances as to be unable to pay even the above small fees, Surgeon Calvert wishes it to be publicly

known that he will give advice and medicines gratis every day from one to two o'clock (Sundays excepted) to such of the poor as can obtain a note of recommendation from any of the clergymen or respectable householders in town, and in this way lend his humble assistance in alleviating the distress which prevails in this season of calamity.

"Drogheda, Jan. 23, 1847."

The following is a milder form of offence against strictly professional conduct. It is an evidence of a tendency which exists amongst some qualified men, to lower the faculty of medicine, by pursuing it in a purely tradesmanlike form, and in a true trading spirit. What we copy is a bill-head, *printed* in the form of a linendraper or a grocer's bill of parcels. In one corner, instead of the royal arms, the golden beehive, or the silver teapot, we have emblazoned the arms of the Irish College of Surgeons, with the supporters, and bearing the motto, "Qvæ prosvnt omnibvs artes." We understand Mr. Hay's love of notoriety is so strong, that his titles are set forth in great strength upon every bottle of medicine he dispenses, and that his name is stuck up in every avenue leading to the square in which he lives, three in number. It should be observed, that we print literally from a printed bill-head, which has been forwarded to us, omitting merely the name of the patient, and the items of the bill.

"Leeds, January , 184 .—Dr to William Hay, Member of the Royal College of Surgeons, Licentiate of the Society of Apothecaries, London: Senior Surgeon to the General Eye and Ear Infirmary, and Late Surgeon to the Lying-in Hospital, Leeds. Park Square No. 23. To Medical Aid, £1 1*s.* 0*d.*"

The next is the card of a metropolitan aspirant to a *trade* in the profession. The card has been forwarded to us by several parties, so that its distribution has probably been extensive. How can tradesmen pay a medical practitioner any respect, as to a member of a learned and liberal profession, while he seeks for practice in such unprofessional modes as the distribution of cards like that we copy from! The profession is indeed sunk low, when any of its members, instead of waiting for a legitimate invitation, can seek to obtain entrance into houses by a circular thrown down the area, a prepaid circular, a card dropped into the letter-box, or a handbill left hanging under the door-knocker. Such incidents are at once a painful evidence of poverty and professional degradation:—

"Mr. Brooks, surgeon and "accouch*ueur*!" (member of the College of Surgeons &c.) 3, Rathbone-place, four doors from Oxford-street, opposite Soho-square. Advice gratis at all hours. Charge one shilling for medicines prescribed. Midwifery, ten shillings; cupping, two shillings; bleeding, one shilling; tooth-drawing, sixpence." (!)

Or can anything be more tradesman-like and unprofessional than the following! It will be in the recollection of our readers, that not long since we defended one of the parties concerned, when we thought wrong had been done to him. We wish this to be taken as an evidence of our fairness and impartiality. We give the literal copy of a circular relating to a dissolution of partnership and a transfer of practice, the terms of which, we should think, has been copied from the newspaper advertisement of some huckster or other. Mr. Perks and Dr. Philson must divide the disgrace between them. We are informed by several parties that this circular has been distributed at Hitchin, not only among the *customers* of Messrs. Perks and Philson, but amongst the patients of the other medical men in the neighbourhood:—

"Mr. Perks begs to inform his friends and the public, that on account of the state of his health, he has relinquished medical practice in favour of his partner, Dr. W. Philson, on whose behalf he solicits a continuance of that support which he has so long received, and for which he now tenders his grateful acknowledgments.

"In consequence of this arrangement, Mr. Perks requests that all bills owing to the late firm may be paid within three months, either to himself or Dr. Philson.

"Hitchin, Jan. 1st, 1847."

"Dr. Philson respectfully announces to his friends and the public, that he has succeeded to the practice lately carried on conjointly with Mr. Perks, and solicits a continuance of their patronage and support.

"Tilehouse-street, Hitchin, Jan. 1st, 1847."

We commenced with the handbill of a quack whose farrago was to be left "till called for." We now conclude with that of another, who does not condescend so far as to call for his dirty bills. He labels his broadsheet with the following heading:—

"Dr. Lamb of Coventry.—[This will *not* be called for; any one doing so will be an impostor.] Dr. Lamb dispenses his own medicines. He need hardly enlarge upon the advantages which he derives from doing so. The reasons which have induced him to adopt that practice are so numerous, and of so grave a character, that when they are stated, the reader will be surprised at any one attempting to practice otherwise."

The quack then proceeds to introduce a choice selection of worm and pile cases, in a jargon about sundry diseases, with quotations from Sir James Clark, Dr. Mason Good, Rudolphi, Bremser, and others. The cases are as disgusting as can well be imagined. After a detail of cases, this self-dubbed doctor concludes in the following strain:—

"Dr. Lamb does not publish these cases in the light of a triumph over the medical gentlemen of Atherstone. No: he has no jealousies, no animosities. For if he were influenced by any such feelings he would not only have stated that his patients had been previously under medical treatment, but have published the names of the medical gentlemen, and the amount of their fees. The want of a kind and friendly feeling, one with another, among the profession is the 'plague spot' to the advancement of practical medicine. Until men communicate the results of their practice cheerfully and unreservedly, the public will have to deplore the little jealousies which so unfortunately blight the prospects of any material improvement in the practice of physic. Dr. Lamb has a great number of other cases ready for publishing which the limits of this sheet preclude, notwithstanding the shortness of the time that he has resided in Atherstone; and as Dr. Lamb, in a former series, stated that he was about to retire from practice, he thinks it proper to state, that as he has such a great number of patients, and from their earnest solicitations, he is induced to continue in practice a few months longer. Dr. Lamb may be consulted daily at his apartments, at Mrs. Laing's, bottom of Union-street, Coventry. No name published without consent. Coventry, Nov. 21st, 1846."

So much for our first selection from cards, circulars, handbills, and advertisements, of a quackish or unprofessional kind. We have purposely mixed up the productions of qualified, but misjudging individuals, with those of well-known quacks and impostors. We hope it will be unnecessary to repeat the process, which has been forced upon us with considerable pain; but, in the prosecution of our earnest crusade against all quacks and quackeries, we have felt it incumbent on us to set forth one of the prevalent evils of the profession—namely, a morbid love of advertisement and notoriety, and one which inevitably tends to damage the individual resorting to it, while it injures and degrades, in the eyes of the public, the profession to which he belongs, and which he ought to feel himself bound to succour and defend.

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In our last we printed, without note or comment, the following communication from Drs. Sharpey and Todd:—

"The Physiological Committee of the Royal Society.

*To the Editor of* The Lancet.

Sir,—As the authors of the Report of the Physiological Committee of the Royal Society, which is impugned in a

document furnished by Mr. Wharton Jones in the last number of THE LANCET, we beg leave to say, that while we altogether deny the justice of the imputations conveyed in that document, whether they regard our good faith or our scientific accuracy; and whilst our opinion as to the excellence and originality of Mr. Beck's researches remains unchanged, we are, nevertheless, disposed to submit to any imputations from the same quarter, rather than take any share in prolonging an agitation set on foot by disappointed expectants, on the character of which an opinion has been already pronounced in the Society itself, by a very significant majority.—We remain, your obedient servants,

W. SHARPEY,
"London, March, 1847." R. B. TODD.

We must plead to be excused with our readers for again referring to the subject; we had not intended to do so; but we cannot allow this last piece of impertinence to go uncensured.

Nothing in the whole affair of the royal medal in physiology is so thoroughly shameless, as this letter from the two most culpable members of the late Physiological Committee. When their conduct is allowed on all hands to have been "irregular and illegal;" and when a vote of the Royal Society confirms it; after Mr. LAWRENCE has told Dr. TODD to his face, that the meeting of the Physiological Committee, on the 27th of October, was dissolved by him, as Chairman, and *per consequence*, the meeting presided over by Dr. TODD was utterly illegal; after the President, too, tells the whole Society, that Dr. TODD and Dr. SHARPEY recommended a paper for the royal medal for 1845, which could not legally come into competition for it;—after all this, which involves the proof of everything we have ever asserted respecting these gentlemen, they have the cool assurance to talk of their "good faith" and of their "scientific accuracy." Verily, they must take the profession to be idiots, to dare to parade themselves thus with only such a flimsy covering for their misdoings?

They go on to talk of their opinion—their opinion, good lack!—"as to the excellence and originality of Mr. BECK'S researches remaining unchanged!" Does any one value Dr. SHARPEY'S and Dr. TODD'S opinion in this case at one jot or tittle? Has not their conduct been throughout "irregular and illegal" in all the main points, and in the minor incidents of the transaction never above suspicion? And as to Mr. BECK'S researches, what do they amount to, even if correct, which is nowhere admitted, but by themselves, as interested parties? What have they done to make themselves authorities? Are they discoverers?—are they even investigators? No; but they hold places, and they mistake the "insolence of office" for the weight with which merit should invest authority.

Why talk vapidly of "imputations from the *same* quarter," when imputations of injustice and irregularity are made against them from *every* quarter? Is there ten men among ten thousand in the profession who think well of the late proceedings of the Royal Society? Every one at all conversant with the affairs of the Royal Society knows that the other sections look on physiology and physiologists as a discredit to the Society. The rest of the Society would indeed be glad to get rid of the medical portion altogether, as troublesome and disgraceful to the institution. This is the indignity which these lovers of irregularity and illegality have brought upon their profession. It will take half a century to repair these misdeeds, and before physiological science can again obtain a respectable footing at the Royal Society. This the actors well know and feel, and this they will never cease to feel, let them affirm and boast as they may.

"An agitation set on foot by disappointed expectants!" This we deny; and we well know the springs of the agitation which affects them so sorely. It had its origin in their own violation of the honour of the Royal Society—in their own disloyalty to the principles, which should ever walk side by side with science. If their doings had never been "irregular and illegal," there could have been no agitation. The moving power has been, not disappointed expectancy, but a feeling of disgust at disorders committed and wrongs inflicted, and at the perpetrators of disorder and wrong.

But we come to the final remark of Drs. SHARPEY and TODD—the opinion pronounced at the Royal Society itself, "by a very significant majority." They would insinuate that the resolution passed by the majority was in their favour. Than this there never was a grosser or more palpable misrepresentation. That decision, that majority, was all that could have been expected, all that could have been desired, from the Fellows of the Royal Society. It spared the Society itself, whilst it condemned the conduct of its officers and appointed guardians. The irregularity and illegality first and fully admitted, without any reservation or defence by the President, and a promise, publicly made, that such irregularities and illegalities should be guarded against for the future,—what more was needed? Was not this sufficient condemnation for the authors of the acts which had tarnished the fame of the Society? Was the Royal Society to be degraded because its officers had acted unjustly? It would be amusing, if it did not rouse feelings of indignation, to see with what complaisance these two persons, after having their conduct thus deliberately condemned for the past, and repudiated for the future, assume to identify themselves with the Society; as though, indeed, the Royal Society and these two members of the Physiological Society were translatable the one into the other. Their *we* would presume to be the *we* of the Royal Society, because at one time they held an illegal meeting, and because at another they voted away a medal illegally. Finally, we will only say, that the conduct of Dr. SHARPEY and Dr. TODD, from first to last, is a very fitting and appropriate pendant to the black secretaryship of twenty years, which will be so long remembered in the annals of the Society.

## Correspondence.

### ON THE INFLUENCE OF SHOCK.

*To the Editor of* THE LANCET.

SIR,—On the 15th of September, I was called to see Miss M——, aged twenty-eight. The father of this young person had expired suddenly in her arms a week previously. I found that she had been suddenly seized with acute pain in the head, the left shoulder, in the course of the pectoral muscle, and down the left side, and that there was great intolerance of light and sound. The catamenia had stopped suddenly, and her bowels, which were usually regular, had become constipated; the pulse was low, and almost imperceptible. The patient remained in this state for three days, and then, under the use of aloetic purgatives, anti-spasmodics, and nutritious diet, she gradually recovered.

A few weeks after her first attack, Miss M—— was incautiously informed of the sudden death of a particular friend. The next morning, when I saw her, all the former symptoms had returned, but with increased severity; the conjunctiva was congested, with extreme intolerance of light and sound; she likewise suffered from distressing flatulence, and the slightest movement brought on syncope. Blisters were applied behind the ears, and the former remedies were continued. Turpentine enemata were administered once a day for a week, and each time brought away large quantities of

hardened scybalæ, after which she was much relieved. In about a fortnight, she was in her usual state of health.

Case 2.—Mrs. J——, aged thirty, was suddenly seized with pain in the head and side, and complained of intolerance of light and sound. I was informed, that a week previously her only child had been seized with convulsions, which alarmed her extremely, but that the child had recovered, and Mrs. J—— appeared in her usual health until that morning. In this case, I noticed precisely the same train of symptoms as in the former one, and the affection gave way under the same remedies. The good effect produced by the enemata was very marked.

Case 3.—Miss S——, aged twenty, was in the room when a young friend died suddenly; she was much agitated at the time. Nine days afterwards, I was requested to see her. She was at first in a state of stupor, and when roused, which was accomplished with some difficulty, she complained of pain in left side, but immediately relapsed into a state of stupor. I ordered an ipecacuanha emetic, which had the effect of effectually rousing the system; and afterwards a turpentine enema was administered, which brought away large quantities of hardened fæces. I was informed that the bowels had been constipated for a week. The enemata were continued for a week, at the end of which time she was quite well.

Case 4.—On the 18th of December, I was called to see Miss O——, aged twenty-three, and found her suffering under precisely the same train of symptoms as those mentioned in the preceding cases. Her friends were not aware of her having experienced any shock, but, upon asking her, she informed me that about a week previously she had fallen down a long flight of stairs, and that, although not much hurt, she was considerably agitated at the time. Her bowels, usually regular, had become constipated. The symptoms under which she was labouring had come on early in the morning of the day on which I saw her. Enemata, as in the other cases, brought away large quantities of hard fæces, after which she experienced almost immediate relief, the intolerance of light and sound ceasing immediately.

Your obedient servant,

March, 1847. M. H. H.

## MR. ABDALLAH ASMAR.

*To the Editor of* The Lancet.

Sir,—In The Lancet of February 27th, at page 242, there appeared a paragraph, stating that Abdallah Asmar, native of Syria, was brought to this country by, and educated at the sole expense of, Mr. Assaad Kayat.

Having had the superintendence of Mr. Asmar's medical education, and confident that that statement (which was entirely incorrect) would cause annoyance to some of Mr. Asmar's large circle of friends, I wrote to you at once, contradicting it, and informing you that Mr. Asmar came to this country of his own accord, that he had been here more than a year before he made the acquaintance of Mr. Kayat, and that the latter had not any share whatever in defraying the expenses of his medical education. I requested that this contradiction might have insertion. As two numbers of The Lancet have since appeared, and the report has not been contradicted, nor the receipt of my letter noticed, I fear that it must either have miscarried or been mislaid. I must therefore request you now, Sir, to have the kindness to contradict the paragraph in question in the forthcoming number of The Lancet, and I do so the more urgently, because, writing now a fortnight after it has appeared, I am enabled to assure you, that it *has* caused the annoyance which I feared and expected.—I have the honour to be, your obedient servant,

Sloane-street, March 16th, 1847. Edward Cator Seaton.

## THE MEDICAL REGISTRATION BILL.

*To the Editor of* The Lancet.

Sir,—Having been a subscriber for many years to your valuable and scientific journal, I cannot but take profound interest in everything connected with the welfare of the profession, holding myself a collegiate diploma. Whilst the profession has remained so long in a distracted state, owing to such divided opinions, and party and corrupt corporate influence, yet I trust most earnestly that the grand object, the "greatest boon" to the profession, will be achieved—I mean your "Registration Bill." It was so favourably received last session by us all, that the late period of its introduction into parliament seemed to be the only obstacle to its success. This is to be regretted.

The Right Honourable the Home Secretary expressed himself so favourably towards registration, and pledged his interest this session, that of course we look with certainty to the enactment of the Registration Bill of this session.

The National Institute can scarcely be deemed an opponent, being a mere fragment, and having outraged every principle of honour and integrity, that it has scarcely a voice with its remaining members, there has been such manifest double-dealing and cruel deception. What we all require, is to be united into one fold; no invidious distinctions, or prohibitions as to practice, among the highly educated and scientific classes of the profession, but uniformity of privileges. Nearly a third of the present session has passed, and not a word about medical affairs in parliament! When, Sir, may we look for our interests being taken into consideration? The mass of the profession is with you; let us then hope there will be no delay or supineness, but that the utmost energy, untiring zeal, and united action, will prevail. The success of your "Registration Bill," will gain you the lasting and grateful thanks of the profession.—I have the honour to be, your obedient servant, Collegian.

March, 1847.

## WHAT IS PHYSIOLOGY? WHAT IS PATHOLOGY?

*To the Editor of* The Lancet.

Sir,—I have been waiting for some weeks for one of your correspondents to define precisely the meaning and application of the words physiology and pathology. Nothing is more important to the advancement of science than a clear and defined mode of expression, and how is this to be ensured, if the principal words bear an ambiguous meaning: for instance, a few numbers back, a reviewer in your valuable journal, while ably proving the great discovery of the true spinal system to belong to Dr. M. Hall, in spite of his enemies, says in effect, "who ever heard of the physiology of vomiting?" Now, what is the meaning of the words physiology and pathology, (I do not refer to their etymology,) but as they are applied to medical science? I have long been accustomed to consider the word physiology as synonymous with function, in the same way that anatomy is with structure. Therefore, any part, whether solid or fluid, must have its anatomy or a certain disposition of the particles of which it is composed. If healthy, it is said to be "healthy anatomy," if otherwise, "morbid." So with physiology, every action must be physiological, whether digestive or pneumonic, but if the latter, for convenience it is included under the term pathology. Taking this definition, it appears to me that vomiting may be either an act of pathology or physiology. If it be caused by a foreign substance, as touching the fauces with a feather, it would be physiological; if as a symptom of hydrocephalus, pathological. I merely allude to vomiting, to illustrate the general principle in reference to the legitimate application of the words I have named. I could enlarge, but I have already taken up too much of your columns; my only apology is the importance of the subject.—I am, Sir, your obedient servant, An Anxious Inquirer.

March, 1847.

## LECTURES ON NATURAL PHILOSOPHY.

Several correspondents have expressed a hope that the publication of these lectures would not be commenced in the middle of a volume, and have suggested that the publication of them should begin with the new half-yearly volume at midsummer. Others of our readers hope that the publication of the lectures will be commenced in January next, so that the whole course may be printed in the two volumes of The Lancet for the next year, 1848. In addition to these requests, which are somewhat perplexing, our difficulties are not lessened by the expression of an opinion, on the part of some of our correspondents, that the great majority of the subjects of the lectures are not sufficiently connected with medicine to be suited for the columns of The Lancet. Amidst this confusion of requests, it is difficult to determine what course to adopt so as to afford general satisfaction. The final decision we cannot now arrive at; but, agreeing with those correspondents who consider that it would be objectionable and inconvenient to commence the publication of the lectures in the middle of a volume, we have resolved not to begin printing them in April next, as we had first announced.

## Medical News.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations before the Court of Examiners, were admitted Members of this College on Friday evening, the 12th instant—viz., Messrs. George Allbutt, Batley, Yorkshire; Chappell May Empson, Crediton, Devon; Henry Barnett, Jamaica; Hugh Green, Boxford, Suffolk; William Faithfull, Hurst-per-point, Sussex; John Martin Birom, Exeter; James Rice, Notting-hill; and Charles Sayer Hugo, Taunton.

Apothecaries' Hall.—Names of gentlemen who passed their examination and received certificates to practise on Thursday, March 11th, 1847.—John Shepherd Fletcher, Manchester; Thomas Oldacres, Market Bosworth; Thomas Binford Eyre, Yeovil; Nathaniel Best Gill, Companies' Service; George Booker, Dronfield, Derbyshire; Edward Mawthill Tearne, Stockton, Worcestershire; Horatio Sillifant, Exeter; Charles Henry Holman, Crediton, Devon; Edward Hancock, Stoke, near Plymouth.

College of Physicians.—In the Lumleian lectures just delivered at the College of Physicians by Dr. Wilson, on the subject of pain, the lecturer spoke in very warm terms in praise of the discovery of the application of vapour of ether to prevent pain in surgical operations, and alluded to the cases at St. George's Hospital in which it has been used, several of which have been reported in The Lancet. At his concluding lecture on the 11th inst., Dr. Wilson introduced Dr. Snow, to perform some experiments on animals, to illustrate the effects of ether. Two gold fishes were placed in water in a glass basin, and an evaporating dish containing some ether was supported over the basin by means of a wire stage, and a bell-glass was placed over the whole; consequently, as the ether evaporated, it was absorbed by the water and respired by the fishes. This was arranged before the lecture began, and the fishes were seen swimming about during the greater part of the lecture; but at the end of it, they were lying on their sides in a torpid state, a gentle motion in the gills being the only sign of life they exhibited, and they did not move on being pricked; being removed into fresh water, they gradually recovered. A green linnet was next etherized, by being placed in a glass jar, into which a small quantity of ether was dropped, and the jar covered till the bird lay insensible, when it was withdrawn. A guinea-pig was also put under the influence of ether in the same way. Both animals were quite insensible to pricks with a pin, but completely recovered. Dr. Snow remarked that he had always found animals to recover perfectly from the effects of ether, if withdrawn from it before respiration had ceased. Birds were rendered insensible in a shorter time than quadrupeds, and recovered more quickly; and fishes were very much longer than either of the other classes, both in being affected and in recovering.

Royal General Dispensary.—The general quarterly meeting of the governors and supporters of this institution was held, on Thursday last, in the board room, Aldersgate-street, Mr. Atkinson in the chair. The report for the last quarter made up, showed that during that period 3,899 persons were recipients of the benefit of the institution. Of these 1,706 were perfectly cured, 335 partially so, 32 died, and 1,826 remained still under medical treatment. The report was then adopted.

Poor-Law Commission.—Mr. Phelan, Surgeon, of Dublin, has been re-appointed an assistant poor-law commissioner for Ireland. It is currently reported, that the poor-law commissioners have felt bound to restore Mr. Phelan to his post, owing to circumstances which took place at the Andover inquiry. Mr. Phelan was in attendance at the time of the sitting of the parliamentary committee, and was expected to have given evidence strongly opposed to his superiors. The matter has, however, ended in his re-appointment.

Middlesex Hospital.—A special general court of the governors of this hospital was held on Wednesday, at the hospital, Charles-street, Berners-street, to receive a report of the committee appointed to inquire into the government and management of the hospital. Sir Robert H. Inglis took the chair. Mr. Hawes read the report, which stated that the committee, having examined the chaplain and surgeons of other establishments, had come to the decision that the order, discipline, and cleanliness of the hospital by no means equalled that of other metropolitan hospitals; that the nurses were not engaged with sufficient care; that these facts proved the constitution of the weekly board to be defective; the respective offices of matron, and secretary, and house-steward (the last two offices being held by one person), had not been properly filled; and that there was a want of cordial coöperation among the officers That in future there be a weekly report as to the management of the hospital. And the committee thought it essential to the welfare of the hospital in general, that Mr. Tuson, one of the surgeons, should resign his appointment. On the chairman putting the question of the adoption and printing of the report to the meeting, great objection was offered, on the plea of its being very undesirable to adopt so important a report without the most careful consideration. An amendment was also proposed, to the effect, that if the report were printed, it should be with the omission of the suggestion respecting Mr. Tuson. After much discussion, an amendment was carried, resolving, that four copies of the report and two copies of the evidence should lie on the table for the inspection of the governors until that day five weeks, until which time the meeting was adjourned.

## BOOKS RECEIVED FOR REVIEW.

Inquiry into some points of the Sanitary State of Edinburgh, &c. By James Stark, M.D. Edinburgh, 1847: A. and C. Black. Pamphlet, pp. 45.

Report on the Mortality of Edinburgh and Leith. By the same Author. Edinburgh, 1846. Pamphlet.

A Popular Atlas of the World, consisting of Detailed Maps of the Different Parts of the Globe, Illustrated by Geographical and Statistical Descriptions. Edited by James Wyld.—This is a very splendid work, and promises to sustain the high reputation of the publishers. We are happy to observe, that this Atlas is of a strictly popular character; it is published at an exceedingly low rate: nothing less than an enormous circulation can render the publication remunerative to the enterprising proprietors.

## CORRESPONDENTS.

Sir,—Will you oblige a "Subscriber" by answering the following queries in your earliest number.—Yours respectfully.

"Does the fact of an unqualified practitioner being in partnership with one qualified protect him against proceedings by indictment?"—No.

"And again: Can an indictment be laid against the unqualified assistant of a legal practitioner?"—Yes.

March 8th, 1847.

*R. Lanyon, M.D.*—The only reply we can give to the two questions proposed to us is this:—That if the M.R.C.S. can be proved to have practised as an apothecary, he is liable to the infliction of the penalties of the 55th of George the Third.

*X. X.* wishing to become a subscriber to the Cavendish Society,—Dr. Day's address is 3, Southwick-street, Hyde-park-square.

*Non Viridis.*—The writer of the pamphlet is as vile an impostor as the quack whom he lauds, though probably the writer and the quack are one and the same person. The enactment of the Medical Registration Bill would enable the College of Physicians to expunge the name of the odious quack from the College lists.

*A General Practitioner.*—Sir Robert Peel's proposition is in operation in all the unions at the present time.

*Mr. Tomkin*, (Witham, Essex,) *Celsus, Senex, and many others.*—The Medical Registration Bill for 1847 has been in the hands of Counsel for some time, and leave will be asked in the House of Commons very soon after the Easter recess. The Bill is receiving the support of the profession in every part of the kingdom, and we have strong grounds for believing that it will become a law in the present session of parliament. We shall discuss the subject fully in the pages of The Lancet at an early period. Can the profession unite for a good Bill? So far as we are at present informed, the Society of Apothecaries of London is the only one of all the medical corporations which is opposed to the Bill. We have the best authority for stating, that the College of Physicians of London is in favour of the measure.

*Quillson.*—Avoid the fellow whose residence you describe, and apply to a regular surgeon.

*Cotswold.*—We doubt the liability of the guardians in such cases. But the question would very much depend on the wording of the contract, and the medical practitioner. As we have not the contract before us, we cannot now offer any precise opinion on the subject.

*Medicus.*—It would be quite useless to publish the letter of Medicus, unless it was publicly authenticated. The private communication to the Editor of the name of the writer, in such a case, is not sufficient for public purposes. The conduct of the coroner was doubtless wrong.

*Senex.*—The action is proceeding against the twice-convicted libellers, and it will *not* be abandoned. The cause will embrace all the libels with reference to the Hounslow inquest.

Communications have been received from—Mr. James Stephens, (Manchester;) Mr. G. M. Phillips; Mr. John Thomson, (Perthshire;) Mr. Henry Sharp; Mr. H. Gervis; Medicus, (Chesterfield;) J. E. Fosbrook, (Nottingham;) Cotswold; Dr. Edwards, (Cheltenham;) Observer, &c. Other correspondents are deferred till next week.

MEDICAL PRACTICE, STAFFORDSHIRE.—£500 annually, including Union and Clubs.—In this rich mining county an established PRACTICE FOR DISPOSAL. The town is well watered, lighted, and paved, (unusual for this county,) with several religious foundations, and parish under 10,000 inhabitants. £800 required. This sum will cover book debts, (all good,) with the usual medical addenda.—Application to Mr. Pyke, Medical Agent, 87, Chancery-lane and Verulam Chambers, Lincoln's-inn.

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MEDICAL.

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THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, AND MIDWIFERY.

Hanover-square Rooms, March 16th, 1847.

NOTICE IS HEREBY GIVEN, that pursuant to a Resolution of a General Meeting of the Association, held on the 9th of September, 1846, the executive powers of the Committee of the National Association were confided to the Council of the National Institute; and that, by a Resolution of the last meeting of the Committee of the National Association, held on the 24th of February, 1847, the accounts of the Association having been duly audited, the balance in the hands of the treasurers, amounting to £67 17s. 7d., was ordered to be paid over to the funds of the National Institute, with the view of carrying out most effectually the intention of the members, as declared at their last general meeting.

The Committee trust that the confidence and support of the members of the Association will be continued to the Council of the National Institute, and that the efforts of the Council to ameliorate the existing laws governing the profession—to maintain inviolate the status of the General Practitioner, and to resist the enactment of any aggressive laws from whatever source it might proceed, will receive the prompt, unanimous, and vigorous support of the profession, and in the event of any emergency arising, that the Honorary Local Secretaries of the National Association will, as heretofore, afford their zealous and efficient coöperation to the Council of the Institute.

By order of the Committee,
JAMES BIRD,
HENRY ANCELL, } Hon. Secs.

TESTIMONIAL TO MESSRS. BIRD AND ANCELL.

THE NATIONAL ASSOCIATION OF GENERAL PRACTITIONERS IN MEDICINE, SURGERY, & MIDWIFERY.

Hanover-square Rooms, Feb. 25th, 1847.

The Members of the Association, and of the Profession generally, are hereby informed, that at the last meeting of the Committee, held at the Hanover-square Rooms, on February the 24th, 1847, the following Resolutions were unanimously adopted:—

"1st. That this Committee cannot separate, at the close of their labours, without acknowledging their unqualified and most grateful thanks to their respected Honorary Secretaries, Messrs. BIRD and ANCELL, for their long-continued, zealous, and laborious services, as well as for the uniform urbanity, good feeling, and ability displayed by them on all occasions, and that, in order to record these sentiments, some suitable Testimonial be presented to each by the Members of the National Association of Medicine, Surgery, and Midwifery, as a mark of the great esteem in which they hold both their official and private worth.

"2nd. That a Subscription of not more than one guinea be immediately opened for this purpose."

JOHN NUSSEY, Chairman.

*** Subscriptions by Post-office order made payable at the Branch Post-office, Old Cavendish-street, or otherwise, will be received by J. NUSSEY, Esq., 4, Cleveland-row; JOHN PROPERT, Esq., 6, New Cavendish-street; G. J. SQUIBB, Esq., 6, Orchard-street, Portman-square.

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The requisite Certificates and Testimonials must be forwarded to the College at least ten days before the period of examination.

By order,

13th March, 1847. EDMUND BELFOUR, Secretary.

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CLINICAL PRIZES.—The competition Papers for these Prizes, given by the lecturers of the above School, must be sent, under cover, to the Honorary Secretary, on or before the 31st instant.

The Seals of the Mottoes will be broken, the names of the successful Candidates announced, and the Prizes presented at the public distribution of the Prizes, May 1st.

The Regulations may be seen at the School, and a copy of them obtained on application to the porter.

1, Grosvenor-place, March 15th, 1847.

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# A Lecture

ON THE UTILITY AND SAFETY OF

# THE INHALATION OF ETHER IN OBSTETRIC PRACTICE.

By W. TYLER SMITH, M.B.,
LECTURER ON MIDWIFERY.

The only authorities who have published their opinions and experience on the subject I am about to consider, are Baron Dubois and Professor Simpson; but in the accounts of these obstetricians, though valuable facts are recorded, little attempt is made to reconcile experience and the phenomena of etherization, with physiological and pathological actions, the true basis upon which its ultimate adoption or rejection must rest. The task of fixing the relations and true position of a new agency, of such extraordinary powers, is one of great difficulty, but it seems to me that the time is arrived when at least the attempt to do this should be made.

Our opinions respecting the value of etherization in practical midwifery must chiefly depend on our knowledge of the manner in which this state of insensibility can modify the physiological actions of parturition, and also on our observation of the results in those obstetric cases in which it has been or may be employed.

If the production of the etherized state merely removed pain, without inducing any other complication, the question, as it relates to midwifery, might be readily decided. The relief of the pangs of travail would indeed be an invaluable boon. But the problem to be solved is by no means so simple or so uncomplicated. The inhalation of ether takes away from the parturient woman several other elements natural to her condition besides mere physical pain, while it adds thereto other states of the system, which are not observed in strictly natural labours.

The true mode of proceeding is to examine carefully what there is subtracted from, what there is added to, the processes of labour, and then to come to a decision as to whether the advantages or the disadvantages of the use of ether in midwifery are likely to preponderate. Etherization is chiefly a new condition of the nervous system, and we must examine the modes in which the different divisions of the nervous system are affected.

And, first, as regards the cerebral division of the nervous system.

*Sensation* is for a time impaired or abolished. There can be no doubt that, as one of its effects, the pains of labour may be alleviated or abolished by this new application.

*Volition* may also be suspended; all the voluntary movements are in abeyance when the patient is fully under the influence of ether. In the partially etherized states, violent actions of the voluntary muscles takes place, but they are irregular, like the movements of ordinary intoxication.

*Emotion* is, in the fully etherized state, withdrawn, or the ordinary emotions are replaced by the disordered emotions of dreaming or delirium.

We must therefore inquire into the uses of *sensation*, *volition*, and *emotion*, to parturition, all of them being intimately associated together in natural labour.

In the expulsory stage of labour, after the dilatation of the os uteri, the efforts of volition are of some assistance to delivery. The efforts of expiration, and especially of the abdominal muscles, are increased, and the patient aids in fixing the thorax and the pelvis, by grasping firmly with the hands, and planting the feet against some convenient place. Sensation and emotion are, in a physiological sense, even of more importance than volition to parturition. In the last pains of labour, when the motor power is prodigious, and the patient is threatened with laceration, the sensation and emotion of pain comes in as a preservative. All the ordinary actions of labour at this period are reflex in their nature, and are, whatever their violence, uncontrollable by the will. But whenever the pain becomes too intense to be borne,—and pain is here a measure of danger,—the patient, chiefly under the influence of emotion, cries out, and her cry, by opening the glottis, takes away all expiratory pressure, and leaves the uterus acting alone. So, in the last stage of labour, upon the mingled agony and exertion of which obstetricians have exhausted their descriptive powers, pain and its attendant emotion play a benign and salutary part. It is now that laceration of the perinæum is most impending, and at this point not only is the glottis opened, but the sphincter ani and the sphincter vesicæ are suddenly dilated, so as to relieve the perinæum to a very great degree. It cannot but be considered as a singular provision of Nature, that at the moment when the outlet of the vagina is threatened with the greatest danger, these two sphincters should suddenly relax before and behind it. We may even deduce from this fact a reason for the anatomical position of the vagina betwixt the rectum and the bladder. Thus, then, volition, and especially the sensation of pain, and its attendant emotion, are of considerable importance in natural parturition.

Some interesting points relating to sensation have been suggested by the facts observed in etherization. It has been again and again noticed that patients may preserve ordinary consciousness, and the use of the special senses, with a total insensibility to pain. They have in some cases talked rationally, and have seen and heard perfectly, while they were unconscious of the performance of the most painful operations. Separate seats have been proposed for ordinary consciousness and the perception of pain. Both the seat of pain, and the exact nerves which are the communicators of pain, are as yet unascertained. It is evident that the nerves of special sense are not the conductors of pain; the optic, olfactory, and auditory, are insensible to pain; and a whitlow affecting the cushion of the finger, upon which the tactile nerves are accumulated, is not more painful than a burn on the back of the hand, or than an inflamed peritonæum. Thus, the nerves of special sense, as such, are not ordinarily conductors of pain. Besides the fact that the intellect may remain clear while sensation is abolished, there are other reasons for believing that the cerebrum is not the seat of the sensation of pain. Longet, for instance, removed the whole of the brain of a living animal, leaving only the medulla oblongata; and on being pinched or punctured, it cried out, and gave the most lively manifestations of pain. These facts would lead to the inference that there must be a special seat of pain, and special nerves for its propagation, from the periphery to this centre of painful sensations. Lastly, it becomes a question whether ether affects the seat of pain, or the nerves which conduct to it. Mr. Adams, of the London Hospital, made the ingenious suggestion that the blood was altered in etherization, and that the altered blood paralyzed the extremities of the nerves. Others have maintained that this altered condition of the blood depends on the imperfect inhalation of the ether, and partial asphyxia. We know that a writer of eminence on the nervous system is of opinion, that the central seat of pain, with that of pleasurable sensations, and emotion, and respiration, is in that *nœud vital*, or nodus vitalis, the medulla oblongata, whilst its actual seat is in some part of the ganglionic system. Probably, under the full influence of ether, the whole of the nervous system concerned in the production and perception of pain is simultaneously affected.

But whatever its nature and seat, sensation is removed by the influence of ether; the parturient woman may pass at once from her agony, into a state of oblivion to pain. Pain is taken away!

Labour itself, like a surgical operation, produces what has been termed *shock*. In certain cases, the vital powers fail, the contractions of the uterus and the actions of the heart sink together, and the patient may even die from the pure influence of *shock*. This may take place in labours, difficult it may be, but still from which the majority of women recover in the usual way, so that we have no certain means of estimating beforehand the probable power of the shock of parturition in any given case. Professor Simpson, in his recent paper, asks, "On what division of the nervous system does the nervous shock operate—the cerebral, spinal, or ganglionic? If on the former, it should be kept in abeyance by due etherization." Now, I conceive this important point need hardly be put as an interrogation, or if so, that it should meet with something like a definite answer.

*Shock* is composed of several elements, and is certainly not confined to the brain; those which are really referrible to the cerebrum, and to the medulla oblongata, which partakes both of the nature of brain and spinal marrow,—for here the cerebral and spinal systems seem fused,—are, pain and emotion, and the effects of these depend on the perfect presence of consciousness and the perception of physical suffering.

We must doubtless look on *pain*—I mean, physical suffering—as distinct from uterine contraction, which in midwifery almost takes the term to itself, not only as a great evil, but as a source of other evils. No human suffering, perhaps, exceeds in intensity the piercing agonies of child-bearing, and no benevolent mind but would consider it an inestimable blessing to

be able to relieve women with safety from so great a trial. I do not underrate the importance of pain or of its alleviation. There are women who after one labour remain their life long depressed and in dread of the repetition of their sufferings. But in the present subject it is with the immediate effects of pain that we have most to do. Acute physical pain, in the majority of cases, inflicts a shock upon the system, the shock being in proportion to the depressing effects of the pain endured. *Pain*, then, when it depresses the system, is one element of *shock*, whether in parturition or in surgical operations. But it must be said that it is not always depressing; on the contrary, it sometimes acts as a stimulant, and as such is probably salutary rather than prejudicial. Even this great evil is not unmixed with good.

*Emotion* constitutes another element of shock, as when fear or despair, or some kindred emotion, depresses the vital powers; and this element begins to act, it must be borne in mind, before the commencement of the operation. Thus, to put an extreme case, the step of the criminal falters, and his heart fails, on the way to execution. But as emotion begins to operate before pain or danger is actually present, it may exert a bad effect on a patient about to be operated on, or delivered, in the etherized state, if there should be any great fear or dread for the result. However, in the majority of cases, *pain* and *emotion*, as elements of shock, would disappear when insensibility commenced. Many parturient women are destroyed, directly or indirectly, by emotion alone, and so are many surgical patients; these latter, however, in a different mode from the former; there is no escape from labour; but that extreme emotion, which in midwifery is so dangerous, prevents surgical patients from undergoing the proper operations at all, and in this manner such patients die. We shall see hereafter whether in midwifery there are not counterbalancing evils more than sufficient to weigh against the partial deliverance from *emotion* and physical *pain* accomplished by etherization.

I now pass on to speak of the *spinal marrow*, by which I mean the true spinal marrow, the seat of the reflex function in its most extended signification; and of the ganglionic system.

There is, speaking generally, in the application of ether, a point at which the cerebral faculties are suspended without any affection whatever of the spinal marrow. But after this has been passed, the respiration becomes stertorous, and spasmodic twitchings, or even general convulsions, may ensue; the spinal marrow is now fully involved as well as the brain. Still later, according to the experiments of Baron Flourens and M. Serres, this organ becomes inexcitable; no reflex movements follow upon the application of an excitant to the surface; and even the spinal marrow itself may be pricked and lacerated without inducing any convulsive action. If etherization be still further continued, the animal dies. In the cases in which ether has been employed in midwifery, it has not affected the uterine contractions—that is, it has not been pushed so far as to materially depress the spinal functions. I have little doubt that accurate observation will show that it may either not influence them at all, or that it may increase or diminish them according to the condition of the patient, and the extent to which it may be employed, though the effects of its successful use would be almost invariably the suspension of voluntary motion, sensation, and emotion, the uterine reflex actions remaining natural, or being but slightly affected. I cannot enter here into the physiology of Baron Dubois, but it is evident that this distinguished accoucheur is quite unaware of the reflex physiology of parturition, and engages in the discussion of points about which there is no doubt.

I have already spoken of the influence of shock upon the brain; still more important is the influence of severe injuries upon the spinal marrow and the ganglionic nerves. An experiment and a fact will prove this. If the whole of the contents of the cranium are removed from a frog, so as not to affect the circulation, and the thigh or the pelvis be now crushed by the sudden blow of a hammer, the heart's action is arrested, and for a time no reflex actions can be excited by external irritation. This experiment shows the part borne by the spinal marrow in the phenomena of shock. You must bear in mind that this physical shock is quite independent of the brain and of sensation. If a man is shot with a bullet through the body, he may drop instantly, though he has not felt himself wounded. He falls, not from the effects of pain, and before the effects of loss of blood are felt, but probably from the simple effects of shock upon the spinal marrow and the ganglionic system.

This fact, that shock in its major part may be still present, though a state of perfect insensibility has been induced, has escaped the attention of all writers on the subject of ether. Cases have been detailed, and the inhalation of ether eulogized, not only as the assuager of pain in surgery, but as the alleviator of the shock of operations. It is most important that it should be understood, that in its true nature shock affects the spinal marrow and the ganglionic system even more imminently than it does the brain.

The stimulant effect of ether upon the brain and spinal marrow at one stage of its operation is of great importance in considering its applicability to midwifery. It has been used by Dr. Ranking in tetanus with the effect of increasing the spasm; it has also been found prejudicial in hysterical and epileptic convulsions; and it has produced convulsions in persons who have inhaled it merely for experiment or for surgical purposes. Baron Dubois vividly describes the symptoms produced in one of his obstetric patients, in which all the most intense premonitory signs of convulsion were induced; the congestion was so great, that he almost expected the eyeballs to syringe forth blood. Now, knowing the tendency to convulsion which belongs to the puerperal and pregnant states, it would at once seem improper to resort, without very grave reason, to the use of an agent so capable of adding to the utero-spinal excitement of labour, a new and a direct stimulant of the organ concerned in convulsions.

In some operations there has been a considerable amount of reflex action; in others, the twitchings of the stump after amputation has been considerably diminished. In one of Baron Dubois' cases, the limbs remained motionless; in another, a movement of the thigh occurred on the introduction of one of the blades of the forceps. These and similar facts show that the spinal marrow may be either excited or depressed by this agent. I cannot now enter fully into this subject; but in some cases the loss of sensation and consciousness, and the persistence of reflex action, have been very remarkable. The cerebral and spinal divisions of the nervous system have been as completely separated as they could be by actual experiment. The inhalation of ether has, with almost the certainty of a chemical reagent, decomposed the old cerebro-spinal system into two, and the cessation of its influence has as suddenly reunited them—thus offering an additional proof, if such were necessary, of the independent function of the true spinal marrow. Baron Flourens has also obtained further proofs of his doctrine of the separation of the contents of the cranium into excitor and inexcitor parts, by the phenomena observed in etherization.

One extraordinary circumstance relating to this subject must not be forgotten—namely, the occasional incitement of the sexual passion in patients under the influence of ether. In one of the cases observed by Baron Dubois, the woman drew an attendant towards her to kiss, as she was lapsing into insensibility, and this woman afterwards confessed to dreaming of coïtus with her husband while she lay etherized. In ungravid women, rendered insensible for the performance of surgical operations, erotic gesticulations have occasionally been observed, and in one case, in which enlarged nymphæ were removed, the woman went unconsciously through the movements attendant on the sexual orgasm, in the presence of numerous bystanders. Sexual excitement has also been observed in the male subject. Viewed apart from the moral considerations involved, there is not, in the whole of the wonders related of this extraordinary agent, anything more wonderful than this exchange of the smarting of the knife and the throes of parturition, not for mere oblivion, but for sensations of an opposite kind, pain, in fact being metamorphosed into its antithesis. Still, I may venture to say, that to the women of this country the bare possibility of having feelings of such a kind excited and manifested in outward uncontrollable actions, would be more shocking even to anticipate, than the endurance of the last extremity of physical pain. I am only surprised that the distinguished French obstetrician should not have made some observation of this kind. In many of the lower animals, we know that an erotic condition of the ovaria is present during parturition, and that sexual congress and conception may take place immediately upon delivery. It was, however, reserved for the phenomena of etherization to show that, as regards sexual emotion, the human female may possibly exchange the pangs of travail for the sensations of coïtus, and so approach to the level of the brute creation. I have no doubt—indeed, I have accumulated evidence to prove, *as a general law*—that at the time of parturition in all ovipara and vivipara, the human female included, the ovaria are in a state fitted for fecundation. May it not be, that in woman the physical pain neutralizes the sexual emotion, which would otherwise, probably, be present, but which would tend very much to alter our estimation of the modesty and retiredness proper to the sex, and which are

never more prominent or more admirable than on these occasions? If this be so, women would scarcely part with pain, hard as their sufferings may be to bear; chastity of feeling, and, above all, emotional self-control, at a time when women are receiving such assistance as the accoucheur can render, are of far more importance than insensibility to pain. They would scarcely submit to the possibility of a sexual act in which their unborn offspring should take the part of excitor; and as the erotic condition has been chiefly observed in patients undergoing operations on the sexual organs, we must assign as the exciting cause, either the manipulation of the attendant or the passage of the child. Lucina, fabled as she was to have been born without pain, was a name often given to the severe Juno, and to the chaste and cold Diana, but never to the Paphian queen.

We are now, I think, in a position to argue the questions as they relate to midwifery—What benefits can be conferred, what injuries hazarded, by the use of ether? Pain and emotion may be obliterated; all, or nearly all, of shock which belongs to pain and mental emotion may be averted; but, at the same time, volition, and the salutary influence exerted by pain and emotion on the motor actions of labour, are withdrawn. In successful cases—that is, when the brain only was affected—parturition, as a reflex function, would not be interfered with. There remains to the woman, in its full intensity, all that portion of *shock* which depends on the spinal marrow and the ganglionic system. There is added, in some cases, the increased tendency to puerperal convulsions, and the collapse described in the cases of Messrs. Nunn and Robbs as the effects of the ether itself, and which has also occurred in many unrecorded cases. The dangers incurred by the use of ether in midwifery would be that of convulsion, and of the meeting of the physical shock of parturition with the shock or collapse produced by the ether itself. Whenever this complication occurred, there would be considerable danger. The moral considerations which relate to our decision I have already alluded to. Briefly, I may repeat, there is, on the one hand, the absence of pain and of painful emotions, with their attendant evils; on the other, there is the physical shock unaverted, the tendency to convulsion, and the possibility of dangerous collapse—a possibility which, in some surgical cases, has passed into fatal certainty.

I know it is ungracious to take the part of an alarmist on such a question; but many fatal cases have now occurred after operations in which etherization has been practised. The patient who underwent the Cæsarian operation died; another patient, on whom extirpation of the eyeball was performed, sank; a clergyman, whose leg was amputated, never rallied after the operation; two of the women delivered while under the influence of ether, by the Baron Dubois, subsequently died; and fatal collapse occurred in the case of a woman from whose thigh a tumour was removed. Probably other fatal cases have occurred, of which we have no information. It would be difficult to say in how many of these instances the ether contributed to the fatal results: in some, death would no doubt have taken place under any circumstances; but in others, it may be considered wellnigh certain that its use was the chief, if not the sole, cause of death.

The morbid phenomena fairly attributable to ether, observed in cases which have recovered, have been—nausea, sickness, stertorous breathing, pulmonary and cerebral congestion, convulsions, and protracted failure of the heart's action. Now, the bare possibility of producing symptoms such as these by a remedial agent, however valuable, renders it imperative that we should be able to distinguish the cases in which the more serious of them are likely to occur, otherwise the agent itself must inevitably fall into disrepute. As is well known, digitalis may produce failure of the heart; opium, congestion of the brain; and hydrocyanic acid, convulsions: and consequently, caution is always observed in the administration of these still valuable remedies; but after etherization, we may have effects which resemble either undue narcotization, an over-dose of hydrocyanic acid, or the cumulative results of digitalis; so that it behoves us to be triply careful respecting its indications and its exhibition. In two fatal cases, a fluid state of the blood has been found after death.

As yet, very little has been done towards indicating the proper cases for resorting to ether, and those in which it should be avoided. There has been a general rush towards the operating room, such as the world has never before witnessed. Great numbers of cases were successful on its first introduction; and this gave an *éclat* to the subject, and induced a confident state of mind in patients, which has doubtless been an element in the successful results; but now that fatal cases have occurred, all that was mere prestige must all to the round; and unless the proper cases for etherization can be distinguished with something approaching to certainty, patients upon whom it may be used will go under the knife influenced by previous dread rather than confidence; and so an item of evil, not properly belonging to etherization itself, will come into play. Such is the constitution of the human mind, that a few fatal cases, even by the side of a great number of successful ones, will be sufficient to transmute hope into fear, confidence into timidity and mistrust. Probably the fatal cases which have become known have already produced this effect, and it is believed that many of our most eminent surgeons are declining the use of ether as much as possible. For the sake of etherization itself, then, something like a pause is required, otherwise it is to be feared that the old empire of pain will return, and if so, it will seem for the future doubly difficult of endurance, because of the hopeful promise that, in surgical operations at least, it was conquered for ever.

It may be said, that in the dangerous and fatal cases the ether was unduly or improperly inhaled,—and from an examination, it does appear that the ether was inhaled for a longer time than usual by some of the patients who died,—but in none does it appear to have been inhaled longer than was necessary to produce insensibility; and in Mr. Robbs' case, if we may believe that reflex movements were not mistaken for movements of volition, complete insensibility was not present at any time during the operation. It would appear as though the ether occasionally followed an erratic course, not, as is usual, affecting the brain at all, but still going on to poison the spinal marrow and the ganglionic system, and to alter the condition of the circulating fluid. Indeed, so various have been the symptoms observed by different operators, that ether seems almost as volatile in its effects, as in its physical constitution.

In all I have said I am merely setting forth my individual opinion. I have given you the data upon which it is founded, and which, I believe, will stand the test of examination. I should observe, in conclusion, that Professor Simpson is far more sanguine than myself in his views of the application of ether to midwifery. His last paper upon the subject ends in the following terms:—

"I have stated that the question which I have been repeatedly asked is this:—Will we ever be 'justified' in using the vapour of ether to assuage the pains of natural labour? Now, if experience betimes goes fully to prove to us the safety with which ether may, under proper precautions and management, be employed in the course of parturition, then, looking to the facts of the case, and considering the actual amount of pain usually endured, (as shown in the above descriptions of Merriman, Naegele, and others,) I believe that the question will require to be quite changed in its character. For instead of determining in relation to it whether we shall be 'justified' in using this agent under the circumstances named, it will become, on the other hand, necessary to determine, whether on any grounds, moral or medical, a professional man could deem himself 'justified' in withholding, and *not* using any such safe means, (as we at present pre-suppose this to be), provided he had the power by it of assuaging the agonies of the last stage of natural labour, and thus counteracting what Velpeau describes as 'those piercing cries, that agitation so lively, those excessive efforts, those inexpressible agonies, and those pains apparently intolerable,' which accompany the termination of natural parturition in the human mother.

Baron Dubois concluded his address to the Academy of Medicine, as reported in THE LANCET, in less glowing terms:—

"My profound conviction is, (he said,) that inhalation of ether in midwifery should be restrained to a very limited number of cases, the nature of which ulterior experience will better allow us to determine."

More recent experience has certainly not been in favour of enlarging the limits of its applicability either in practical midwifery. In our own department there is good reason to believe, that after a short time, unless some certain mode of binding or disciplining this Prometheus shall be discovered, it will be rarely, if ever, used in difficult parturition or obstetric operations, and certainly never in natural labour. It will be a disappointment to have to turn from this promised good, but it is better to do so than to follow an ignis fatuus, if so it prove, to the neglect of real and scientific advancement. Let us hope that this glimpse of deliverance from this heavy infliction on humanity, may act as a stimulus to Science to continue her search after some certain and available relief from physical pain—possibly a visionary search,—but still one for which human nature will never cease to yearn.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION; AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

THE syphilitic poison exhibits, in most instances, an ulcerative action. Its application to the surface of the body gives rise to a vesicle, or to an excoriation, which soon becomes an ulcer, the appearances and further progress of which are essentially modified by the nature of the tissues in which it is seated. If the disease be not interfered with by mercury, the poison eventually exhausts itself, the surface of the sore becomes clean, granulations spring up, and the part cicatrizes.

But not uncommonly, and especially amongst the intemperate, the disease pursues a more violent course, and there ensues mortification or sloughing of the part to which the poison has been applied. The various conditions under which these occurrences take place may be illustrated by the following cases:—

### SLOUGHING SORE OF THE GLANS PENIS; DIVISION OF THE PREPUCE.

CASE 1.—William L——, aged thirty-one, iron-moulder; a healthy-looking but intemperate man, who has twice suffered from gonorrhœa, but has been well for the last four or five years; states, that ten days ago, immediately after connexion, he felt as if he had hurt himself under the foreskin. Twenty-four hours afterwards, he experienced a sharp burning pain in the part, but he continued at work, and followed his usual habits, until three days ago, when he noticed a small sore upon the upper surface of the glans, close to its junction with the prepuce. The day following, the penis was hot, swelled, and painful, and the foreskin, contracted at the orifice, could not be withdrawn. The pain, much aggravated upon pressure, soon became so severe as to deprive him of rest, and he passed the night bathing the penis with cold water, with the hope of obtaining some relief.

Sept. 24th, 1846.—Admitted into Lazarus ward, under Mr. Stanley. The penis is hot, swelled, and painful; there is scarcely any discharge from under the prepuce; the pulse is accelerated, the tongue white, and the bowels are confined. Twelve leeches to the penis immediately; bread-and-water poultice; two aperient pills.

25th.—The bowels have been freely relieved, and the skin is cooler; but he passed the night without sleep. Five grains of soap-and-opium pill at bedtime; continue the poultice; broth diet as before.

27th.—The penis, still much swelled, is extremely painful when pressed over the situation of the sore; a thin and sanious, but not very abundant, discharge escapes from under the prepuce. Mr. Stanley liberated the glans by a free division of the superior part of the contracted prepuce. About two-thirds of the glans was occupied by a sore, the surface of which was covered by a black slough. Considerable hæmorrhage ensued, but no artery required to be tied. Continue the soap-and-opium pill; opium lotion to be applied, under the bread-and-water poultice, to the glans penis.

28th.—Early this morning, profuse hæmorrhage took place from the divided prepuce. With some difficulty a large artery was tied, and the bleeding ceased.

30th.—He is quite free from pain; the slough has not extended; the cut surfaces of the prepuce look healthy; he complains of feeling weak. Continue the poultice; meat diet; a pint of porter daily.

Oct. 2nd.—Nearly the whole slough has separated to-day; a deep and irregular, but healthy-looking excavation, not extending into the urethra, occupies the whole upper surface of the glans. To use a weak solution of nitric acid and opium wine as a lotion, under the poultice; meat diet and porter as before. Under this treatment, cicatrization speedily ensued, and he left the hospital well about the end of the month.

### SLOUGHING SORE OF THE GLANS PENIS; DIVISION OF THE PREPUCE.

CASE 2.—Charles P——, aged twenty-five, sailor; a person of irregular and intemperate habits, who has occasionally suffered from slight attacks of gonorrhœa; states, that about a week ago, (the eighteenth day after connexion,) he experienced a sharp burning pain upon the upper and left side of the glans penis, under the prepuce, which was swelled, and hotter than natural. The day following, the swelling involved the whole body of the penis; the prepuce could not be withdrawn from the glans, which had become the seat of pain, so severe as to deprive him of rest. He applied to a surgeon, who ordered him pills and a lotion.

Sept. 28th, 1846.—He was admitted into Lazarus ward, under Mr. Stanley. The whole penis is much swelled and inflamed; a profuse sero-purulent and bloody discharge escapes from under the contracted prepuce, upon the upper surface of which, and towards the left side, there is a prominent part, of purplish-black colour. Mr. Stanley immediately divided the prepuce along its superior surface, and exposed a black slough of the glans, about the size of a sixpence, and having the appearance as if produced by the application of potassa fusa; considerable hæmorrhage ensued. Bread-and-water poultice to the penis; milk diet.

29th.—Since the division of the prepuce, he has been quite free from pain; the slough has not extended, and he obtained some hours' rest. There occurred during the course of last evening some inconsiderable hæmorrhage, which was arrested by the application of cold. Continue the same.

30th.—Sleeps badly at night, but is free from pain. Five grains of soap-and-opium pill every night.

Oct. 2nd.—The slough has separated to-day. There is exposed a deep and irregular, but healthy-looking excavation, which involves about one-third of the glans penis. He sleeps well, but complains of feeling very weak. Meat diet; pint of porter daily; a weak solution of nitric acid and opium wine to be applied, under the poultice, to the sore.

6th.—The wound is cicatrizing, and he left the hospital well about the end of the month.

### INFLAMED SLOUGHING SORE OF THE GLANS PENIS; DIVISION OF THE PREPUCE; ANTIPHLOGISTIC TREATMENT; RECOVERY.

CASE 3.—Job L——, aged twenty-one; has been leading a dissipated life for the last three or four weeks, and cannot say when he contracted the venereal disease. About a week ago, the penis felt hot and swelled, and painful; the orifice of the prepuce became contracted, and could with difficulty be withdrawn, so as to denude the glans, the exact condition of which had not been ascertained. Admitted into Lazarus ward, Jan. 11th, 1840, under Mr. Lawrence. There was acute inflammation of the prepuce, with partial phymosis, and a copious secretion of an ichorous and fœtid discharge. Upon withdrawing the prepuce, there was exposed a large sloughing chancre, situated partly on the glans and partly on the prepuce; the preputrid portion was spreading by a mixed process of sloughing and ulceration. There was an inflamed bubo in the right groin. Prepuce divided along its superior surface. About six ounces of blood flowed from the cut edges. Poppy fomentation; bread-and-water poultice to the sore; saline mixture, with half a drachm of the solution of the potassio-tartrate of antimony, every six hours; leeches in the evening, should the patient complain of pain.

13th.—The penis has been quite free from pain; the slough, of dark livid colour and raised, seems disposed to separate at the edges; bubo very painful. Six leeches to the bubo; discontinue the mixture.

14th.—The slough has separated, leaving a healthy granulating surface.

27th.—The wounds are granulating.

July 1st.—Discharged. The wounds were cicatrized; some thickening at the base of the sore was rapidly disappearing; the divided prepuce, healed and contracted, formed a very good covering or hood to the glans.

### SLOUGHING SORE OF THE GLANS AND PREPUCE.

CASE 4.—Thomas C——, aged twenty-six; a person of irregular habits; has frequently suffered from venereal disease. During the last five months, he has led a very intemperate life, and cannot say exactly when he contracted his present complaint. About seven days ago, he first noticed a black spot upon the penis, but as he experienced but little pain, he followed his employment, and ate and drank as usual, up to the day of his admission into the hospital. Admitted May 23rd, 1840, into Lazarus ward, under Mr. Lawrence. There is a phagedænic sore of the prepuce, by which one-half has been destroyed: the glans penis is in great part converted into a dark-coloured slough. The pulse is feeble, the skin cool, and he sleeps at night, but complains of feeling weak. A dose of aperient medicine; bread-and-water poultice to the sore; broth diet.

24th.—The slough, which has involved three-fourths of the

glans, came away this morning in the poultice, and has exposed a healthy granulating surface.

25th.—The sores are granulating, and secrete a healthy puriform discharge. Meat diet, and a pint of porter daily.

June 15th.—Discharged. The sores, almost wholly cicatrized, have required no other local treatment than the application of black wash.

INFLAMMATION OF THE PENIS, FOLLOWED BY SLOUGHING OF THE ENTIRE GLANS: HÆMORRHAGE ATTENDING THE SEPARATION OF THE SLOUGHS: GREAT PROSTRATION OF STRENGTH: DIVISION OF THE PREPUCE: RECOVERY.

Case 5.—Henry R——, aged twenty-eight; excavator on a railway line; a person of intemperate habits; states, that four months ago, soon after having exposed himself to venereal infection, he noticed upon the upper surface of the glans penis a small superficial sore, which he daily exposed, by drawing back the prepuce, (which was naturally short,) for the purposes of ablution, and of applying common dressings. He was unable, from the nature of his work, to pursue any regular plan of treatment, but whenever he was near a town, he bought medicines at the first chemist's shop near which he passed. Two months ago, the prepuce became inflamed, painful, and contracted, so as not to admit of being withdrawn. He continued, however, his usual habits, until a week ago, when the glans looked dark-coloured, and a thin fœtid discharge flowed from under the prepuce. The pain now became excessive, and he was obliged to lie up. Yesterday there took place suddenly, from under the prepuce, a profuse flow of blood and of fœtid discharge, which soaked through his thick working trousers. Being now, for the first time, somewhat uneasy, and feeling very weak, he came to the hospital, and was admitted, July 23rd, 1840, into Lazarus ward, under Mr. Lawrence. Inflammation of the prepuce and of the integuments of the penis, with sloughing of the entire glans, a large portion of which protrudes from the orifice of the prepuce, as a moist black mass. Free division of the prepuce exposed the ends of the two corpora cavernosa, from which the sloughed glans had nearly separated. Pulse very feeble; he has no appetite; and cannot sleep at night. Five grains of soap-and-opium pill every night; charcoal poultice to the penis; six ounces of port wine daily; broth diet.

24th.—Inflammation of the prepuce much abated; the sloughed glans had nearly separated. Half an ounce of the essence of sarsaparilla, out of pimento water, three times a day; meat diet; continue in other respects as before.

25th.—The sloughed glans has separated, leaving a healthy granulating surface; a small portion of the urethra, which has preserved its vitality, projects from the remains of the penis.

August 13th.—Cicatrization nearly complete.

19th.—Discharged.

INDURATED CHANCRE OF THE LABIUM VAGINÆ; SLOUGHING OF THE HARDENED TISSUES; CICATRIZATION OE THE SORE.

Case 6.—Fanny A——, aged twenty; a slightly built, pallid girl; states, that having contracted venereal disease, she became out-patient at Guy's Hospital, three months ago, for a gonorrhœal discharge, and a small superficial sore upon the outer surface of the left labium vaginæ. The former got well under the use of lotions and other suitable remedies; the latter was healed by the repeated application of nitrate of silver. No mercurial treatment was adopted. Believing that she was perfectly well, she ceased her attendance at the hospital, and resumed her former habits, although she was aware of the existence of a small, hard, subcutaneous knot, as big as a pea, immediately under the cicatrix of the sore on the labium. The knot increased in size, slowly, gradually, and without pain, until its diameter was equal to that of a half-crown. Six weeks ago, a small spot of ulceration appeared in its centre. A fortnight ago, the ulceration assumed a foul, unhealthy aspect; but gave her no pain until five days afterwards, when she experienced a burning and smarting sensation, which, however, never caused her nearly so much inconvenience as the pain attending some common ulcerated fissures about the anus. Admitted into Patience ward June 7th, 1840, under Mr. Lawrence. The left labium is occupied by a mass of induration, in the centre of which is an ulcer, covered by a black slough, the size of a fourpenny-piece, and surrounded by a ring of unhealthy ulceration,—six weeks' duration. There is discharge from the vagina, and some ulcerated fissures about the anus. To take five grains of blue pill night and morning; black wash to the sore; broth diet.

9th.—The sore has become considerably larger. Bread poultice to the sore.

12th.—A circular slough, about one inch in width, and half an inch in depth, separated to-day from the sore, and left a healthy granulating surface. Omit the pills. To take five grains of soap-and-opium pill, if necessary, at bedtime; bread-and-water poultice to the sore; black wash to the fissures of the anus; meat diet.

June 25th.—Discharged. A very small hard knot yet remained. Upon this she was directed to rub every night some of the strong mercurial ointment. In about five weeks afterwards, she called at the hospital to say that she was quite well.

The cases here related show that, from a variety of causes, sloughing may attack a syphilitic sore in any of its stages. Some situations, such as the glans penis in men, or the inferior commissure of the labia, or the nymphæ, in women, are more frequently its seat than others; and there coëxists with the sloughing action, in most instances, a state of high inflammation, combined with general febrile disturbance. But a distinction must be made between those cases in which sloughing ensues two or three days after the first manifestation of the disease, as a consequence of some peculiar virulence of the poison, and those in which it occurs at a later period, and is a result of acute inflammatory action, brought on by intemperance, neglect, or want.

In the former, (Cases 1 and 2,) the poison is as effectually destroyed, and the disease as surely eradicated, as if the parts had been disorganized by some strong acid.

In the latter, (Cases 3, 4, and 5,) sufficient time may have elapsed between the first appearance of the sore and its subsequent sloughing for the constitution to have become affected, when the patient is rendered liable to a troublesome train of secondary symptoms. However high, in either case, may be the inflammatory and febrile disturbance, there ensues, generally with great rapidity, a state of depression and exhaustion, during which Nature makes but little effort to arrest the disorganizing process, and to separate the sloughs; indeed, it is not uncommon to meet with cases in which patients are laid prostrate from the very commencement, and the disease makes its way in a more chronic form, without causing much local suffering.

Case 6 illustrates a rather uncommon form of sloughing. A young female contracts a venereal sore; it heals under local applications, but leaves behind a small, hard, subcutaneous knot. Returning to her former irregular mode of life, she notices the gradual enlargement of this knot, unattended by pain; she does not, however, seek advice till nearly six weeks afterwards, when a small superficial ulcer has formed in its centre; and in the course of a few days, the mass of induration perishes and separates in the form of a dark-coloured slough, granulations arise from the exposed surface, and the part heals without an unfavourable symptom.

But sloughing sometimes ensues as a consequence of rapidly spreading and foul ulceration; and to this form of disease the term sloughing phagedæna has been applied. The striking peculiarities of this formidable affection shall be illustrated by cases in my next report.

## WESTMINSTER HOSPITAL.

CASE OF OVARIAN DROPSY—TAPPING—PERITONITIS—DEATH.

Communicated by Mr. T. G. TEBAY, Resident Medical Officer.

Eliza P——, aged thirty-six; a servant by occupation; an unhealthy, pallid, and emaciated woman; was admitted, on the 3rd of December, 1846, into Adelaide ward, under the care of Dr. Hamilton Roe, for ovarian dropsy. She stated, that though she had never been very strong, she had enjoyed tolerable health until about ten or eleven months ago, (about or soon after which time, the menstruation, always scanty and irregular, ceased,) when she felt pain in the lower extremities, and in the hypogastric region, followed by swelling of the abdomen; her urine became scanty, and loaded with sediment; the size of the abdomen gradually increased, until about ten days ago, when she was tapped, and two gallons and a half of a yellowish, viscid fluid removed. The relief afforded by the tapping was of short duration; the abdomen soon began to enlarge, and she obtained admission into the hospital. Her abdomen was very enlarged, tense, and gave a distinct sense of fluctuation on percussion anteriorly; the regions of the epigastrium and ascending and descending colon sounded hollow and tympanitic; the umbilicus became prominent

when pressure was made upon the abdomen, and also gave a sense of fluctuation; her lower extremities pitted on pressure; the cervix uteri was natural, and free from induration or enlargement. She complained of an almost constant pain extending across the epigastric region, and often over the abdomen, and which she said had existed for the last three months, and had been gradually increasing in severity; of flatulence and oppression after taking food, and of some difficulty of respiration; her chest sounded clear on percussion; her respirations were somewhat shorter and quicker than natural; she had no cough; pulse 110, small; heart's action feeble; sounds natural; tongue clean; bowels open; urine copious, and of a natural colour, limpid specific gravity varying from 1010 to 1015, very feebly acid, (on Jan. 5th, showing numerous crystals of triple phosphate.) By the use of diuretics the pitting of the extremities was relieved, and the abdomen diminished somewhat in size; but towards the end of January it had enlarged considerably, her breathing became oppressed, and she complained of great uneasiness all over the abdomen. Dr. Hamilton Roe, thinking unfavourably of the case, consulted Mr. Phillips as to the propriety of extirpating the ovarian cyst. They both agreed that it was a very unfavourable case for operation, and therefore they resolved to tap her, and to give a fair trial to Dr. Neil Arnott's mode of applying pressure in similar cases.

On the 1st of February, she began to suffer a good deal from distention and irritability of the stomach, but she did not complain of tenderness in any part of the abdomen.

9th.—Mr. Phillips introduced a full-sized trochar in the mesial line, below the umbilicus; a very small quantity of pale jelly-looking matter escaped, but no fluid; the canula was then gradually withdrawn, until only about an inch remained, when three pints and a half of straw-coloured serum escaped. The fluid was neutral, specific gravity 1017, heat and nitric acid converting it into a solid, bright-yellow mass. She expressed herself much relieved by the removal of the fluid.

10th.—At eleven o'clock last night she began to feel uneasiness in the abdomen, and slept badly. There is some uneasiness on pressure. The bowels have acted freely. Pulse 90, small; she has had one or two slight rigors; and the tongue is somewhat coated, but moist. To have calomel, two grains, opium, one grain, in the form of pill, night and morning.

11th.—The pain continues, but somewhat slighter; there is occasional retching and vomiting of ingesta. Repeat pill; to have a turpentine enema in the evening; and an effervescing draught occasionally.

12th.—Pain less, and intermittent, but vomiting of ingesta and anorexia continue, and the countenance is anxious. Twelve leeches to be applied to the abdomen; repeat the pill and draughts.

14th.—Pains have recurred at intervals, and more so the last twenty-four hours; the stomach continues to reject all ingesta, excepting effervescing mixture; she complains of pain, of burning character, in the right half of abdomen, aggravated by pressure. She has taken scarcely any nourishment for the last five days, and that of the lightest character only. Twenty leeches to the abdomen; to have half a grain of opium and two grains of calomel every third hour.

15th.—The pain still continues, but is less severe; the anxiety of countenance increases, and the stomach continues to reject all food; the pulse is small and frequent, and the tongue is coated with red, tip and edges; the abdomen continues painful on pressure; dozed a little during the night; is extremely low. Continue the effervescing draught and pills; to have three ounces of wine daily.

17th.—Eleven A.M.: The symptoms continue, with but little variation, but the exhaustion has increased. Four P.M.: The thin membrane protruding at the umbilicus, although protected by a pad, ruptured, and about a gallon of viscid, dirty-yellowish, opaque fluid, had flowed from the opening, inducing such great exhaustion, that we were obliged to give port wine freely, medicine appearing useless.

18th.—Is greatly exhausted; the fluid continues to drain away from the umbilicus, through a soft pad and bandage, amounting, from the first, to about two gallons in quantity; and the abdomen is diminished considerably in size. She gradually became weaker, and sunk the following morning, at half-past seven A.M.

*Post-mortem examination, twenty-three hours after death.*—Body much emaciated; the left lower extremity œdematous. Abdomen distended to a level with the sternum; the anterior paries thin, its muscles pale. The cavity was chiefly filled by a large ovarian tumour, the serous covering of which, together with all the peritonæal reflections in contact with it, was covered by recently effused lymph, the copious deposit of which, in various parts, produced feeble adhesions, connecting anteriorly the abdominal wall, and superiorly, the small intestines, transverse colon, and omentum, to the tumour. The tumour was found to originate in the ovarium of the right side, and belonged to the class of multilocular growths. The external or containing cyst was, for the most part, of dense fibrous structure, presenting many isolated spots, at which much thinning had taken place, as if from the pressure of secondary cysts, formed in, or attached to, the lining membrane; the lower third of the tumour was formed by numerous cells, of secondary and tertiary formation, containing different secretions, some serous, others mucoid, and in a few suppuration had occurred. Large masses of more solid growth existed towards the base of the sac, one of which, in close proximity to the uterus, equalled in size a fœtal head. All these solid portions were fungoid, and referrible to the medullary form. The upper two-thirds of the tumour were formed by cysts of larger size, filled by more fluid secretions, the total amount of which was about five pints, but the flaccidity of the external cyst showed that a much larger quantity had been contained. At a spot in the anterior wall of the sac, corresponding, when in situ, to about two inches below the umbilicus, was a mass, composed of several distinct cysts, separated by thick septa from the general cavity of the sac; these had been evacuated by the trochar during life, but, having no communication with the larger secondary cysts, prevented the complete withdrawal of the contained fluid. Every part of the lining membrane of the external cyst presented evidences of recent and acute inflammation. The pedicle of the tumour was found by the broad ligament and Fallopian tube, which latter, thickened and vascular, passed up on the left side of the diseased mass, to the extent of eight or ten inches—near the base of the pedicle, some part of the ovarium, still preserving its healthy structure, could be observed. The other ovarium and the uterus were healthy. The liver was small, and, from the gradual enlargement of the tumour, had undergone considerable compression, its acute margin being rendered obtuse, and its right extremity descending to within two inches of the iliac crest. The kidneys were in the earlier stage of granular degeneration. Mr. Quekett, (of the Royal College of Surgeons,) who investigated the structure of the tumour, states, "After careful examination of the portions of tumour sent to him, he found them to present the microscopic characters of medullary fungus; the cells were either round, oval, or fusiform, and were full of nucleoli; the softer parts contained the round cells, the harder, the fusiform."

Dr. Roe remarked, "That cases similar to the present render it impossible for us to assure patients who were deliberating whether they should encounter the risk of an operation, for the sake of being relieved from all the distress and suffering which an ovarian tumour occasions; that if they are satisfied to bear what they have already suffered, they may probably calculate upon living some years; and that they may at any time be relieved from the effects of over-distention, with little danger, by the operation of tapping."

## Original Papers.

### ON FLOODING BEFORE DELIVERY ARISING FROM ADHESION OF PLACENTA TO THE OS AND CERVIX UTERI.

By ROBERT BARNES, M.B., Lond.,

LECTURER ON FORENSIC MEDICINE, AND FORMERLY TWO YEARS SENIOR HOUSE-SURGEON TO QUEEN ADELAIDE'S LYING-IN HOSPITAL.

Since the time of the elder Rigby, the pathology of flooding before delivery has received no contribution so valuable as that resulting from the researches of Professor Simpson, of Edinburgh. The propositions he advances are briefly these:—First, that the hæmorrhage proceeds from the placental surface. Secondly, that the placenta, being wholly detached, no further hæmorrhage can occur. Thirdly, that Nature has in many cases, by separating the placenta, and expelling it before the child, adopted the surest method of remedying the original error of development. Fourthly, that the proper practice to follow, in cases of this description, is to imitate the plan indicated by Nature—i. e., to detach the placenta, and to extract it before the child.

With proper philosophical caution, however, Dr. Simpson

does not put forth his conclusions as final. He observes: "In the course of a short time, it seems not unreasonable to expect that we may have a sufficient number of cases recorded to enable us to judge with greater certainty and precision of the merits of this plan of treatment, and of the particular placental complications to which it may be specially applicable." In the course of the following observations, flowing chiefly from reflections upon three very interesting cases which have within a short time come under my notice, I think it will be shown that the caution displayed by the learned professor was wise; and that no certain line of conduct can be laid down which can be invariably followed in all cases. Each individual case will probably call for some modification of treatment.

There is a dispute, *in limine*, concerning the physiological principle upon which the expediency of the practice recommended by Dr. Simpson turns—viz., the source of the blood in hæmorrhage from placental presentation. With most accoucheurs, Dr. Lee holds that—"It is from the great semilunar, valvular-like, venous openings in the lining membranes of the uterus, and from the arteries which are laid open by the separation of the placenta, that the blood alone flows in uterine hæmorrhage." (Lectures on Midwifery, p. 361.)

To this Dr. Simpson replies, "that arteries, particularly when they are so long and slender as the utero-placental arteries are, do not give rise to any marked degree of hæmorrhage when they are lacerated or torn through; and bleeding does not readily occur from the venous openings exposed on the interior of the uterus, because venous hæmorrhage by retrogression (which the blood escaping backward into the uterine cavity would be) is here prevented by a variety of anatomical and subsidiary means. I believe, with Dr. Hamilton and others, that the discharge issues principally or entirely from the vascular openings which exist on that exposed placental surface. These placental orifices are not, like the uterine, surrounded by contractile fibres capable of constricting them; they are in free communication with the general vascular system of the mother, through the medium of the maternal vascular or cavernous system of the placenta; and the blood in that cavernous system escapes readily from the exposed venous orifices on the surface of the placenta—that being, in fact, so far its natural and forward course."

The truth appears to me to lie between the two extremes. The hæmorrhage is neither wholly uterine nor wholly placental. The facts alleged by Dr. Simpson are sufficient to disprove the exclusively uterine origin of the flooding advocated by Dr. R. Lee. At the same time, Dr. Simpson would probably be more nearly accurate were he to say that "he believes, with Dr. Hamilton and others, that the discharge issues principally," and not "entirely, from the vascular openings which exist on the exposed placental surface." There is a direct experiment to prove that the bleeding may take place from the placental surface. On injecting the hypogastric arteries of the gravid uterus, the placenta being in situ, the injection has been seen to escape from the placental surface. And Mr. Bloxam, who has injected a multitude of placentas, has assured me that Dr. Simpson's views are quite in accordance with the anatomical structure of the placenta, and what he has observed in his experiments. On the other hand, if there be a doubt as to the source of the hæmorrhage before delivery, and while the placenta is still partially adherent to the uterus, there can, I apprehend, be none that the hæmorrhage proceeds from the uterus alone in flooding after delivery, when the placenta may have been entirely removed. It seems, then, certain that hæmorrhage may arise both from the uterus and the placenta. The establishment of this fundamental fact must be attended by the conclusion, that Dr. Simpson's plan of wholly detaching the placenta will not always be successful.

To Dr. Simpson, however, will belong the honour of having effected a valuable improvement in obstetric practice, by having exposed the dangers of turning—the practice universally recommended hitherto; and by comparing the fatal results of this practice with the favourable results which have followed in cases of complete expulsion or extraction of the placenta before the child. His statistic researches, partly confirmed by those of Dr. Churchill, show, that in one case out of fourteen the mother died after the complete expulsion or extraction of the placenta before the child; whilst about one in every three of the mothers dies under turning and extraction of the child in unavoidable hæmorrhage. I think, nevertheless, that one of the cases I shall presently relate will show that the operation of turning, however dangerous in itself and objectionable as a rule must occasionally be resorted to.

*Partial implantation of placenta over os uteri; breech presentation; hæmorrhage; rupture of membranes; delivery; cessation of hæmorrhage.*

Case 1.—Catherine D——, has previously borne two children, living, at the full time; attended Oct. 21, 1845; seven months gone; has been losing blood for the last fortnight, and has been suffering from pains in the loins and hypogastrium. At nine A.M. was called to the patient. Pains racking and harassing; externally, the abdomen presents a firmly-contracted tumour, rising out of the pelvis, about the size of a child's head at the full term; the tumour is remarkably well defined and globular; the os uteri was of the size of half-a-crown, soft and dilatable. On passing the finger through the os uteri, the presenting part of the child was found to be the breech. The diagnostic marks were the tuberosities of the ischia and the coccyx. The sacrum was turned to the pubis of the mother. The tip of the finger could be carried freely round between the membranes and the cervix uteri. Anteriorly, the membranes were felt very thick and strong, and resisting the most violent contractions of the uterus; at the posterior part, a quaggy sensation gave intimation that the placenta was presenting; it was now pretty extensively detached from the uterus at this part. The hæmorrhage, which has been considerable, is now moderate. There not appearing to be any urgency for active interference, I administered an opiate, and left till half-past three P.M. At this hour the pains have not ceased; the os is now dilated to the size of rather more than a crown-piece; other things remain as before. By strong pressure and scratching during a pain, ruptured the membranes, whereupon the waters escaped, and the presenting part of the child was instantly driven through the os uteri, and the child expelled from the vagina by the same pain. The placenta was withdrawn ten minutes afterwards; the hæmorrhage ceased; the uterus contracted well; the child exhibited no appearance of vitality, but showed no sign of decomposition.

The placenta exhibited at one portion of the margin of the maternal surface a paler appearance than elsewhere; there was also some infiltration of blood in the substance of the placenta at this part; this was the part which had been adherent to the posterior lip of the os uteri, and had become detached; there was also expelled with the placenta a firmly contracted coagulum, of the size of a hen's egg, which was in all probability the result of hæmorrhage from partial separation of the placenta some days previously, and which, by the irritation it produced, probably excited contraction of the uterus. The mother recovered favourably.

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*Partial implantation of placenta over os uteri; feet presenting; hæmorrhage; vagina plugged; rupture of membranes; delivery; cessation of hæmorrhage.*

Case 2.—Jane W——, has borne four children at the full term; has generally lingering labours. During present pregnancy has observed nothing unusual up to beginning of ninth month, when, having been subject to excitement and labour attending upon changing her residence, she was suddenly seized with profuse flooding, partly fluid, partly in clots; great pains in the loins, followed by occasional giddiness and vomiting. Called to see her, June 1st, 1846, at four P.M. She is rather a robust woman, of full habit; pulse firm, 80; skin and tongue moist; some thirst, sickness, pains in the loins, and violent pains in the belly; great anxiety and restlessness; feels pain, especially when lying on the left side. Examination per vaginam: os uteri directed back to promontory of sacrum, so that it cannot be reached without great trouble by right index; by the left, the cervix is found to be nearly an inch long; the os barely admits the tip of the finger; the quaggy sensation communicated by placenta is perceived; presenting part of the child not ascertainable, though from the irregularity and mobility of the parts, I am enabled to determine that it is not the head. The hæmorrhage is still profuse; administered half a drachm of laudanum; acetate of lead, six grains; plugged the vagina with a sponge dipped in vinegar, so as to fill the vagina completely; enjoined quiet and cool air. Eleven P.M.: Some considerable oozing has escaped through the sponge; the pains continue; left the sponge in situ, as the patient did not seem to be much exhausted.

June 2nd.—Seven A.M.: Some oozing still going on; removed plug for examination; os uteri now the size of a crown-piece, and lips thinner, but still rigid; the placenta is felt detached from posterior lip and back of cervix; anteriorly, the membranes are felt, and the presenting part of child recognised to be the feet. The mother thinks the child dead, not having felt it for two days. The stethoscope placed over the centre of the abdomen reveals a feeble, smothered ticking sound

recurring ninety times in the minute. To discriminate this sound from that of the maternal aorta, I compared it with the pulse at the wrist. This was only eighty. The pulsation was therefore owing to the fœtal heart. I re-inserted the plug, and gave twenty minims of laudanum. At noon removed the plug: there has been no further flooding; os uteri the size of the rim of a wine-glass; pulse 80, pretty firm; some restlessness; occasional sensation of faintness and sickness. Still no urgency; waited, therefore, for more complete dilatation of the os.—Half-past one P.M.: Os uteri more dilated; ruptured the membranes during a feeble contraction of the uterus, just anteriorly to the border of the placenta, and seized the feet, which readily descended, and were secured by a tape; cord was still pulsating; and as, owing to the smallness of the child, there was no great pressure upon it, I saw no occasion to hurry the birth. I proceeded, therefore, gently with extraction; the cord was twisted round the neck and left arm; head was delivered at forty-five minutes past one P.M. On coming in contact with the cold air, the child gave a feeble gasp, followed by an emissive cry. The heart continued pulsating, as also did the funis; delayed severing the funis; endeavoured to excite more perfect respiration by stimulating reflex action of the respiratory nerves; cleared away mucus from the nostrils and mouth; held vinegar to the nostrils at times of inspiration. The gasp and emissive cry recurred every minute. On applying the stethoscope over the heart, found pulsations to be 60 per minute only; but they increased to 90 immediately after every inspiration, and then sunk again to 60, until the next inspiration raised them again to 90. This phenomenon I continued to watch for some time. At forty-five minutes past two P.M., perceiving no difference in the child, severed cord, allowing a few drops of blood to escape from fœtal end, before tying it. The gasps and emissive cries, accompanied by the ebb and flow of pulsations, continued as before. Wrapped the child up in flannel, and laid it by the mother. Respiration did not become more complete, and the pulsation of the heart ceased at four P.M.

On examination after death, the body of the child did not exhibit the appearance of having suffered from anæmia. After severing the cord, stimulated the uterus, by friction, to throw off the placenta. On examining this organ, found the cord inserted close to the margin, which had been adherent to the posterior lip and cervix. The part of the placenta which had been so situated and detached during labour, was indicated by its more rugged aspect over a space three inches in diameter, the presence of clots plugging up orifices of cells, and infiltration of tissue, with blood, simulating ecchymosis. The general structure of the placenta was healthy. Some clots followed the removal of the placenta.

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*Complete adhesion of placenta to os and cervix uteri; profuse hæmorrhage; death before delivery; post-mortem examination.*

Case 3.—Jane B——, aged forty-one; has had eleven children, of which two were born dead; attended in ten labours by a midwife, whose doings I had formerly occasion to lay before the readers of The Lancet, under the head of "Midwives' Midwifery." In her latter pregnancies, this patient has had flooding before delivery. August 14th, 1846, in labour with her twelfth child, under the care of the midwife alluded to. From what could be gathered of the history of the case, it appeared that pains came on at seven P.M. of the 13th; flooding recurred at intervals during night. At forty-five minutes past five A.M. of the 14th, she sunk. Mr. Frost, who was sent for, on his arrival, found her dead. An inquest was held upon the body by Mr. Mills. Through the politeness of Mr. Frost, I had the opportunity of assisting at the post-mortem examination. The patient is a stout, well-developed woman. The skin has generally a waxen, yellow appearance; the conjunctivæ and lips quite blanched.—Examination per vaginam: Os uteri found dilated; placenta felt plugging up the orifice completely. The presenting part of the child cannot be felt. Brain: A small quantity of blood in the sinuses; vascularity of membranes appears normal; on incising the substance of the brain, puncta are seen, but less numerous and marked than usual; there is no oozing of blood from the puncta. Chest: Lungs healthy; serous mucus in bronchial tubes; they are generally paler than usual; very little escape of blood on incision, even at the posterior parts. Heart: A small quantity of serum in pericardium; structure healthy; a small quantity of thin serous blood in either ventricle; a small polypoid concretion in left auricle; a larger soft coagulum in the right. On cutting across the inferior vena cava, a small quantity of thin, fluid, serous blood escaped. What little blood there was throughout the body was generally thin and fluid. Liver was healthy, but pale. Intestines generally pallid, bloodless. Uterus presented a greyish-white aspect, and occupied the normal position of the gravid organ. The rami of the ossa pubis were sawed through on either side, so as to expose the cervix uteri and vagina, and admit of the removal of the gravid uterus and vagina entire from the body. The vagina was then slit up on the anterior aspect, so as to expose the os. This orifice was dilated to the size of the rim of a wine-glass; the edges were thin and ecchymosed. At the upper part of the vagina surrounding the os, three distinct lacerations of the mucous membrane were seen, of about half an inch long, and there was ecchymosis diffused around, the result of rough examination during life. Projecting through the os was a mass of placenta, hardened by infiltration of coagulated blood; the placenta was detached from the cervix all around, for the space of two inches. The uterus was next laid open by a longitudinal incision in the posterior aspect, when the child was seen to be a male of the full size, with the head presenting, the occiput having been directed to the right sacro-iliac synchondrosis. On removing the child, a quantity of meconium was found mixed with the liquor amnii: this was washed away, and the attachment of the placenta examined. The placenta was found spread over three-fourths of the entire area of the uterus, forming a complete cul-de-sac enveloping the child. (*See* the diagram.)

The thickest portion of the placenta was inserted over the os and cervix uteri, from which point it arose all round, adhering very firmly to the walls of the uterus on every side, generally of little thickness, and terminating in a very thin margin near the very fundus of the uterus, so as to leave barely one-fourth of the whole internal surface unoccupied by placental adhesion. The cord sprung from the very margin of the placenta at the posterior part near the fundus.

The placenta was one inch and a half thick at the part corresponding to the insertion of the cord. It would seem as if the placenta, originally springing from the cervix uteri during the development of the embryo, had become compressed and flattened out by the pressure of the head, causing it to spread laterally, and occupy an unusual superficies, to make up for its extreme thinness. The origin of the cord from the posterior part of the fundus is worthy of note. This is its usual origin in the normal state of the placenta, and seems to be the spot most secure from pressure in the ordinary position of the fœtus. There was but little blood in the placenta. The left ovary had an atrophied appearance, resembling a few granules of fat, enveloped in serous membrane. The right ovary presented a similar appearance, excepting that in one spot it was vascular, and there

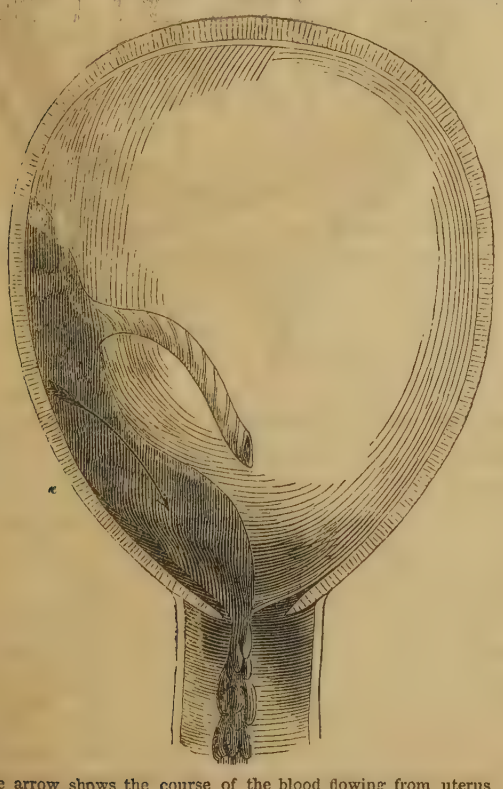
was a distinct corpus luteum, having a cicatrix in the centre, through which the ovum had escaped. The Fallopian tubes were vascular.

The foregoing cases supply several important illustrations of the pathology and treatment of placenta prævia.

1. The appearances in the placentas examined after expulsion—viz., the infiltration of their structure, and the plugging up of the orifices on the maternal surface by blood in various stages of coagulation. This condition being observed only in those portions of the placenta which had been adherent to the cervix uteri, and which had become detached during the expansion of that portion of the uterus, proves to demonstration that the placenta is, at least in part, the source of the hæmorrhage. That portion of the placenta which has been adherent to the body of the uterus, and has only become thrown off *en masse*, never presents the appearance described, for the reason, that while it continues in connexion with the uterus, the blood circulating in it flows directly onwards into the uterine sinuses, instead of being discharged at the surface by a disruption of the continuity of the canals, as is the case at the points where the placenta is separated from the uterus.

2. The appearance of blood in different stages of coagulation also tends to explain the occasional intermission of the flooding, and its renewal at intervals. The temporary cessation of the flooding is accounted for by the coagula choking up the bleeding orifices on the detached placental surface; the renewal of flooding, by progressive expansion of cervix detaching fresh portions of placenta, which continue to bleed until arrested by a similar formation of coagula. The different degrees of hardness of the coagula observed bear evidence that they were formed at different times, and mark the successive alternations of flooding, and the suspension of hæmorrhage.

3. But there arrives a period in partial placental presentation when the hæmorrhage ceases altogether, although a great portion of the placenta may still remain attached to the uterus. On referring to Case 2, where the placenta was implanted over the posterior part of the cervix only, it will be remarked that the hæmorrhage, which had been profuse, ceased when the os uteri was dilated to the size of the rim of a wine-glass. Why was this? The detached portion of placenta had become plugged up by coagula, and *the remainder of the placenta, being attached to the body of the uterus, was not liable to become separated during the contractions of that organ.* (*See* the diagram.) It was in fact reduced to the normal condition, in which the placenta is attached wholly to the fundus uteri. In this condition, no part of the placenta being opposed to a portion of the uterus which is exposed to a greater degree of contraction than the remainder, it is not subject to partial detachment, and consequently to hæmorrhage.



The arrow shows the course of the blood flowing from uterus through placenta, to escape at detached surface.

*a*, Angle formed by separation of placenta from uterus. When the detachment has reached this point, if the detached surface of placenta has been sealed up by coagula, the hæmorrhage will cease, as no further detachment will occur until the whole placenta is thrown off *en masse*.

The preceding facts establish a most valuable indication in practice. They serve to show that Nature, if closely watched, may, at least in partial placental presentation, be trusted to more than is generally admitted. They serve to show that turning, and Dr. Simpson's plan of artificially detaching the placenta, (which, it must be admitted, is in itself a severe and even dangerous operation,) may be sometimes dispensed with altogether, and in most cases be deferred. They justify a stronger reliance on the use of the plug or tampon, which is an easy and a harmless operation. Supposing you are called to a case of flooding from partial placental presentation, where, although the hæmorrhage has been abundant, still the patient's strength is good; the os uteri is scarcely at all dilated; it is rigid. In such a case, in order to effect either turning or total separation of the placenta, the hand must be forced through the os uteri at the risk of laceration, and the other dangers attending those formidable operations. But if, by plugging the vagina, you promote the blocking up of the bleeding orifices by favouring the coagulation of the blood, you may safely reach the period when the os uteri shall be fully dilated, and when that portion of the placenta which had been adherent to the cervix has been wholly detached, and further hæmorrhage precluded by the sealing up of the detached placental surface. The remainder of the placenta, though still adherent, as it expands and contracts with the expansion and contraction of the uterus, will not bleed. If by following this practice you can safely bring your patient to the termination of the first stage of labour—viz., the complete dilatation of the os uteri, the case is resolved into one of natural labour, and unless any other complication arises, may be treated in the usual manner. The Case No. 2 affords a complete illustration of these remarks.

In Case No. 1, I conceive the treatment recommended by Dr. Simpson would also have been improper. The labour was here evidently lingering, in consequence of the extreme toughness of the membranes, which, preventing the escape of the waters, did not allow the uterus to contract freely. The labour would no doubt have been terminated earlier, had the membranes been ruptured sooner. The os uteri was sufficiently dilated: besides, I have observed, that when a labour is lingering from retention of the waters, the os, previously rigid, will often expand immediately this obstacle is removed. I think the happy result of this case may be explained consistently with the doctrine of Professor Simpson. It is probable that rupturing the membranes, by allowing the waters to escape, admitted of the sudden and forcible contraction of the uterus, (so sudden, we have seen, that it was sufficient to expel the child at one pain,) and consequent complete separation of the placenta—the very object sought to be attained by Dr. Simpson.

The seal of success ratified the propriety of the treatment adopted in the two preceding cases. To decide upon the line of conduct which ought to have been pursued in the third and last case, is a more doubtful matter. It deserves the most attentive consideration. In the first place, we may observe, that this remarkable case was one of complete placental presentation, and presents an example of more extensive attachment to the uterus than any other case recorded. Nature was here evidently incompetent to the task of safely terminating the delivery. Under the midwife's non-interference, the patient sunk from hæmorrhage. Active measures were evidently called for. What should have been done?

1. Could the plug have been trusted to? The plug could only have been useful up to a certain point—that is, until the os uteri had become sufficiently dilated to admit the hand. There could be no hope of the flooding being put an end to by the complete dilatation of the cervix, and the sealing up of the detached placental surface. The attachment to the whole cervix precluded that.

2. Could Professor Simpson's plan of detaching the whole placenta by the introduction of the hand have been carried into execution? I believe this would have been, if not impossible, at least inadequate to the emergency. Firstly, the enormous surface to be separated, equal to three-fourths of

the whole internal superficies of the uterus, would have necessitated a great loss of time, during which the flooding would have gone on, up to a certain point, in an increasing ratio, in proportion as the detachment proceeded. Secondly, the accoucheur might have given way under fatigue; his hands would have been cramped before the completion of his task. Thirdly, the forcible detachment of so large a surface must have been attended by severe contusion, if not more serious injury, to the uterus, occasioning risk of inflammation afterwards, in the event of recovery from the delivery. Fourthly, the extreme thinness of the placenta would have presented another obstacle. As the accoucheur proceeded in his task, he would soon have pierced the sac of the amnion. Fifthly, the difficulty would have been increased by the firmness of the adhesion between placenta and uterus. Dr. William Hunter, indeed, says, the separation of the placenta from the uterus is "commonly practicable, with the least imaginable force." In this case I fear it would have been found otherwise.

3. Could partial detachment have been practised so as to reach the membranes, rupture them, seize the child's feet, and deliver by turning? This proceeding would have been as difficult as that of detaching the placenta; and it would have been open, in a lesser degree, to the same objections. There being, moreover, but a small portion of the very fundus of the uterus unoccupied by placental adhesion, the child could not have been brought through the os uteri without extensive laceration of the placenta.

4. What course does there remain to consider? There is an old and generally exploded method of treatment, which, it appears to me, offered the only chance of success—I mean, the forcible perforation of the placenta by the hand, and extraction of the child by turning. Had this operation been resorted to, by the removal of the child from the uterus, the chief obstacle to the full contraction of that organ would have been withdrawn, the hæmorrhage would have been under command, and the usual applications, as kneading the uterus externally, or stimulating it by the introduction of the hand internally, the ergot, cold water, &c., might all have been had recourse to. And had it eventually become necessary to detach the placenta, it might still have been done, but much more easily, and under far more favourable circumstances, than whilst the operator was yet encumbered by the presence of the child. While advocating the expediency of perforating the placenta for the purpose of extracting the child in this particular case, I am far from seeking to revive an operation which has been deservedly condemned. Under any treatment, anxious consideration of the unusual difficulties attending this case induces me to conclude that the mother would have died. It is possible that the child might have been saved had the Cæsarian operation been performed immediately after the death of the mother.

The case in question is a purely exceptional one. It inculcates the valuable lesson that Nature refuses to be circumscribed by systems, and serves to place in a most forcible light the truth of the proposition I enunciated at the beginning of this paper—that no certain line of conduct can be laid down which can be invariably followed in all cases of placenta prævia. The three cases I have detailed, taken together also, go far to prove that the plan proposed by Dr. Simpson, of detaching the placenta before the birth of the child, is not even generally applicable. It seems proper also to point out that there would be a serious fallacy in Dr. Simpson's conclusions if we were to adopt unreservedly the statistics he has given as the exponent of the relative success that would result from the old methods of treating placenta prævia, and that which he has proposed of detaching the placenta. It must not be overlooked that in Dr. Simpson's statistics he has included cases in which the placenta was thrown off spontaneously. Such cases are widely different from those in which the severe operation of detaching the placenta by the introduction of the hand has been resorted to. The operation of turning is scarcely more dangerous. At the same time, it is my belief that we are not yet in possession of a sufficient number of facts to enable us to come to any determinate decision respecting the exact value either of the treatment proposed by Professor Simpson, or of any other.

I have analyzed the above cases with reference to the single question of the pathology and treatment of placenta prævia; but the points of interest they present are not by any means exhausted. For the sake of greater distinctness, I propose to complete the consideration of these cases in a separate communication.

Park-road, Notting-hill, March, 1847.

# ON THE NOMENCLATURE OF THE SCIENCE OF MEDICINE.

By R. G. MAYNE, M.D., Leeds.

## No. V.

ANASARCA—GASTROCNEMIUS—PSALLOIDES—INFINITESIMAL.

*Anasarca.*—This word has recently been brought more especially under the notice of the profession, in the pages of The Lancet, by a remark of the editor in approval of an alteration of its previously reputed grammatical character, as a noun of the first declension. If I recollect rightly, that remark proceeded on the statement of some one,—but of whom, or the precise place where it was inserted, my memory does not enable me to show,—to the effect that such alteration had been made. It rested, however, on an opinion expressed by Kuhn, that this word has been mistaken for a noun of the first declension, but that it is really indeclinable, *σάρκα* being the accusative of *σάρξ*, and governed by the preposition *ἀνά*, which, by a rule of Greek grammar, is joined only to the accusative case. With all respect, I cannot help viewing this opinion of Kuhn's as a mere rash dictum, on which too much stress has been laid, to which too ready acquiescence has been given.

It is very true that *σάρκα* is the accusative of *σάρξ*—that the rule declares the preposition *ἀνὰ* is joined only to an accusative; and therefore, if this preposition were to be introduced into a Greek sentence, in reference to the noun *σάρξ*, the latter must, in all propriety, be placed in the accusative case, which is *σάρκα*. But this forms no rule for the formation of a Latin compound term, nor any ground against constituting that term a noun of the first declension. It proves nothing more than a coincidence—a similarity of sound between that case of the Greek noun *σάρξ*, viz., *σάρκα*, and the latter half of the nominative of this Latin term, viz., *sarca*—a circumstance which by no means warrants its being declared indeclinable. In truth, the alleged mistake must have been of very long standing, for the word has been in general use among professional men for centuries, and is one of the few medical terms to be found in classical dictionaries—as a noun of the first declension. It is simply a term compounded from two Greek words, to which, in order to its complete adoption into the Latin, like a host of others, that grammatical condition has been originally assigned for convenience in medical language, without reference to *ἀνὰ* being a preposition, or to the circumstance that, as such, the Greek rule joins it only to the accusative, that case of *σάρξ* being *σάρκα*.

So rigid an observance of grammatical rules as an opposite conclusion would imply, is not practised in the Greek language itself. For example, old Latin authors have employed a synonyme of this word, *catasarca*. Now, although I have not been able to trace a Greek synonyme for either *anasarca* or *catasarca*, there is an adjective term very closely allied to the last mentioned—namely, *κατάσαρκος*, signifying corpulent, obese, fleshy. It is compounded of the preposition *κατὰ* and *σαρκὸς*, the genitive of *σάρξ*. By a rule of Greek grammar, this preposition *κατὰ* governs *the genitive* and accusative; but can it be for a moment imagined, that therefore *κατάσαρκος* is, or ought to be, indeclinable?

Far less is such strictness exercised in the formation of Latin compounds. Thus, *perpendiculum*, a plumb-line, a word which exactly resembles *anasarca* in its composition, being formed of *per*—the equivalent of *ἀνὰ*, and like it, too, a preposition governing the accusative—and *pendiculum*, which, like *σάρκα*, the accusative of *σάρξ*, is the same case of *pendiculus*, a rope, or cord from which anything hangs. This word *perpendiculum*, in place of being indeclinable, as by Kuhn's reasoning it ought, ranks as a regular noun n.; without regard at all to the rule affecting prepositions of this class.

Least of all, should the construction of a Latin compound term be cramped by attention to any rule of a different language, and as well might it be decided that *moxa* has been "mistaken" for a noun of the first declension, because it is a Japanese word; or *myrrha*, for that it is a Hebrew one, and that both are really indeclinable. To employ a metaphor: the soldier who is enlisted into the army of a foreign nation, no longer regulates his duty or his dress by the discipline to which he was subject in his own country, but must do both in obedience to that of his new service. It is unnecessary to multiply examples; those given suffice to show, I trust, how uncalled for is the alteration, how unsound the opinion, of Kuhn—an opinion, which, if energetically acted upon, would narrow the resources of classical language. I hold, then, that

*anasarca* is properly a noun of the first declension, formed without any reference to *ἀνὰ* being a preposition, or *σάρκα* being the accusative of *σάρξ*, or to the rule by which the former is joined only to an accusative.

*Gastrocnemius.*—This word is presented in medical dictionaries as a noun m:, but erroneously so, it being, in every point of view, an adjective of the first and second declensions. In the same works it is stated to be derived from *γαστὴρ*, the stomach, and *κνήμη*, the leg, and is applied as a name for "two, or, according to some anatomists, four muscles," that "form the fleshy part, or calf, of the leg." This, however, is neither its direct nor immediate derivation, nor does this term, *in itself*, mean the calf of the leg. Classical authorities contain two nouns, *gastrocnemia* and *gastrocnemion*, both adopted *literatim* from the Greek, and each signifying the *calf of the leg;* but they do not anywhere, in my experience, make mention of *gastrocnemius*. Some of the older anatomists have indeed employed in their writings the words *musculi gastrocnemii;* these, however, do not justify the course adopted as to this term. Their translation is not, as would seem to have been supposed, "the muscles, the *gastrocnemii*,"—as we might say, the men, the Thompsons,—but is simply "the muscles of the calf of the leg," *gastrocnemii* being the genitive of *gastrocnemion*, and the only case in which such a termination was to be found, governed, according to the familiar rule, by the substantive *musculi*. It is clearly an error, therefore, to assume from this the existence of a noun m:, *gastrocnemius*, as the special name of a muscle, or muscles, because this word can only bear allusion, or *relation*, to the *calf of the leg*, which consists of several muscles, as well as of integuments, *fascia*, and other objects. But to invent an adjective term on the model of the two classical synonymes, *gastrocnemia* and *gastrocnemion*, that should mean pertaining, belonging to, or connected with, the calf of the leg, was quite consistent with established usage. To adopt, also, into the English language, by a very common custom, a single word, fashioned exactly in the same form as the invented Latin term, (excepting only the terminating syllable,) and expressing the same thing—viz., gastrocnemian, was alike legitimate and allowable; both terms, English and Latin, being applicable, not only to the two, or four muscles, but to every other part entering into the formation of the calf of the leg—the skin, cellular tissue, *fascia*, vessels, and nerves composing or traversing its region, and to the region itself. *Gastrocnemius* bears the same relation to *gastrocnemion*, as, it was attempted to be shown in a former paper, (No. II. p. 607, vol. ii. for 1846,) *arytœnoideus* (*musculus*) did to *arytœnoides* (*cartilagines*.) In fact, it stands precisely in the same position as the numerous adjectives ending in *us*, *eus*, or *is*, which are, by habit, similarly applied to muscles as names, though in reality they are only terms indicative of their form or situation, the word *musculus* being always understood, most of them having at the same time a general application. In corroboration, the same muscle or muscles to which *gastrocnemius* is applied, is, or are, also distinguished by the adjective term, *gemellus* (*musculus*), or the double muscle.

*Gastrocnemius*, therefore, hitherto treated as a noun m:, is an adjective, meaning relation to the calf of the leg, of some object indicated by a noun to be placed in agreement with it. For although it be common enough, in our English idiom, to use an adjective substantively, and so to speak and write without scruple of the *gastrocnemius*, or the *gastrocnemii*, still this is not strictly correct, and can never constitute an authority for representing this word as other than an adjective.

*Psalloides.*—This familiar anatomical term, (*corpus psalloides,*) as it appears in medical works, and as taught in lectures, is, I have reason to think, misspelled, its derivation is misstated, and, in regard to the *appearance*, as of the strings of a lyre, which it is more particularly employed to denote, is misapplied. It is always spelled with double *l*, and stated to be derived from *ψάλλος*, a stringed instrument, and *εἶδος*, resemblance, in allusion to certain lines, like cords, which appear on the under surface, posteriorly, of the *fornix* of the brain, for this reason termed *corpus psalloides;* which appearance, from the same cause, is also termed *lyra*. The true term is *psaloides*, as if *psalidoides*, which it ought correctly to be, and not *psalloides;* it is not derived from *ψάλλος*, a word I am unable to discover in any lexicon at hand, but from *ψαλὶς*, an arched work, and *εἶδος*, likeness; like, or resembling, an arched work, an arch, or vault. The *corpus psaloides*, therefore, cannot be a synomyme of *lyra*, which is the correct name for the appearance of cords or lines on the under surface of the *fornix*, but is another term for the *fornix* itself —viz., the arched, or vaulted body.

*Psaloides* thus appears to be erroneous in three distinct respects—its orthography, the etymology hitherto assigned to it, and its application as a synonyme of the *lyra*, the last constituting a blunder—albeit a trivial one—in the anatomical description of the internal parts of the brain. It is not difficult to perceive how error, in the first two particulars, may have arisen, and how naturally these would lead to its commission in the third, and also to the confounding it with the *lyra* by anatomists, who, too much absorbed in the prosecution of their own special department of science, continue to teach, as they themselves were taught, without a thought of the term *corpus psaloides* being correct in itself, or properly applied or not. I intend, consistently with these remarks, which, I shall but say, are not the produce of a spirit of cavilling, but the result of conviction, arrived at after careful investigation, to give its true orthography, etymology, meaning, and application—viz., psaloides, adj: (from *ψαλὶς*, an arch, or vault; *εἶδος*, resemblance;) resembling an arch or vault; and so, applied to the body otherwise termed the *fornix*.

*Infinitesimal.*—For this word, or, at least, its very general use of late, we are beholden to homœopathy, to illustrate some of the childish fancies of which it was introduced into professional language. At first, it was spelled infinitessimal, but was soon changed to infinitesimal, the form in which it is now employed. But is this spelling itself correct? Or, is it not farther from being so than the former? I am inclined to answer affirmatively of the latter, or alternative query. The word is the English synonyme of *infinitissimus*, the superlative degree of *infinitus*, infinite, or without end, and should appear in conformity with it, as there seems to exist no reason for adopting a different spelling. No doubt there are several words, the latter portion of which has the same arrangement of letters as that objected to, and this circumstance, perhaps, has had its share in suggesting it. They are chiefly drawn from Latin numeral adjectives, as vigesimal, trigesimal, nonagesimal, &c.; but it is to be kept in view, that these are formed in strict accordance with the orthography of their originals, *vigesimus*, *trigesimus*, *nonagesimus*, &c., while there is no such ground for the same spelling in the instance before us. On the contrary, ought it not, in proper consistency with *its* original, to be infinitissimal?

Leeds, March, 1847.

## ON THE TREATMENT OF NEURALGIA.

By R. H. ALLNATT, M.D., A.M., F.S.A.

In the "Alphabetical Notices" which have appeared from time to time in the pages of The Lancet, from the pen of Dr. Dick, that gentleman has improved upon the practice of his predecessors. It has hitherto been the almost invariable rule, in the routine prescriptions of modern practitioners, to administer the gentler tonics and narcotics in harmonious conjunction; but Dr. Dick has stepped from the ranks, and he assures us, on his own individual testimony, that "in deep-seated or peripheral neuralgia, quinine, united with iron, zinc, sulphate of copper, or nitrate of silver, may be given in combination with extract of hop, lettuce, hyoscyamus, conium, and even the hydrochlorate of morphia."!

Let me stop for one moment, and inquire, *in limine*, of Dr. Dick and the other advocates of the narcotico-tonic system, upon what principle their therapeutic views are grounded, and what idea they may have formed of the proximate cause of neuralgia.

A case has occurred in my practice, at the moment of my writing, which will form a text for the illustration of the brief observations which I am about to offer:—A gentleman called on me, a fortnight ago, suffering from a severe tic of the trifacial nerve, which branches upon the cheek and forehead, and the paroxysms observed something like an irregular periodicity. His appetite was good, and the functions of the stomach were apparently uninjured; the liver secreted a due quantity of bile; the bowels acted with regularity; and nothing could be detected, after the most minute search, to account for the agonizing pain in the peripheral expansions of the sentient nerve. As is my custom, I placed him under a preliminary course of active purgatives, and the pain in the face, and, indeed, all the symptoms, were aggravated to a considerable extent. Disregarding this temporary manifestation, I urged upon him the necessity of continuing the aperients until their full effect should be produced; and this morning he informed me, that in the middle of the night he had a most copious evacuation; undetected scybala, in large quantities, had been ejected from the bowels: he immediately experienced an inexpressible feeling of relief, and the facial tic has totally disappeared.

Now, this was comparatively an obscure case; for nothing

could be detected in the system—no aberration of the general health—to account for the local malady; and there was little else to direct the treatment than the analogy afforded by cases about which there could be, I conceived, little doubt.

Suppose, for a moment, that this man had been placed under a course of tonics and narcotics, what would have been the inevitable result? Destruction of the general health, and an entailed perpetuity of the local disorder.

In the first edition of a work I published some five years ago, on tic douloureux, I ventured an opinion, founded then on practical observation, that "neuralgia almost invariably arises from some aberration of function of the chylopoietic viscera;" and although the assertion was condemned as being of too sweeping a nature, further observation has confirmed me in the belief of its perfect correctness. Bichat says, "In neuralgic paroxysms, there are often spasmodic vomitings, increased action of the heart, and so forth; and every man of experience will readily concur with Bichat in the truth of the statement; and what are they all, but manifestations of a cause efficient to the production of the effects which follow? Then we have, again, as another step, that which I have denominated "the process of alternation," which stamps and characterizes the remote peripheral neuralgia. A patient will often tell you that an acute pain in the hepatic region, to which he had been subject, perhaps, for years, suddenly ceased on the accession of a severe facial neuralgia, and *vice versâ*, so that the disorder, in some instances, will alternate with unceasing regularity.

Still more obvious are the deductions to be derived from the more decided manifestations—such as clay-coloured evacuations, darting pains in the thorax, tenderness at the pit of the stomach, distention of the duodenum or intestines, simulated hysteria in males, and the hysteria in females, which may equally arise from irritation of the uterine nerves, and any of the internal ganglionic centres. Hence proceed the intimations of the mode of practice to which we may resort with well-grounded anticipation of ultimate success.

Inhalation of ether has, of course, at this time, claimed its advocates; and there is no doubt that it may for a moment so deaden the universal sensibility as to render the patient insensible to the morbid excitement of an irritated nerve, and thus quell a paroxysm of neuralgia: this transient immunity is, however, the whole of the benefit we shall probably derive from narcotic inspiration.

The great object of all our endeavours should be to strike at once at the root of the malady—to remove the cause, and the effects will cease; but this can never be permanently effected by narcotics and tonics. I have seen cases treated by the "gentler method" of which I have spoken, and the results were fearful. What shall we say, then, to the nitrate of silver, the hydrochlorate of morphia, and disulphate of quinine?—a combination, I fear, proposed without due consideration, and one which, if adopted, would lead to unmitigated and irremediable evil.

Suffolk-place, Pall-mall East, March, 1847.

## RHEUMATIC NEURALGIA OF THE HEAD AND FACE TREATED BY THE INHALATION OF ETHER.

By ARCHIBALD B. SEMPLE, Esq., Surgeon.

Mrs. ——, aged about thirty-five; has been married about four years, but has never had any children; catamenia quite regular; is of a dark sallow complexion, spare, and of very active habits. She is a native of Scotland, but has resided here about four years. She states, that at the age of sixteen she was violently salivated for inflammation of the liver, and that shortly after her recovery she began to suffer very much from severe head and face-ach, coming on in periodical paroxysms, at intervals of from one to six months, the attacks generally lasting about twenty-four hours. About four years subsequently, she states that she was treated for erysipelas of the head and face, of a very dangerous character. Again, two years subsequent to this last attack, she was treated for rheumatic fever, which lasted four or five weeks, every part of the body (the head only excepted) being implicated. This trio of very dangerous complaints she attributes to exposure to cold and wet, as she happened at that period of her life to be so circumstanced as to bring her under their pernicious influence. From that time to the present (particularly since she came to this country) she has suffered most acutely from similar attacks, but at intervals of from two to four weeks. About two years ago she placed herself under medical treatment, and notwithstanding every well-known remedy (the division of the branches of the great nerve of sensation excepted) was resorted to, comparatively little good was effected. For the last four months the patient has been under my care, and although I have diligently administered many of the much-talked-of remedies, and applied all sorts of external applications, I regret to say I have been equally unsuccessful in affording permanent relief.

On the invasion of an attack, the following are the symptoms present:—There is felt a creeping sensation of cold, commencing at the feet, and gradually extending over the body; the lower extremities then become enfeebled; there is nausea, sometimes considerable, at others not great; and when emesis takes place, either voluntarily, or from the exhibition of an emetic, temporary relief is afforded. These symptoms generally set in, in the afternoon, and gradually increase till evening, when the head and face symptoms manifest themselves in the following manner:—There is first observed slight lachrymation of the right eye, (for it is almost invariably the right side which is affected,) with frequent spasmodic twitches of the upper and lower eyelids. Next all the well-known pathognomonic symptoms of facial neuralgia manifest themselves, all the muscles down to the lower maxilla being affected. The forehead and entire side of the head, extending as far back as the occiput, and down the neck as far as the shoulder, are next, in rapid succession, involved. When the pain has continued for some time, a feeling of puffiness of the face and scalp is communicated to the touch of the patient and attendants. The patient is now for eight or ten hours "torn to pieces," as she terms it, before the pain, which frequently renders her insensible, reaches its acme. Her sufferings then gradually abate, and not unfrequently there is perfect freedom from pain in two or three hours. During this intense suffering, the pulse seldom exceeds 65 or 70 beats in the minute, and I have never found it of an inflammatory character.

If, during the attack, pressure or friction be resorted to, over the face and scalp, the pain is generally greatly augmented. Cold applications drive the patient almost mad. Most frequently, the greatest relief has been afforded by very warm anodyne fomentations, mustard pediluvia, and the exhibition of brisk saline purgatives. Finally, enveloping the affected parts in warm dry flannel, and enjoining rest, is all the treatment usually had recourse to.

Finding that everything hitherto adopted had completely failed in the subduction of the complaint, I determined upon putting my patient under the influence of ether, the first opportunity that presented itself. On Monday last I was sent for; I found the patient in bed, labouring under very great pain. Having readily obtained her consent, I at once applied the ether, in the manner usually adopted. She inhaled the vapour, in the recumbent posture, for upwards of five minutes, but without any effect. Waiting a few minutes, I again applied it for five minutes more, but with like want of success. I now placed the patient in a sitting posture, and again caused her to inhale; and in two minutes, the pulse (at first a little excited) fell five beats, the eyes began to roll upwards, and became fixed. I now laid her head upon the pillow. She appeared sound asleep, and snored loudly for ten minutes, when she awoke. She stated that she heard herself snoring; also, that she confusedly heard what was said in the room by those in attendance. She could not tell me, however, that I had pinched her very smartly on the arm, which I did, during the narcotic state. I have now only to mention, in few words, that prior to administering the ether, the pain was of a sharp, stabbing, and excruciating character, whereas it was now converted into a pain which she described as being heavy and dull. The acute pain did not again return. In a few hours she came down stairs, expressing herself much pleased with the relief afforded, and signified her readiness, when next attacked, to undergo the same operation.

In sending you the above rapidly sketched case, I have had two objects in view:—First, to bear my humble testimony to the power of ether, in alleviating, in some measure, human suffering—a fact, I believe, now pretty generally acknowledged; secondly, to solicit some of your numerous contributors to suggest some remedy, which, in their hands, has been found capable of eradicating neuralgic affections, bearing in mind, however, that in this case, iron, mercury, arsenic, quinine, the shower-bath, sea-bathing, &c., and the whole category of antispasmodic and narcotic medicines, have been prescribed in vain. One observation more. I have in vain endeavoured to discover if functional or organic derangement of any of the internal organs existed. The teeth are sound; and the spine,

on pressure, is not at all affected. I may remark, that the patient, when free from periodic pain, enjoys in the intervals comparatively good health, the appetite and digestion being good.

March, 1847.

## ON THE REMOVAL OF STAINS IN LINEN MADE BY NITRATE OF SILVER.

By W. B. HERAPATH, M.B. Lond., Bristol.

Medical practitioners in the habit of using the nitrate of silver extensively, as a remedial agent, must have frequently heard loud complaints of their patients' linen having been indelibly stained and spoilt, by some accident having occurred during its use; and in many cases, patients have refused to employ these preparations, in consequence of the extensive destruction of linen which they occasion. I have therefore very little doubt that the following observations will prove most acceptable to my brother practitioners:—

These dark stains consist of very finely divided metallic silver in intimate union with the fibres of the cloth. Had they been oxide of silver, any diluted acid would have dissolved them; but nitric acid alone produces any effect upon them, which of course cannot be employed on account of its powerfully destructive effects upon the linen fabric. Iodine immediately converts them into iodide of silver, which is instantly dissolved by a solution of hypo-sulphate of soda, and the cloth remains as white as when issued from the bleaching-house, and as firm and durable as ever.

The best mode of employing this substance is to strain the spotted linen over a basin of hot water, and then to let fall upon each spot, previously moistened with water, a few drops of tincture of iodine, and instantly to pour sufficient solution of the hypo-sulphate of soda to dissolve the iodide produced, and then immerse the spot in the water beneath, to wash out and cleanse the tissue, at once, from the stain and chemical reagents employed. The tincture of iodine of London Pharmacopœia strength is the one I employ; and one drachm of crystallized hypo-sulphate of soda, dissolved in two ounces of water, will make an excellent bleaching liquid.

A patient may thus be very readily taught the manner of removing an unpleasantness frequently attending the use of a most valuable remedy.

March, 1847.

## ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

## THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from p. 276.*)

*Colocynth.*—In England, we regard colocynth as a useful and safe purgative, when properly combined, and given in proper doses. In France, they have what we cannot help considering a groundless jealousy of it. There is no doubt, however, that it disagrees with some persons, causing very marked irritation in the stomach and bowels, attended with thirst, griping, &c. We have been consulted by two married women, sisters, in one of whom colocynth causes syncope, and something approaching to it in the other. It may be proper to state that these women belong to what is called the better ranks, and have many of the luxurious and enervating habits which too much prevail there. I have elsewhere quoted (see "Derangements, Primary and Reflex, of the Organs of Digestion," page 335) the singular and acute observation of Broussais, which I beg leave here to re-quote. "Si l'on y fait une serieuse attention, on reconnaitra que l'education rend les hommes plus attentifs à ce que se passe dans leurs viscères, et leur apprend à se sentir d'une manière plus exquise. L'homme stupide et à demi civilisé a quelquefois les viscères disorganizés avant qu'il se plaigne; l'homme d'esprit et celui qui est livré aux arts d'imagination, est si fidelement averti du bien etre et du malaise de ses organes, qu'il appele toujours du secours de bonne heure." He adds, that in the military hospitals persons of intelligence and education always gave him much less trouble in forming his diagnosis of their diseases, than persons ignorant and stupid. Every practitioner of the slightest experience will acknowledge the justice of these remarks.*

But though idiosyncrasy may render colocynth inadmissible in a few cases, and morbid susceptibility in the ventriculo-intestinal mucous membrane may oppose difficulties in some others, yet in the majority, the extract of colocynth, combined with blue pill or rhubarb, as need may be, is an efficient and sufficiently safe purgative. Except in persons who will bear, or who require, energy of treatment, the union and simultaneous administration of aloes and colocynth demand caution, as their combined operation is occasionally harsh. Scammony may be advantageously combined with colocynth. Gamboge is often so combined by some, and many of the patent aperient pills include one or both ingredients. Neither, however, in this nor in any other combination does the writer prescribe or recommend gamboge, being satisfied, from repeated observation, that it invariably does more harm than good.

Colocynth should generally be guarded in its action by antispasmodics and carminatives, such as assafœtida, canella, cardamom, &c.

*Colon.*—We have not much to add, under this head, to the remarks on the cæcum in a former number, (see The Lancet for January 9th, 1847,) and which, to a great extent, apply equally to the colon. We have not, however, referred to the many obscure symptoms and affections of distant organs, often occasioned by loaded and deranged states of the great bowel. Thus palpitation and dyspnœa are not unfrequent consequences of impacted or greatly flatulent conditions of the colon, owing to pressure of its transverse portion on the descending aorta. From a similar pressure on the vena cava inferior, varices of the veins of the thigh and leg, swelling of the feet, hæmorrhoids, anal or uterine hæmorrhages, may result.

There is little doubt that from preternaturally sordid states of the colon absorption into the circulation of excrementitious matters takes place, causing morbid changes in the secretions, sensibly offensive conditions of the respiration and of the cutaneous transpiration, and often palpable disease of the cutaneous membrane; sometimes foul and dangerous abscesses. Further, from the prolonged contact of scybala and hardened fæces in the cells of the great bowel, ulcerations of its mucous surface by no means unfrequently occur, apt to lead to the most grave consequences, such as dysentery, or absorption of pus or excrement into the portal circulation, ending in either diffused inflammation or disseminated abscesses of the liver. Such results are more frequent than is usually supposed.

In ordinary cases, the best evacuant of the colon, in its loaded and preternaturally offensive state, is a bolus, at night, of blue pill, aloes, and myrrh, followed, next morning, by a dose of castor oil, with or without a turpentine enema. Turpentine, as I have already remarked, has a most cordially stimulating and corrective effect in loaded, torpid, fœtid, and flatulent states of the cæcum and colon. In some cases, it is necessary to repeat the above bolus, on alternate nights, for a week or ten days, before the desired subsidence and softness of the abdomen, in the track of the cæcum and colon, are obtained; by which we are assured that the great bowel is disembarrassed of long-formed accumulations. A course of vegetable bitters and laxatives, such as aloes and taraxacum, and injections of cinchona and oak-bark decoction, are simultaneously to be employed.

There may be some grounds to suspect that the following interesting and rather obscure case is one, partly at least, of disease of the great bowel. It is that of a highly respectable gentleman in general practice, who, though unknown to me, has been pleased to request my opinion of his case. He is seventy-two years of age, and resides in the country, and is unable to come to town, and hitherto I have been prevented from getting to his place. It is with his sanction that I give the following details of his case, as contained in a letter to myself. After stating, as his reason for not coming to London, that a late journey by railway had brought on hæmorrhage from "some part of the urinary apparatus," he proceeds:—

* In the work above referred to, I have given (pp. 334, 5,) a singular case of preternatural sensibility to the action of various drugs. It was that of a lady, long subject to a very complicated form of irritability of the stomach and bowels, and who was for a considerable period under my care. She was and is a woman of superior intellectual acquirement and cultivation, and her imagination is extremely excitable. She was never married. I shall simply quote my own words:—

"Tonic medicines she detects by their producing a tightness of the temples. A grain of carbonate of iron, taken once or twice a day, for two or three days, is sufficient to cause her to complain of the sensation referred to, even when purposely kept unacquainted with what she is in the receipt of; which, to test the truth of her statement, I have disguised in every way. Sedative medicines, such as hyoscyamus, conium, &c., she detects by their producing a dryness of the tongue. Doses of ten drops of a solution of a drachm of the extract of hyoscyamus, in an ounce of orange-flower water, caused this feeling. Ten drops of a solution of a scruple of nitrate of potass, in an ounce of rose-water, produces a sensation of chilliness. Five drops of antimonial wine, or the sixth part of a grain of ipecacuan, causes the most decided nausea, and sometimes vomiting."

"I shall therefore attempt to describe my symptoms; and although it is most unsatisfactory and, I fear troublesome to you to read the details, yet I shall be thankful if you will tell me what you think of my state. I have, from time to time, consulted very many of the most eminent members of the profession, but they have not clearly understood my case, and have not relieved me. Dr. ——* thought my disease was in the cæcum; others, that it was in the colon; others, in the liver; and that my sufferings were from flatulence and acid. Mr. —— examined the rectum more than a year ago, and found some thickening of the mucous membrane from inflammation. My motions, when figured, are rather flattened, but not small. Mr. —— advised only opium suppositories, and not injections, and castor oil occasionally. I have a small hæmorrhoidal excrescence, and there never has been any pain in the rectum. The motions are in general healthy. I go to bed between ten and eleven, in a pretty easy state; pass some urine, and sleep till three or four in the morning, when I take a cup of tea, with a slice of bread-and-butter, and pass some more urine. The tea seems to soothe me; but about five or six, I am seized with a violent griping pain, great flatulence and distention, which continue for a longer or shorter time. At eight o'clock, I take two ounces of warm milk, and have soon after a pulpy motion, with some, though not much effort. I pass urine again, during which I suffer from † and wind. I then take half a grain of acetate of morphia, and immediately suffer from pain of the most distressing and indescribable kind. I then take breakfast of tea and dry toast, and get a little relief. I dine at three, and take then a little mutton, mealy potatoes, suet pudding, and three ounces of brandy-and-water, very weak; and continue to feel easier, though distended. At six o'clock, I take tea, and become comfortable, till five or six next morning. I sup between nine and ten, on half a pint of Reid's mild porter, and a bit of bread-and-butter. I have no tenderness anywhere on pressure. My tongue is pretty clean, and my pulse is only 60. I have had, for more than twenty years, numbness and coldness of feet and hands, and I have had, for several months, pain in my loins. Stooping is most painful to me. I also have severe pain in my shoulders, when I move my arms backward. I have also pain in the gluteal muscles. I am seventy-two years old, and have been a hard-working general practitioner, but always a healthy and active man, with more than the usual share of mental sufferings," &c.

On account of the nature of this case, and the age of the invalid, I declined giving an opinion or suggesting any system of treatment, until I have an opportunity (which I anticipate) of a personal interview.

Bentinck Street, Manchester Square.

# Medical Societies.

## MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 1, 1847.—MR. DENDY, PRESIDENT.

### GONORRHŒAL BRONCHITIS; ERYSIPELAS.

THE PRESIDENT said that since the last meeting, the gentleman, whose case he related last Monday, had had a return of discharge from the urethra, followed by an alleviation of all the symptoms. The dyspnœa was very much relieved, and the râle could scarcely be detected.

Dr. T. THOMPSON said that Dr. Stokes had written an interesting chapter on syphilitic bronchitis in his work on diseases of the chest. The cases mentioned by Dr. Stokes occurred after primary symptoms of syphilis, the symptoms being aggravated at nights, and relieved by mercury. In chronic bronchitis, Dr. Stokes did not give mercury. He (Dr. Thompson) did not think the distinction between the ordinary cases of bronchitis made out.

Mr. HANCOCK had seen gonorrhœal discharge checked, and bronchitis supervene; but in cases of that kind, for instance, where the discharge stopped, and swelled testicle occurred, he considered it questionable whether it should not be ascribed to a slighter disease disappearing when a more severe one appeared, rather than to a pure metastasis. He did not think Dr. Stokes' cases bore upon the present one, as they arose after chancre. He mentioned the case of a patient suffering from gonorrhœa in a severe form, with chordee, &c., who was attacked with acute pain in the knee, which became much swollen. The dorsal veins of the penis were swollen, and in a high state of inflammation, and felt like hard wiry cords; the inflammation extended along the saphena vein, and the thigh became much swollen. He alluded to some cases, related at the Medical and Chirurgical Society, of swelled knee, followed by white thigh, and wished to know how much this swelling was due to phlebitis extending from the veins of the penis. He inquired if any one had seen cases of peritonitis coming on when the discharge in gonorrhœa was checked, and subsiding as it returned. He had seen such cases.

Mr. HIRD thought if these enlargements of the joints occurred only in the lower extremities, we might trace it along the veins; but the upper extremities were often affected. The saphena vein communicated with the dorsal veins through the femoral, which must also have been affected. (This Mr. Hancock said was the case.) In gonorrhœal rheumatism, it was often difficult to trace continuity of surface.

Mr. HANCOCK said that joints became inflamed, with deposition of purulent matter, without continuity of surface. In phlebitis, matter was deposited in joints. The peculiar structure of the spongy portion of the penis was connected with the venous system.

Mr. HIRD has within the last three weeks seen several cases of erysipelas of a low type occurring after local injuries. One was the case of a gentleman, who fell during the frost, and grazed the side of the head. He had lived freely. A few days afterwards, the wound became unhealthy, with a thin ichorous discharge; the integuments around it dark-coloured; the inflammation gradually extended over the head and face; the inflammatory symptoms were slight; the pulse below the natural standard. Stimulants were given almost from the first. The surface was dusted with hair-powder, and purgatives administered. There was no sloughing. He was now getting well. The treatment consisted of calomel, followed by occasional saline purgatives, afterwards ammonia, combined with the decoction of bark. The second case was that of an unmarried lady, of twenty-five years of age, who also fell during the frost, and injured her knee. Erysipelas came on round the knee, and extended nearly to the hip. There was considerable constitutional disturbance; a good deal of vesication, and slight sloughing. She required stimulants from the first, and had half a pint of wine daily. The third case was that of a child that had erysipelas of the head and face, following injury of the scalp, accompanied with a good deal of feverish irritation. There was no sloughing. She was excessively low, with muttering delirium, but was now getting well. He contrasted these cases with some he related to the Society a year or two since, in which the disease was of a highly inflammatory nature, and required depleting measures, venesection, and purgatives. It was necessary to treat the disease itself, not the name of it. Great mischief was done if we treated all cases alike. Most cases of erysipelas lately had been of low type, and probably connected with the state of the atmosphere. All the patients were in good circumstances.

Mr. HANCOCK agreed with Mr. Hird that the symptoms were to be treated. He had himself lately seen a good deal of erysipelas, of a low type, with great fatality, especially after operations, rapidly assuming a typhoid character, in spite of stimulants. He mentioned some cases of persons coming from the country who had abscesses opened, in which erysipelas rapidly came on, and caused death. No depletion had been used. He had observed the inflammatory blush to be of a brownish, and not of a rose colour. In these cases, the tongue was coated and dry. He was in the habit of attending particularly to the state of the alvine evacuations, and even when the stools were watery, giving calomel and colocynth, followed by aromatic purgatives. He had found gin-and-water the best stimulant in these cases. He gave bark and carbonate of ammonia.

Mr. HIRD had not had occasion to puncture the integuments in his cases; but where there was much tension, with a quick pulse and febrile symptoms, punctures or incisions were very useful.

Mr. HANCOCK had seen no hardness or doughy feel, therefore did not make incisions.

Mr. BISHOP wished to know if Mr. Hancock had seen any cases out of hospital, as it might arise from the state of the wards.

Mr. HANCOCK had seen several.

Dr. T. THOMPSON had seen several cases like those related by Mr. Hancock. He narrated a case which he had seen

* I omit the names given by my correspondent; but the gentlemen alluded to by him are justly most celebrated in the two branches of the profession.—R. D.

† A word here occurs, which the transcriber cannot make out.

last summer in the mountains of Wales. He thought that it was often connected with congestion of the liver. Calomel purgatives were indicated, camphor being a beneficial addition. Turpentine injections were also useful. It was desirable to begin soon with sulphate of quinine. He thought that rubbing-in mercurial ointment was a most advantageous mode of treatment, the inflammation under this application sooner fading away than under any other treatment. The solution of nitrate of silver was also an useful application, being better than powder or cotton wool. He would apply the mercurial ointment even to an extensive surface. He had not seen much benefit from the tincture of iodine.

Dr. Chowne thought local treatment of very little use in traumatic erysipelas, the disease being constitutional. Most cases required support, and not depletory remedies. He thought the contagious nature of erysipelas was proved by some cases which had recently occurred in Charing-cross Hospital. A patient came in with erysipelas, was prematurely delivered, and died. There was no peritonitis. He thought that this was the origin of the cases. Many of the patients nursed the infant, particularly one young woman, who had erysipelas very severely. He wished to know, if the whole head and face were affected, whether Dr. Thompson would anoint the whole surface with mercurial ointment.

Dr. T. Thompson said that in most cases only half the head and face were affected. He had now and then applied it to the whole of the chest. We must consider all local applications merely as auxiliaries. He would avoid any remedy which would check the disease at once. Constitutional treatment was mainly to be relied on.

## PATHOLOGICAL SOCIETY OF LONDON.

Monday, March 15, 1847.—Dr. Williams in the Chair.

Mr. Busk exhibited a specimen of

ABSCESS OF THE KIDNEY.

The organ presented a mere collection of pouches filled with pus, the glandular structure having apparently undergone entire disorganization. Each pouch contained a secondary cyst, with similar purulent fluid. The pelvis was not much dilated.

The specimen was taken from a female, aged sixteen, who died hectic, and was affected, six months before death, with considerable purulent deposit in the urine. The cause of the disease was not evident. That it did not arise from impediment to the flow of urine was proved by the pervious condition of the ureter, which, however, was destitute of its lining membrane.

Mr. Busk also exhibited a drawing illustrative of a case of

INTERNAL STRANGULATION OF THE SIGMOID FLEXURE OF THE COLON FROM THE TWISTING OF THE GUT ON ITSELF.

The patient, a man, aged twenty-eight, was admitted into the Dreadnought Hospital in a moribund state, having suffered from irremediable constipation for five days. He died five hours after admission; and on examination, the sigmoid flexure was remarked, occupying nearly the entire portion of the front of the abdominal cavity, and in a gangrenous condition. It was immensely distended, obliteration of the muscular bands and rupture of the serous coat having resulted. It appeared, from a careful examination, that this portion of the gut had been originally highly developed, and that it had become strangulated from falling over towards the right side on itself, thus causing the formation of a twisting, and consequent strangulation. There was but slight peritonæal effusion, and the descending colon and rectum appeared natural. The patient had on previous occasions been subject to constipation.

Dr. Lloyd directed attention to a similar case in the person of a man who had been subject for several years to constipation, which was relieved by a bougie passed up about thirty-six inches. In one of these attacks he died; and on examination a similar state of things was observed. An ulcer, however, had formed at the point of the twist. The case is detailed at length in the *Guy's Hospital Reports*.

Mr. Prescott Hewett related a case in which the post-mortem appearances were very similar. A man, aged sixty-five, was admitted into St. George's Hospital, in 1844, with a large, circumscribed tumour, occupying the greater part of the abdominal cavity, and apparently extending into the pelvis. The patient, who had been hemiplegic for twenty-two years, could give no distinct history of his case; but on examining the abdomen, fluctuation was distinguished over the whole of the tumour, the surface of which appeared to be smooth. No solid material could be detected in any part of it. Percussion gave a clear sound in the upper part of the abdomen only, and here but to a small extent. At the time of his admission, there was a tendency to diarrhœa, and a day or two afterwards low peritonitis made its appearance, accompanied by great pain in the abdomen and constant sickness. He died on the third day after these symptoms had begun, having only been in the hospital five days. On laying open the abdomen, the greater part of it was found occupied by a large tumour, of a dark colour, which had displaced the various viscera, and even encroached upon the chest. This tumour was formed by the sigmoid flexure of the colon, enormously distended. The bowel was connected to the iliac fossa by a pedicle, formed by a long meso-colon, which had become twisted upon itself, and thus given rise to partial obstruction of the gut, the openings leading into the descending colon and rectum being very small and tortuous. The cavity of this distended intestine was filled with fluid fæces, and one or two hard masses; its mucous membrane was of a dark livid colour, but not ulcerated. The other parts of the intestinal canal were quite healthy in structure; but extensive traces of low peritonitis were observed in various parts.

Mr. Dalrymple showed a series of preparations (accompanied with drawings) of the various forms of

MALIGNANT DISEASE OF THE EYE,

in order to prove the futility of operative interference in any stage of such affections. The result of extended experience had convinced him, that where the globe had been extirpated at the earliest possible stage of the disease, the death of the patient was brought about, sooner or later, by the formation of secondary tumours in the brain, in the same manner as when the globe had been extirpated at a more remote period of the disease. The particulars of several of the specimens were detailed at length, proving the above assertion; and the following case, Mr. Dalrymple observed, might be considered a type of the average course of the disease:—

A child, two or three years old, came under his care in the beginning of the year, some time back. At the back part of the eye were observed three small deposits of fibrin, leaving a triangular space of the choroid between them. These gradually extended forward to the ciliary boundary of the choroid, and became vascular, pushing the iris forward into the anterior chamber. They became gradually more and more vascular, the triangular space between them gradually diminishing. In proportion to their increase, the iris became more prominent, and by degrees, vascular. In May, the globe was hard, sclerotic, bluish, iris more convex.—August: Globe enlarged, iris narrower, lens in a state of incipient opacity, lids of a purplish hue, pain in the globe.—September: Eye enlarged, pupil large, lids livid and swollen, palpebræ cannot be closed: deep-seated sclerotitis, dark blue zone near attachment of cornea, fungoid mass in the anterior chamber, with effusion of lymph; headach.—December: Globe gave way, conjunctiva crimson and velvety, slight bleeding, headach, and pain over brow.—January: Tumour equalled size of apple, covered with dark crust: drowsiness, emaciation.—March: Tumour much enlarged.—On the 25th: Stupor, convulsions, death.

On the post-mortem examination, small tumours were observed, connected with the bone under the scalp. Dura mater opposite the tumours, soft and thick, as also arachnoid. Ventricles contained one ounce of clear fluid; a large encephaloid tumour at base of brain, limited by the olfactory nerves; the pons Varolii, and the sides of the middle lobes, involving the right optic nerve, the third pair, however, being but little interfered with. Sclerotic crushed and emptied of its contents, the cavity of the eye being filled by a reddish medullary growth, traced from where the optic nerve entered. Muscles and lachrymal gland unaffected.

Another reason contra-indicating the removal of the globe, remarked Mr. Dalrymple, is the occasional existence of a disease of the eye, in no way distinguishable, as regards physical appearance, from the first stage of malignant disease. The disease consists in the effusion of an albuminous fluid between the retina and choroid, causing protrusion of the lens, and giving rise to the cat's-eye appearance. In the two specimens which were exhibited as illustrative of this affection—in the one, there was mere serous effusion; in the other, serous effusion, accompanied with the deposit of flocculent tripe-like-looking lymph, on the external surface of the retina.

Dr. Parkes exhibited the

LIVER AND INTESTINES OF A PATIENT WHO HAD BEEN AFFECTED WITH DYSENTERY,

and who had died in University College Hospital, under the care of Dr. Thompson. The patient was attacked with the disease on board a man-of-war on the West Indian station, in June, 1845. The attack lasted nine months; and in the following July, severe pain in the right side and shoulder, accompanied with recurrent attacks of dysentery, supervened, and lasted three months. He entered the hospital twenty months after the first attack, when he presented the group of symptoms usually assigned to hepatic abscess, communicating with the lungs. These lasted to the day of his death, the fifteenth after admission. On examination, the upper lobe of the right lung was pale and crepitant, the lower hepatized, forming the wall of a large abscess between it and the liver, the diaphragm in this situation having disappeared; the abscess extended behind the peritonæum and kidney, as far as the cæcum, the pus burrowing among the abdominal and intercostal muscles; the liver contained numerous abscesses, of various sizes, on its right convex portion, and there were two cicatrices; the bronchial tubes opened freely in the upper part of the wall of the large abscess; the hepatic structure which formed the lower wall of the abscess was thickened and darkly injected; and three inches below it, a group of yellowish, gritty particles, surrounded by cartilaginous deposit, were observed; the remainder of the liver much enlarged; the portal system minutely injected; small intestines healthy to within a foot of the cæcum, with, however, here and there an effusion of granular lymph on the healthy membrane, in the form of bands; small ulcers on the upper part of ileo-cæcal valve and ileum close to it; the lower surface of valve and cæcum generally occupied by an immense ulcer, crossed here and there by bands of thickened mucous membrane, the muscular fibres forming its floor. All the ulcers were undergoing repair by the laminated effusion of plasma over the surface, the fibrin also assuming, in some of the ulcers, a nodular appearance. The lymph, under both these forms, had been submitted to the microscope by Mr. Bowman, Dr. Parkes, and Dr. Quain, and the result of the examination showed that the process was in an early stage, no epithelium being detected.

Dr. Parkes remarked, that after a time the surface of these ulcers gradually assumes the appearance of mucous membrane, although he was by no means convinced that so compound an organ as the colonic mucous membrane was absolutely regenerated. He thought the decision of this fact a point of great interest, and although he felt certain, that in the present case there existed spots of old cicatrization, the process was so much concealed by the recent ulceration, that he was deterred from drawing a conclusion, being incapable of pointing out a particular cicatrix.

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Dr. Chambers exhibited a specimen of

HYPERTROPHIED SPLEEN.

The structure was extremely dense, exhibiting, on section, a beautiful mottled appearance; but under the microscope presented no obvious deviation from the normal character. The spleen measured about fourteen inches in length, and four or five in depth. It was taken from a strumous subject. The heart was quite healthy. A peculiarity of the case was the fluidity of the blood after death, and the presence in this fluid of a large number of granular, irregular, spheroidal bodies, twice or three times the size of the blood corpuscles. This was the second case that had come under the notice of Dr. Chambers, in which the post-mortem phenomena were analogous.

Dr. Jenner recollected a similar case of hypertrophy of the spleen, with fluidity of the blood after death, under the care of Dr. Taylor, in University College Hospital.

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Dr. Norman Chevers exhibited a specimen of

ENLARGEMENT OF THE HEART AT BIRTH,

taken from an infant who lived eight hours. The funis and placenta were small. The infant, immediately after birth, breathed freely. On the tying of the cord, the colour of the surface became dusky, and the respiration soon afterwards embarrassed, without, however, any increase in the dinginess of the colour of the body. The respirations became gradually slower and slower, and the child died without convulsions or apparent agony. The body was examined eighteen hours after death. The heart occupied the whole anterior part of the chest, with the exception of a small portion of right lung, which presented a little interlobular emphysema. The pericardium contained a small quantity of clear fluid. All the cavities, particularly the right auricle, were dilated, the walls of the ventricles being thin. There was no valvular disease: the pulmonary artery wide; marked contraction of descending aorta opposite the left subclavian artery; arterial duct aneurismally enlarged; its interior of a dark red; ascending aorta rather dilated. This case, Dr. Chevers remarked, illustrated the first grade of that malformation known under the name of "descending aorta given off from the pulmonary artery," and alluded to the case published by Dr. Farre, in which the child lived eight days. The specimen also was of peculiar interest, in a medico-legal point of view, in reference to the above-described state of the arterial duct.

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Dr. Peacock exhibited a specimen of

CARCINOMATOUS DISEASE OF THE PYLORUS.

The person from whom this specimen was removed was forty-two, and had been very intemperate. He had laboured under pain in the epigastrium, and frequent vomiting and confinement of the bowels, for six months. He was rarely able to retain food more than two, four, or eight hours; sometimes, however, the vomiting ceased for two or three days; but after these times, he seemed to eject everything which he had taken in the interval. When the stomach was empty, he hawked up much glairy mucus, and occasionally vomited considerable quantities of clear but very sour fluid. The pain which he experienced was not severe, and he rather complained of a sense of weight and gnawing in the epigastrium. Pressure in that part excited some tenderness, and gave a sense of resistance, though no distinct tumefaction could be detected. The stomach was found larger than natural, and its coats were throughout much thickened, especially towards the pylorus. The mucous membrane was there much hypertrophied; and the sub-mucous, sub-serous, and intermuscular cellular tissue was infiltrated with dense whitish-coloured cancerous deposit, affording an example of the chondroid form. The coats at the pylorus measured eight French lines in thickness, and the aperture was reduced to a canal so small as barely to allow the little finger to be passed along it. The mucous membrane, at the cardiac side of the pylorus, was entirely removed, and an ulcer existed, with a hard, unequal base, and surrounded by an irregular, overhanging edge.

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Dr. Peacock exhibited also a specimen of

INTERNAL STRANGULATION OF PART OF THE SMALL INTESTINE.

The preparation exhibited to the Society was taken from the body of a man, sixty-five years of age, who was admitted, in a state of great collapse, into the Royal Free Hospital, and died before he could be got to bed.

The viscera of the head and thorax were found very free from disease. The left testes had not descended into the scrotum, and lay immediately external to the abdominal ring. The abdomen was tympanitic. The omentum was attached by old adhesions to the left iliac and inguinal regions. The small intestines were much inflated, intensely inflamed, and matted together by moderately firm lymph. From the point of adhesion of the omentum at the left groin, a fibrous band extended obliquely across the hypogastrium towards the right iliac region; and this, when two or three inches from the head of the cæcum, united with two loose bands of omentum, connecting it with the caput cæcum on the one hand, and the internal extremity of Poupart's ligament on the other. Between these bands a triangular space thus existed, having its apex at the union of the three, and its base formed by a portion of omentum attached to the cæcum, and to the parietes of the abdomen in the right iliac region. Into this space, a portion of the intestine was found to have passed from behind, and to have there become strangulated. The upper end of the strangulated portion was six inches and a half above the termination of the ileum; and the stricture was there so tight that the coats had become gangrenous; and on tearing apart some soft adhesions between the strangulated intestine and an adjacent fold, some fluid fæcal matter made its escape. The lower end of the strangulated portion was two inches above the ileo-cæcal valve, so that its whole length was four inches and a half. At this point, there was only a slight furrow in the anterior surface of the intestine; but on opening its interior, a polypus of the size of a large marble was found attached by a broad base to the anterior wall, and occupied so

large a portion of the canal that the point of the forefinger could barely be made to pass behind and below it. The intestine above the stricture was extremely distended with fluid fæcal matter, and its coats were intensely inflamed. Below the stricture, the intestine was empty and contracted; but with the exception of much thickening of the coats of the extremity of the ilium and of the ileo-cæcal valve, it was free from disease. A slight furrow on the external surface of the intestine, at a point thirty-three inches above the termination of the ilium, indicated the situation at which the long band of omentum, reflected from the left inguinal region, had crossed the gut. A hard tumour, of the size of a large walnut, was situated in the ileo-cæcal meso-colon. It was bounded by a dense and thick fibro-cartilaginous cyst, and was apparently an enlarged and softened gland.

It appeared on the inquest which was held upon the body, that the man had been indisposed, and suffering from confinement of the bowels, for six days. He had, however, during this time, continued to follow his engagements, and went out as usual on the morning of his death. Owing to particular circumstances, it was impossible to collect any accurate information as to his previous state of health.

## British Medical Journals.

### ON THE ANTAGONISM BETWEEN TYPHOID FEVERS, INTERMITTENT FEVERS, AND PHTHISIS.

The following summary of M. Boudin's conclusions on this subject are given in a recent number of the *British and Foreign Review*. The facts are simple, and the sources from whence they are obtained sufficiently accurate to justify a reliance on the statements.

"1. Those localities in which the producing cause of endemic intermittents thoroughly modify the constitution of man, are remarkable for the infrequency of pulmonary phthisis and typhoid fever.

"2. The localities in which pulmonary phthisis and typhoid fever are particularly prevalent, are remarkable for the infrequency and mildness of intermittent fevers contracted on the spot.

"3. The drying up of a marsh, or its conversion into a lake, diminishes or prevents intermittent fevers, but seems to dispose the organism to a new series of diseases, in which pulmonary phthisis and (according to the climate) typhoid fever are particularly prominent.

"4. After a residence in a thoroughly marshy locality, an individual enjoys an immunity from typhoid fever, the degree and duration of which is in direct proportion, first, to the length of the previous residence; second, to the intensity of the fevers proper to the locality, considered under the two-fold relations of form and type; third, or, in other words, that a residence in a country of remittent and continued fevers, such as certain points of the coast of Algeria, and the centre of the marshy part of Brasse, is more prophylactic against the disease referred to, than, for example, a residence near the marshy embouchure of the Bièvre, at Paris.

"5. The conditions of latitude and longitude, and of height [above the sea], which limit the manifestation of marsh fevers, equally limit the curative or prophylactic influence of the marsh miasm.

"6. Lastly, certain conditions of race, and, possibly, of sex, diminish the susceptibility of the system to the cause of marsh fevers, and in an equal degree diminish the therapeutic influence of that cause."

The subject of which M. Boudin treats has considerable practical value in the distribution of troops, and in the hygiene of those predisposed to consumption.

### THE KNIFE OR THE PAD IN THE TREATMENT OF POPLITEAL ANEURISM.

The highest triumph of the scientific surgeon of the present day is the zeal with which he seeks to dispense with the use of the knife; and second to this he makes the power of being able to use it successfully where required. Never in these respects did operative surgery stand higher than it does now, whether we regard the substitutes which are made to take the place of cutting operations, or the singular success with which operations are performed. It is, then, strange to see, in this onward progress, an individual standing apart, seeking to be conspicuous by his isolation,—to be original by his singularity. The pillar of salt to which we refer is Mr. Syme, a surgeon, who would be surprised were we to withhold from him the epithet distinguished, and the case, that of the treatment of popliteal aneurism by compression. Our readers have been made familiar with the revival of this operation, and the singular success which has attended its application, yet Mr. Syme comes forward to declare that the old operation by ligature is to be preferred. The arguments which he uses are these—that he, as a skilful operator, has not lost one of sixteen cases in which a ligature had been applied; secondly, that the application of the pressure is tedious and painful; thirdly, that some cases in which pressure had been used were unsuccessful.

In reference to the success of Mr. Syme's operations, we have but to say that he has been singularly fortunate, operating, too, under "circumstances often very unpromising, and even when erysipelas as well as hospital sore infested the clinical wards of the Royal Infirmary."

The simplest wound is not free from danger; the most straightforward and superficial of large arteries has its branches and varieties: a wounded vein may become inflamed; a suddenly-arrested circulation may produce sphacelus and death: so says the experience of all surgeons, and so are they led to avoid those risks when they can.

The operation of pressure has no doubt its inconveniences, but they are remediable and easily borne. It is free from risk, and saves the patient from much anxiety. It is true that a case may not succeed; we want proof of the fact. Mr. Syme gives three cases: one, in which a patient suffering from diseased heart and anasarca died of erysipelas; a second, who died from sloughing of the leg, the knee-joint being diseased; and a third case, in which the patient died suddenly from diseased heart, the aneurism having been cured.

How far these cases can be used as arguments against the successful result of the operation, our readers can judge as well as our author. There cannot be a doubt in any mind, except that constituted like Mr. Syme's, as to which procedure is preferable; and notwithstanding such egotistical sneers as the following, we have little doubt as to which will be adopted:—

"So long as it is my sincere persuasion that ligature of the artery is preferable to pressure for the cure of popliteal aneurism, I shall deem it my duty to pursue this method, though it may not, perhaps, be the best suited for the lowest capacity of surgical skill. Let every man act according to his powers; but let no one who feels it necessary to choose inferior means throw blame upon those who are able to practise a higher exercise of their art."—*Edinburgh Monthly Journal.*

### THE PROGRESS OF VETERINARY SCIENCE.

We have frequently noticed in the pages of The Lancet the progress of veterinary science. Any new facts which it presented have been recorded, and what remains to be done has been pointed out. An address by Professor Sewell, published in the last number of the *Veterinary Record*, affords the opportunity of a brief *resumé* of some recent improvements, which may be interesting to our readers generally.

"Glanders, a disease at one time so prevalent and so fatal, is now far less frequently met with, and certainly is not incurable in its earlier stages, especially that form designated chronic. The plan successfully adopted here has been to trephine the frontal and maxillary sinuses, and to pass a seton through from one to the other, so as to evacuate the cavities, conjoining the use of stimulating injections with the internal administration of the sulphate of copper. And even in the acute form, when ulceration of the septum nasi has taken place, this agent, when given in large and repeated doses, has occasionally proved the means of bringing about a cure. * *

"Of many maladies, different, and we hope more correct views of their nature are now taken. Thus, at one time

roaring was made to depend alone upon a band of effused lymph which stretched across the trachea. But this, certainly, is not the only cause. A distorted state of the rings of the trachea frequently gives rise to it—a state induced by horses being tightly reined in. Tumours pressing on this tube may cause it; and even a paralyzed state of the laryngeal muscles.

"Stringhalt has been found to be the result of a diseased state of the muscles of the thigh and the nerves thereof; shivering, an affection of the stifle joint, associated with a luxation of the patella; kumree, a peculiar disease of the loins, attacking horses in India, is now known to be paralysis, arising from an effusion of blood on the spinal cord.

"With respect to operations, these are now performed in accordance with true principles of surgery. The extraction of calculous concretions from the bladder has become a common operation, and subcutaneous periosteotomy is constantly performed to relieve the lameness attendant on splents and spavins," &c.

ON THE GROWTH OF PARTS.

The following observations are taken from Mr. PAGET'S report, in the *British and Foreign Review*:—

"A series of micrometric observations has been made by Professor Harting, with the view, chiefly, of determining the changes of number and dimension which the elements of each tissue and organ undergo in their development and growth, from the early period of fœtal life to adult age. His results show that the elements of the tissues may be thus placed in two classes: 1st, those elementary structures which, from their first existence to adult life, increase in size either very little or not at all; so that the growth of the tissue which they form must be ascribed to their multiplication, not their enlargement; and 2nd, those which constantly increase in size, till the tissue or organ which they form has gained its full dimensions, while their number does not increase after birth; the growth of the whole organ depending on their enlargement, not on their multiplication. In the first class he places the cells of epithelia, the fibrils of fibro-cellular tissue and tendons, the primitive fibrils of voluntary muscles, the cellular cavities of bones, and the blood-corpuscles. In the second class are the cells of the black choroidal pigment, of the fat, and of the liver, the primitive fasciculi (fibres) of voluntary muscles, and the fibres of involuntary muscle, the primitive nerve-tubules, the cells of cartilage, the urine-tubes and Malpighian capsules; and, probably, the fibres of elastic tissue and the ganglion-corpuscles. In a third class he says we might place a few elementary structures, the number of which appears even to decrease after birth, e. g., the primitive fibres of muscles, and the cells of permanent cartilage."

INTRA-UTERINE DROPSY.

The diseases of the fœtus in utero afford a wide and uncultivated space for the pursuits of the pathologist. The records of cases are valuable: it is to be regretted that the following history is so imperfect:—

"Mr. King narrated a case of dropsy occurring in a fœtus of eight months. The mother had borne six children, but did not menstruate between her first and her fifth pregnancies; was "unwell" once, when she became pregnant with this child. Between the fifth and sixth months she became anasarcous, and at the time of parturition, her abdomen and lower extremities were very large, tense, and hard. Some few days after labour her urine was not albuminous. The labour was natural, but the child did not advance, though the pelvis was large, and the head of the child could be freely moved therein. The uterus was excited to action by two doses of ergot, and the child, with some difficulty, caused by the size of its body, brought down. At birth it measured round the waist, sixteen inches and a half. The next day the serum had drained through the skin, partially denuded of its cuticle, and saturated the clothes in which it lay."—*Provincial Journal.*

CANCRUM ORIS.

"Mr. MICKLETHWAIT detailed the case of a child, aged five, who suffered from hooping cough and tubular bronchitis, to whom he gave, in the space of ten days, a drachm of mercury with chalk. The mouth became sore, without any flow of saliva. The soreness became confined to the left cheek, which soon presented the appearance of cancrum oris, which destroyed the cheek, opened the commissure of the lips, and destroyed the gums, teeth, and part of the tongue of that side, and terminated fatally in five days after the appearance of the gangrene. The child complained of excruciating pains of the hands and feet, which directly after death became very black. It had suffered from erysipelas of the same cheek three years ago, and ever since, that side had been less in size than the other."—*Provincial Journal.*

The absence of salivation is not a proof that the sore mouth did not arise from the use of the mercury. Too much caution cannot be used in its administration to children.

SINGULAR CASE OF CALCULUS IN THE BLADDER.

In the same journal, Mr. MORGAN records the case of a lad from whom he removed by operation a large and exceedingly friable calculus, composed of earthy phosphates—the nucleus of which was found to be a piece of thick fustian cloth, a square inch in size. Its presence is thus accounted for:—

"Fourteen months previously he had fallen on the end of an iron rod, which penetrated the anus to some extent, inflicting only a slight external wound, and was followed by no immediate symptoms of any moment. He says he neither passed urine by the rectum, nor blood by the penis; and under the care of Mr. Tucker, surgeon to the works, he soon apparently recovered. Not long afterwards, however, he began to complain of pain and difficulty in passing water, followed by the usual symptoms of stone in the bladder, in which state he was admitted in the infirmary. The fustian nucleus was part of his trowsers, which he recognised immediately, with no little surprise. Of course it had been torn off and pushed into the bladder by the end of the iron rod; but he had not the slightest previous suspicion of such an occurrence."

ON THE TREATMENT OF AMENORRHŒA.

"The remedy recommended by LALLEMAND consists of aloes, ergot of rye, and rue, made into pills. Every pill contains about two-thirds of a grain of each of these substances, and the number prescribed is from nine to eighteen in twenty-four hours, or from six to twelve grains of each drug in the day. If the case be recent, the proper day for the return of the menstruation is to be reckoned, and the use of the pills commenced on that day; and the pills are employed for four days. If the case is of so long standing that the proper day cannot be fixed on, the time chosen is arbitrary; but if the first trials are unsuccessful, they are to be repeated at the corresponding periods of the succeeding months. Three pills are given, morning, noon, and night, in the first months; afterwards they are gradually increased to six, at the same three periods of the day. During each of the four days of treatment, four or five leeches are applied to the vulva, and after the leeches, a vapour-bath is used."

The effects of this remedy must, we should think, depend in a great measure on the cause of the disease.

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HEALTH IS A DUTY.—"The reflection is not more common than just, that he who lives physically must live miserably. The truth is, too great nicety and exactness about every minute circumstance that may impair our health, is such a yoke and slavery, as no man of a generous free spirit would submit to. 'Tis, as a poet expresses it, 'to die for fear of dying.' And to forbear, or give over a just, charitable, or even generous office of life, from a too scrupulous regard to health, is unworthy of a man, much more of a Christian. But then, on the other hand, to cut off our days by intemperance, indiscretion, and guilty passions, to live miserably for the sake of gratifying a sweet tooth, or a brutal itch; to die martyrs to our luxury and wantonness, is equally beneath the dignity of human nature, and contrary to the homage we owe to the Author of our being. Without some degree of health, we can neither be agreeable to ourselves, nor useful to our friends; we can neither relish the blessings of Divine Providence to us in life, nor acquit ourselves of our duties to our Maker or our neighbour. He that wantonly transgresseth the self-evident rules of health, is guilty of a degree of self-murder; and an habitual perseverance therein is direct suicide, and, consequently, the greatest crime he can commit against the Author of his being, as it is slighting and despising the noblest gift He could bestow upon him—viz., the means of making himself infinitely happy; and also as it is a treacherous forsaking the post wherein His wisdom has placed him, and thereby rendering himself incapable of answering the designs of His providence over him. The infinitely wise Author of Nature has so contrived things, that the most remarkable rules of preserving life and health are moral duties commanded us, so true it is that 'godliness has the promises of *this* life, as well as that to come.'"—*Dr. Cheyne.*

THE LANCET.

LONDON, SATURDAY, MARCH 27, 1847.

"Your desert speaks loud, and I should wrong it,
To lock it in the wards of covert bosom,
When it deserves, with characters of brass,
A forted residence."

While brevets, honours, and various substantive rewards, are being showered forth with a liberality and a profusion even hitherto unknown to our armies, we would briefly call attention to the services and the merits of a whole class of officers, that, by some strange oversight, has not hitherto been even mentioned by our praise-bestowing statesmen and orators, whether civil or military. We here refer to the medical officers of the united services;* but, as having more immediate reference to our present subject—to the medical officers serving in the East Indies.

We must premise, however, that the neglect about to be proved, rests not with the Indian governments at home or abroad. It is a great state neglect, affecting our naval and military surgeons in every quarter of the globe. But, returning to India, we readily admit, that as regards pay and pension, a more considerate and liberal government exists not, than the court of directors.

The exclusion of medical officers from military honours and rewards, has been attempted to be grounded on the circumstance that they have been rated (erroneously, we admit) as "civil staff," along with chaplains and commissaries, and that surgeons form but a portion of the class technically designated non-combatants. The technical distinction here mentioned might be allowed to pass without notice, were it not for the grievous injustice that is founded on it. It has never appeared in our gazettes that either clergymen or commissaries have been killed or wounded in battle, while the numbers of military surgeons that have thus fallen and suffered are attested in all our histories. As to non-combatants, again, all officers of all arms are non-combatants, and they never become otherwise, unless personally attacked, a circumstance of the most rare occurrence. The paramount duty of a military officer is to look to, and direct, his men in their fighting; and even in the close combats of cavalry, the really good officer will never use his right arm, but to direct the efforts of the men under his orders. That in conducting this duty of supervision and direction in battle, the military officer incurs much personal risk, is well known; but so also, in the daily execution of his duty in the field, does the medical officer, staff and regimental. Mr. Guthrie states, on his experience of Peninsular warfare, that, "it is quite impossible for a regimental surgeon to be out of fire, if he does his duty; and a medical staff officer can scarcely be out of the way of cannon-shot." . . . "Every one who has been a regimental officer, knows well how often the surgeon is called to the front, even when a single man is wounded. The soldier expects this assistance, and medical officers have never disappointed him, either in the French or in the British armies." It is well known, also, that no storming party ever ascends the breach without its surgeons in company up to the very breach; and in every siege they are placed in the gorge of the trenches.

In the performance of these and other duties, numbers of medical officers are killed and wounded; and, without referring to European wars, it is well known that in all the earlier campaigns in India, in the late Mahratta and Burmese wars, in the Affghan war, and in the recent campaign on the Sutlej, numbers of military surgeons have been killed and wounded. We will not stop, then, to split hairs about technicalities, or to denounce the dishonesty of pretending to class military surgeons with clergymen or commissaries. It is established in the events of every campaign, in every quarter of the globe, that, to quote the words of another great military surgeon, "the medical staff shares in the fatigues and dangers of war;" and let us hope that, ere long, the government of this country will see that, "in just reason, it is entitled to a share of advantages."

It were the merest puerility, on the score of the risks incurred by them, as compared to their brother officers in the ranks, to argue against the admission of medical officers to military honours, for the question is one of degree only. Upon this difference, however trifling in itself, and dishonest when used in argument, there has been founded the most barefaced injustice. Men who are in the wrong, even, have need of satisfaction; but how much more those who know that, beyond dispute, they are in the right, while yet smarting under injuries?

As now constituted, the ambition and emulation common to all men, but especially to educated men, are either unknown, or they are suppressed. The medical services are unique in their studied exclusion from honours. Amongst medical officers who have served in the field, it is matter of universal remark, that he who has not the mental characteristics of a soldier, never proves a good military surgeon; and the justice of this observation is confirmed, on referring to all the great names amongst the army surgeons of France and England. Yet the regulations that have obtained, and that still obtain, in the medical department of the British army, go directly, and as if on purpose, to repress every feeling of this kind. In the eye of the soldier, and in comparison with his brother officer of the line, the medical officer stands marked out for exclusion from everything that has the name or semblance of military distinction or reward. He lives thus in a perpetual repulsion; and though well educated, and though born and bred in the middle classes of society, which furnishes, and ever will furnish, the best officers in the army, he finds himself debarred from the cheapest rewards of governments; he has before him but a continuous sense of the unjust and impolitic inequality of his position. The first of military authorities acted very differently from this. Napoleon, who designed that there should be rewards for every rank, from the common soldier to the marshal,—Napoleon bestowed military honours on his surgeons on the field of battle; and Marshals Ney and Soult have never been heard to complain that Barons Percy, Desgenettes, and Larrey, received from their great master the highest military rewards and distinctions. The Marshals of France took no pleasure in keeping the surgeons of the army in the dust. On the contrary, these celebrated commanders viewed with satisfaction the elevation of men, whose claims of duties long and faithfully discharged well entitled them to honours,—of men who

* We believe we are under the mark, when we state the aggregate of the medical staff of the three services at between two and three thousand, each officer holding a commission corresponding with the ranks from lieutenant up to brigadier-general.

through the advancement of military surgery, had conferred great and lasting benefits on the fleets and armies of France; while he who was at once general and emperor deemed the honours conferred on such men as called for alike by justice and necessity, in any plan which should pretend to give "consistence to the system of recompences" granted by the state to its servants. It must be subject of regret—and surprise, too—that, on the score of common justice, and for promoting the efficiency of the public service, a similar course to that followed by all the continental nations has not been adopted in this country. Our military surgeons are not surpassed by any in the world. They possess the feelings that are common to other men, and they know that just and considerate rewards would incite to increased exertions in their branch, as they do, and always have done, in all the other branches of the public service; but, up to this hour, their claims on the state for their vast services have remained unheeded,—the worst principles of the worst corporations have been applied to their unquestioned merits and deserts. Military men, too, even those of station and influence, have failed to exhibit the generosity and the justice (for we refuse to speak of gratitude) that might naturally be expected from men serving with our army surgeons, knowing and experiencing, as they must, the practical value of their services in peace and in war. Theirs is an erroneous, a limited, and an ungenerous view of an important public question; for, assuredly, whatever may be given to our army surgeons will not be taken from them—will never interfere either with the commands or with the off-reckonings of our generals. On this point, the most useless and the most decorated of them may be perfectly at rest. It is surprising that men should pass through a long life of public employment, and yet never perceive the depressing and injurious influences on the public services of restrictions and distinctions, that, upon consideration, must prove to be nothing less than a disgrace to the institutions of this country. The history of all public services in all countries proves, that for governments to attach officers to their service—to lead them to the point of highest exertion and excellence—by money alone, is impossible. Unless the nature of man change altogether, it must be so.

A consideration of the history of the rise and progress of the legal professions in England and France will make it sufficiently clear, that to the high and honourable station which was occupied, and which has continued to be occupied, by its professors, is mainly due that the theory and practice of the law have obtained to such excellence in both countries; for pay alone never has attached, and never will attach, men to a public service, any more than it will command their highest intellectual or moral efforts. The thing is not in nature. Where would have been the exploits of our navy and army, where the great works of our divines and our lawyers, had the members of the sea and land services, of the church and of the law, been treated on a principle of uniform neglect and exclusion by the authorities of the state? Our clergy, even, would not relish the practical application of the high-sounding abstract principle—"It is better to deserve and not to have, than to have and not deserve." The first limb of the aphorism has been reserved for exclusive application to the fortunes of the medical officers of the army and navy. The practical enforcement of the second limb would vacate many a fat benefice.

It is true, that of high estimation on society, grounded on high moral and intellectual quality, military surgeons have had, and always will have, ample share; but this is a reward beyond governments. It may be sufficient for a good man, perhaps, but the principle of leaving men to the reward that is within themselves, has not been acted on in regard to any of the other professions; and we will venture to declare, that a trial of it on naval and military officers during six months only of active warfare, will prove such a scheme of recompence to be as fatal to the public interests as unjust and ungrateful to individuals. In short, there is not a single argument urged by the advocates of monopoly and exclusiveness against the fair claims of the medical officers of the army and navy, that can for a moment stand the broad daylight of the public intelligence.

To carry through any object against class prejudices, or supposed class interests, is at all times but up-hill work; yet let our military surgeons be of good heart. We have great faith in the force of experience and truth, and we believe that every cause that ought to succeed will ultimately succeed.

## Medical Jurisprudence.

### FATAL OPERATION UNDER THE INFLUENCE OF ETHER.

(*From the Times, March 19th*, 1847.)

Coroner's Inquest.—A case of considerable importance, as affecting the practice lately introduced into the medical world, of subjecting persons about to be operated upon to the influence of ether, by causing them to inhale its vapour in order to render them insensible to pain, has just occurred at Spittlegate, in the parish of Grantham, in the county of Lincoln, in which death has resulted from that mode of treatment. It appears that a respectable woman of the name of Ann Parkinson, aged twenty-one years, the wife of a hairdresser at Spittlegate, who had been married eighteen months, and had a child nine months old, had been afflicted with a tumour on the under part of her left thigh for about twelve months, which had gradually increased in size, until, from its situation, it became a perpetual torment to her, as she was unable either to sit down or lie in bed with any degree of comfort. Under these circumstances, having read of the many successful cases of operations performed without pain under the influence of the vapour of ether, she expressed a wish to her medical attendant, Mr. Robbs, of Grantham, to have ether applied, and the tumour removed. To this, after consulting other medical men, he consented; and on Tuesday, the 9th inst. at one o'clock, she was subjected to the influence of the ether, and the operation was performed by Mr. Robbs, in the presence of three other medical men. Unfortunately, however, the poor woman never rallied, but remained in a state of complete prostration until five o'clock on Thursday morning, when she died without the slightest reaction having taken place subsequent to the operation. In consequence of these circumstances having become known, and much discussion having taken place on the subject, the matter came to the ears of the coroner of the district, Mr. G. Kewney, who, having made a strict inquiry into the facts, and having ascertained that, in the opinion of persons well qualified to judge, the death had resulted from the application of ether, thought it his duty to institute an inquiry, and accordingly issued his warrant for an inquest, which commenced on Saturday, the 13th inst. In charging the jury, the coroner, after recapitulating the facts of the case, made the following observations:—

"The case you are about to investigate is one of the most important that it has fallen to my lot to preside over, because, if it should be found, after a calm and deliberate inquiry, that the death of this person did result from the effects of the vapour of ether, and not from the tumour under which she was labouring, or from the operation which was necessary to remove it, it will become a question, whether the person administering the ether is answerable for the consequences, or whether it is unsafe and prejudicial to life to pursue the prac-

tice of administering ether, which has been introduced apparently with great success in many cases. I have every reason to believe that Mr. Robbs performed the operation in question with that skill which he is known to possess, and no one can blame him for adopting a practice sanctioned by the highest medical authorities, and which has been used in all our leading hospitals, his object being the alleviation of pain and suffering; but it will be for you to say, after a calm and dispassionate investigation, whether in doing so he has strictly adhered to the rules laid down in such cases, or whether he has been guilty of criminal negligence, inattention, or rashness, in the manner in which he has treated the particular case before you. It must be remembered, that credit is due to him for endeavouring to extend the advantages of a discovery apparently calculated to relieve the sufferings of humanity; for it is too well known that many of the greatest discoveries in medical as well as other sciences have been violently opposed on their first promulgation, though ultimately found to be of the greatest benefit to mankind, of which the circulation of the blood, and other equally striking instances, may be mentioned. But whilst he should receive encouragement upon this view of the subject, it must never be forgotten that he was bound to bring to the case under his management the greatest care, skill, and attention of which he was master, and in no degree to exceed or go beyond the instructions laid down by the most competent medical authorities in similar cases; and the remarks contained in a portion of the charge to the grand jury at the Central Criminal Court, in a late case, appear to me to be so appropriate that I cannot do better than read them; they are as follow:—

"'Athough it would be very hard to make a medical man amenable to a charge of manslaughter because he happened to be unsuccessful in his treatment of any particular case, yet, on the other hand, it was necessary for the protection of the public that persons of the medical profession should understand that if they chose to make use of dangerous and deadly ingredients, they were bound to exercise the utmost care and caution in so doing.

"'The interests of science required that there should occasionally be some departure from the beaten path prescribed by medical authority, and many important results had followed from such deviations by the alleviation of diseases heretofore deemed incurable. But if dangerous experiments were attempted, the persons adopting them must be taught to keep within proper bounds, and that they must exercise the most ample caution in carrying out those experiments.'

"If, therefore, you should find that Mr. Robbs has been guilty of culpable negligence, inattention, or rashness, it will be your duty, as jurors, upon the oath you have taken, which is paramount to all other considerations, to bring in a verdict of manslaughter against him; but if, on the other hand, you shall find, after hearing and weighing the whole of the evidence, that the death of Mrs. Parkinson was purely the result of the application of ether, as generally practised by legally qualified medical practitioners in order to alleviate pain under surgical operations, and not from any other cause, it will be your satisfactory duty to simply record that fact; and this inquiry may be the means of checking a practice that will then appear prejudicial to human life, and your labours may conduce, not only to the benefit of this immediate neighbourhood, but to the advantage of the public at large."

At the conclusion of the charge, the coroner and jury proceeded to view the body, and the inquest was then adjourned till Monday, when it was resumed, and the following evidence was given:—

Elizabeth, the wife of Nelson Leak, of Spittlegate, mason, deposed, that she is sister to John Parkinson, of Spittlegate, hairdresser, who was the husband of the deceased Ann Parkinson, to whom witness was also cousin. That her brother had been married to the deceased about a year and nine months; and she was in a very delicate state of health at the time of her marriage—that is to say, she was what is called a very delicate woman, subject to cold upon the slightest occasion, but was not subject to any particular illness, and was not consumptive, as witness believes. That about three months after her marriage she became pregnant; and about three months before her confinement, she complained to witness that she had a substance formed upon her left thigh, which caused her pain, and impeded her walking. That she showed witness the place, and she (witness) observed a swelling about the size of an egg upon the under part of the left thigh, nearer to the body than the knee, and it caused pain upon sitting down. That she called in Mr. Bentley, a medical man living in Spittlegate, to attend her; and he saw her, and prescribed linseed poultice, and afterwards brought a plaster, which was applied, and causing great pain, it was taken off before he ordered it to be so. That the tumour kept increasing, and Mrs. Parkinson was confined of a boy about nine months since, which was born as its full time; and she did very well, and suckled the child for about six months, when it was weaned. That during the whole of this period she was in good health, otherwise than as she was affected by the tumour before mentioned. That during all this time the tumour increased in size, and became a great impediment to her walking, sitting, or sleeping. That in January last, she applied to Mr. Robbs, surgeon, Grantham, to attend her. That he did so from that period until her decease: That he ordered leeches, and made several punctures in the tumour, which, however, was not reduced, but rather increased. That in consequence of this, she wished to have the tumour removed, and wished witness to speak to Mr. Robbs upon the subject, which she (witness) did; and he said he would bring Dr. Turner to look at it. That he did so on Thursday, the 4th inst. That at this time she had seen several reports of successful operations under the influence of ether, but had expressed her wish to have the tumour removed before she had heard of such mode of treatment. That when Dr. Turner came, he said he thought there was no other remedy than taking it away by an operation. That on the next day, Mr. Robbs called to see the deceased, and asked her if it was her wish to have the tumour removed, and she said that it was; and it was then determined that it should be taken away; and it was also determined that ether should be applied. That about a fortnight or three weeks before, witness had asked Mr. Robbs what he thought of the application of ether, and he said he had no faith in it, but at the time in question he said he had performed an operation on a young man's toe with success under the influence of ether. That witness, on the Saturday, the 6th of March, saw the young man in question, and asked him how he had felt during the operation? and he said, quite comfortable; "that he felt quite like a fool;" and he said, in answer to a question, that if he had to undergo another operation he would take the ether. That on the same evening Mr. Robbs administered ether to Mrs. Parkinson, in witness's presence, by causing her to inhale the vapour in order to see what effect it would produce upon her. That it made her laugh very much, and whilst under its influence she was pinched very severely; and when she recovered from its influence she said she felt quite comfortable, and retained all the "consciousness of mind," but not feeling, but was aware she was being pinched, although she said it did not give her pain. That the operation lasted about ten minutes, but the influence continued about two hours and a half, during which time she was hysterical. That on the following Monday evening she was again subjected to the vapour, when its influence was much more rapid, and she became quite unconscious in a few minutes—in about four or five minutes. That she remained so for about a quarter of an hour or twenty minutes, when she became conscious, but the effect of the ether did not leave her for about an hour. That on her recovery she said she knew all that had passed in the room, though she was apparently unconscious; that she could hear, though she could not see. That she was not hysterical the second time. That after this it was arranged that the tumour should be removed the next day, Tuesday, the 9th inst. That she appeared to be in her usual health between the operations of Saturday and Monday; and on being asked if she felt at all unusual, she said, her head felt heavy, which she attributed to her laughing so much whilst under the influence of the ether. That witness asked her, on Monday evening, whether she was determined to have the tumour removed? and she said she was; and witness asked her if she would have so determined even if the ether had not been discovered? and she said she should: this she also asked her on the Tuesday morning, and she again replied in the affirmative. That on Tuesday last, the 9th of March, about noon, Mr. Robbs, accompanied by Mr. Rogers, Mr. Priest, and Mr. Dibben, all medical men, arrived at Mr. Parkinson's, and the operation was performed. That it was about one o'clock when the ether was administered. That the apparatus consisted of a glass jar or globe, with a tube that was made to fit the mouth, and it was applied by Mr. Dibben. That in about ten minutes Mrs. Parkinson was reduced to a state of unconsciousness, when the operation of removing the tumour commenced, and she appeared to feel the first cut, as she made a deep moan, whereupon ether was again applied, but witness is not of opinion that she inhaled much more upon such second application. That the operation proceeded during the time the vapour was so inhaling the

second time. That witness cannot positively state whether the ether was again applied during the operation, nor can she state positively whether the apparatus was kept applied to the mouth during the whole time the operation was going on. That Mrs. Parkinson was laid upon her stomach upon a table, and witness assisted in holding her during the operation, and was placed about the lower part of her body, and did not therefore see her mouth. That upon every incision made during the operation she moaned, and appeared to feel it, as she struggled and nipped witness's hand; but she did not appear to feel anything when the different vessels were being tied up. That to the best of witness's belief the operation lasted an hour all but five minutes, when she was taken from the table and laid on the bed; she had a little brandy-and-water before the operation was quite over, which she swallowed readily, and a little more when she was put to bed. That she did not appear to lose much blood, and the wound was dressed after the operation and bandaged, and when put to bed she appeared to be conscious. That shortly after she was in bed witness made her a little gruel, which she took, and said she felt better, but spoke in a very low and faint tone of voice. That she did not appear to rally at all from that time. That Mr. Robbs came to see her in the afternoon and evening, and desired her to be kept quite still. That on the following day she remained in the same low state, and Mr. Robbs saw her more than once, and sent her medicine, which was administered, and a little thin gruel and tea was given her by his directions, which was all the nourishment she took. That on Wednesday she complained of a numbness in both legs and the lower part of her back, and hot bottles were applied by Mr. Robb's directions, but she was not relieved. That witness asked her if she felt pain during the operation, and she said she did when they cut, but not otherwise. That on the Thursday morning, about twenty minutes past five o'clock, she died without uttering a groan. That from the time the operation was performed till her death, she never moved by her own power, but was moved when necessary by witness. That she seemed quite conscious during the whole time from the operation till her decease. That Mrs. Heaney, the nurse, was backward and forward in the room during the operation.

William Eaton, of Grantham, surgeon, deposed that on Saturday last, by order of the coroner, he proceeded with Mr. Shipman, in the presence of several other surgeons, to make an examination of the body of the deceased, Ann Parkinson. That on examining the body externally, he found an incised wound on the left thigh about six or seven inches long, secured by sutures, on removing which he found a wound, which had the appearance of an operation having been performed upon the thigh. On examining it closely, he could not observe that any nerve or large bloodvessel had been divided or wounded. That there were four ligatures, which appeared to have been applied to small arterial branches. That there was nothing in the appearance of the wound or of its situation that could account for the speedy dissolution of the deceased, and the operation appeared to have been performed as correctly as it was possible to have been done. That he then proceeded to examine the chest internally, and found nothing unnatural in the appearance of it; the lungs were pervious, and appeared healthy; they were a little congested at the posterior part, which witness attributed to the position at the time of dissolution. That the heart was next examined, was healthy in structure, but more flabby or flaccid than usual, and containing rather less blood than usual. The stomach was next examined, and contained a little dark-coloured thick fluid, of a greyish colour, apparently gruel, and was healthy, but rather congested at the lower part from the position as above stated. The liver was of its natural size, but paler than usual, and softer in texture; the spleen healthy and natural, the intestines also. That he did not think it necessary to examine the kidneys; but then proceeded to examine the head. That the brain was quite healthy, with the exception of the upper part of the anterior lobes, the membranes of which were congested with blood, and there was no effusion in the ventricles. That the blood throughout the body was in a fluid state. That witness discovered nothing in the appearances on or in the body to account for the death under the ordinary circumstances attending an operation of the nature that had been performed. That the congestion of the brain, in witness's opinion, was caused by the exhibition of the ether which was administered, as also the liquid state of the blood. That, in witness's opinion, the death was not caused by the shock to the system simply produced by the operation, as the deceased exhibited every appearance of a healthy person, though delicate, and the operation was not in a part at all likely to affect the general state of the patient's health. That, in witness's opinion, the death of Mrs. Parkinson took place from the effects of the ether which she had inhaled, and the tumour itself was not in that state to cause death, witness having seen it since its extraction. That it is what is called an osteo-sarcomatous tumour, which is of a malignant nature, and calculated to destroy life ultimately. That the practice of using ether in similar cases has been sanctioned by the highest medical authorities, and has been used with success in many cases in the public hospitals, and he himself has operated upon a patient, though he suffered a good deal from the effects of it, but is now getting on well.

Robert Shipman, of Grantham, surgeon, assisted Mr. Eaton in the examination of the body of the deceased, and entirely concurred with the evidence given by the latter gentleman. At the conclusion of the evidence, the coroner, having duly cautioned Mr. Robbs, requested to know whether he was desirous of making any statement relative to the case; upon which that gentleman described the manner in which the vapour had been inhaled, and stated that the operation lasted about twenty-five minutes, including the tying of the vessels, the remainder of the time being occupied by the inhalation, and the necessary bandaging, &c. He also stated that he believed the deceased felt as much pain as if she had not inhaled the vapour, as she cried out and struggled at each cut. He then proceeded to read accounts of numerous operations which had been performed by the most eminent surgeons in the public hospitals, and other places, where the ether had been used with success, and stated that nothing had been done in this case but what had been fully warranted by the practice of the leaders of the profession. He also stated that he had attempted to produce reaction by the exhibition of ammonia and other applications, without success.

The coroner then summed up, and the jury, having deliberated a short time, pronounced a verdict, "That the deceased, Ann Parkinson, died from the effects of the vapour of ether, inhaled by her for the purpose of alleviating pain during the removal of a tumour from her left thigh, and not from the effect of the operation, or from any other cause."

At the conclusion of the case, Mr. Robbs stated that he fully concurred in the verdict, as he had no doubt whatever that the ether alone was the cause of death, and it was a duty he owed to the public to say so.

The verdict was then signed, and the inquiry terminated.

## Operations Without Pain.

### ST. GEORGE'S HOSPITAL.

Thursday, Feb. 25th.—Mr. Cutler removed the right breast of a female for scirrhus. She inhaled for about four minutes before the commencement, and continued to inhale the vapour more diluted during part of the operation. She began to make a moaning sound whilst inhaling before the operation began, and continued it for a little time after it commenced; but as the moaning was not increased, it probably had no connexion with the operation. The pulse became very frequent and feeble during the inhalation, but improved afterwards. The inhalation was discontinued, and consciousness returned, but without sensibility to pain, during the tying of the arteries; and the patient became very talkative, saying she had felt nothing of the operation, and not remarking at all that it was still going on. She was prevented from seeing the wound, and was told that it was finished. She complained of feeling very faint, although there was a blush on her cheeks; and she was allowed a little wine-and-water. In this case, the pupil was not observed to dilate.

Mr. Cutler likewise amputated the thigh of a little boy, by the circular method, for scrofulous disease of the knee-joint. The pupil began to dilate in about a minute; and in a minute more the eye was turned up, and the respiration deep and snoring. The pulse was somewhat accelerated, but very good. The operation by this time had been commenced without causing the least evidence of sensation. The ether having been discontinued, and a few inspirations of air allowed by the nostrils, the snoring subsided, and he soon showed signs of returning consciousness. The ether being inhaled for half a minute again, he snored as before for a short time; but recovered his consciousness again readily, as the operation was concluded, without having exhibited any signs of feeling it. The vapour of ether was given to the patients by Dr. Snow.

## ESSEX AND COLCHESTER HOSPITAL.

### OPERATION FOR STONE IN THE BLADDER.

By Roger S. Nunn, Surgeon to the Essex and Colchester Hospital.

On Friday, the 12th instant, I operated upon Thos. H——, aged fifty-two, the subject of stone in the bladder, in the presence of most of the medical gentlemen of the town and neighbourhood. The ether was exhibited by my colleague, Dr. Williams, who considered the patient to be sufficiently under its influence after he had inhaled it seven or eight minutes, at the end of which time I commenced the operation. There was neither difficulty nor loss of time in cutting into the bladder; but having done so, some little delay occurred in grasping the stone, which was small, very flat, and lying in the posterior part of the bladder. The delay was also increased by the extremely relaxed state of the bladder itself, which seemed to fall in folds on the forceps, and to cover the stone. The time occupied, from the commencement of the operation to the period when the man was unbound, was ten minutes, during which the ether was administered at intervals. The patient was placed fully under its influence, and the breathing first became heavy, and ultimately stertorous. He recovered, however, from its effects after a short time, and continued in a quiet, passive state, but without decided reaction, for twenty-four hours. At this period he had a severe chill, which lasted for nearly twenty minutes. Mr. Taylor (the house-surgeon) immediately gave him two ounces of brandy, with an equal quantity of water, after which the patient remained in a dozing state till eight o'clock P.M., when the house-surgeon considered it necessary to send for me, as a state of complete prostration or collapse had ensued. I ordered small quantities of brandy-and-water, (equal parts,) with arrow-root at intervals, wrapped him in hot blankets, placed bottles of hot water in the bed, &c. This treatment was kept up till nine o'clock the following morning, when ammonia was given alternately with the aforementioned stimulus. The patient seemed incoherent from eight o'clock P.M. of Saturday, till nine A.M. of the following day, when symptoms of slight reaction appeared. At a consultation of the medical staff, which was held at the time, it was determined that the same treatment should be continued, (modified according to circumstances,) and that, in addition, a stimulating injection should be administered. (The effect of the injection was to increase slightly the frequency of the heart's pulsation, but without exciting his nervous energies.) From this period he gradually sank, and died at five o'clock P.M., being sensible to the last. I should here mention, that the small vessels, which are necessarily divided in making the first incision, showed much inclination to bleed, owing, I imagine, to their want of contractile power. I therefore, to prevent any unnecessary hæmorrhage, secured them immediately after the patient was put to bed, so that he did not lose much blood.

*Post-mortem examination, sixty-seven hours after death.*—Membraneous congestion of the brain, but no effusion; brain firm; lungs permeable throughout, anteriorly exsanguineous, posteriorly engorged. Heart flaccid, of a natural size, and nearly empty. The left kidney pale, the right slightly congested. The bladder and the adjoining parts presented the usual aspect after an operation.

I would mention, that the blood throughout the whole vascular system was in a perfectly fluid state.

It is not my intention or inclination to attribute the loss of my patient wholly to the influence of the ether which was administered in this case, nor hastily to decry its use under all circumstances connected with surgical operations; but, still I feel called upon to bring before the notice of my medical brethren, the effects which resulted from its exhibition in this instance, that the profession may judge, from the recital of an unsuccessful case, how far it may be considered safe to employ ether generally, as a means of preventing the pain otherwise inseparable from physical lesion. The suffused eye, livid lips, and stertorous breathing, accompanied first by convulsive struggles, and next by a sudden cessation of all motion, are often indications of the effects of the vapour, and these were not altogether absent in the present instance. Still I felt myself justified in employing it, from the published accounts of many successful cases, and the sanction of my colleagues and numerous friends around me. In prosecuting the operation there was nothing peculiar to attract my attention, or to lead me to consider the patient's physical condition differed from that of those on whom I had before operated, until I had reached the bladder, when I can but attribute the difficulty in seizing the stone to the apparently collapsed state of that viscus, which had fallen in folds over the calculus, and so prevented its being grasped by the forceps. I must not, however, omit to mention the fact, that the patient expressed no signs of suffering during the operation. Thus far, therefore, it may be said the ether fulfilled its intended offices. But I think another question is involved—viz., whether the artificial means thus employed may not produce very serious depressing effects on the nervous system, depriving a patient of that reactive power so necessary to the reparative process? Has not a patient after the administration of ether a double shock to overcome—that produced by the vapour superadded to that of the operation itself? Does not the history of the post-mortem examination bear out the suspicion of the depressing influence of this inhalation? positively, from the still fluid state of the blood (although the body was not opened for sixty-seven hours after death) and the flaccid state of the heart; negatively, from the fact that the inspection detected no indications of violence done to the parts that could explain the rapid dissolution which ensued, and that there was no evidence of Nature having made the slightest effort towards local reparation. Pain is doubtless our great safeguard under ordinary circumstances; but for it we should hourly be running into danger; and I am inclined to believe that pain should be considered as a healthy indication, and an essential concomitant with surgical operations, and that it is amply compensated for by the effects it produces on the system as the natural incentive to reparative action. I trust that the publication of this unsuccessful case may lead to the publicity of many others which have occurred, so that the profession may not be led away by the erroneous supposition that the prevention of pain is so vital a desideratum in operative surgery.

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## OPERATIONS ON AN INFANT AND AN ADULT, UNDER THE INFLUENCE OF ETHER.

*To the Editor of* The Lancet.

Sir,—I beg to forward two cases of operations performed under the influence of ether, one of which is most interesting, as being the only case recorded in England, of an infant only ten months old, being subjected to the influence of ether, for operation, with the exception of one case named in the last Lancet, the particulars of which are not fully given.

Feb. 27th.—J—— L——, aged about forty-five, residing in King-street, has suffered from three painful hæmorrhoidal excrescences, which unfit him for work, and for which the usual remedies have been essayed in vain. He wished their removal, and was fully influenced by the vapour, in about two minutes, from an instrument constructed by myself, with a calibre of three-eighths of an inch in diameter, throughout tube and mouth-piece—the recipient of the ether being a common glass receiver, into the small orifice of which one end of the tube was adapted, and through a cock in the large aperture, a glass tube let down nearly to the bottom. In the use of this instrument I was kindly assisted by Dr. Wright and Mr. Fisher, Chemist. The three tumours were successively seized with the tenaculum, and cut away slowly by a scalpel. The mouth-piece being now removed, and the patient questioned whether he was now ready, or would like to postpone the operation a day or two, replied, he thought he would postpone it, but when informed that it was already completed, he expressed much surprise and delight. I asked, had he a dream? he said, "Nothing, Sir, except that I fancied I heard you cutting a thread with scissors."

The second and most interesting case was that of the infant of Mr. Savory, Chemist, High-street. I performed the operation at his private residence, in Jersey-place. This infant, only ten months old, had a subcutaneous nævus, the elevated and discoloured part of which was about the size of a sixpence on the left temple, and was growing rapidly. I had advised extirpation by ligature. The child in about two minutes got under the full influence of the ether, (by inhaling it from lint and sponge, previously wrung out of hot water,) it closed its eyes, and fell as it were into a calm and sweet sleep.

From the shape of the tumour, I was obliged to pass three needles under its base, which I afterwards included in a strong twisted silk ligature, drawing the noose with the full force necessary to strangulate the tumour. The infant never moved during the transfixion or tightening the thread. The ends of the needles were snipped off with cutting pliers, and otherwise secured from disturbance. The vapour which had been kept applied gently and skilfully during the whole period, by Dr. Thomas Wright, of this town, was now removed

—the child revived—applied itself, with the greatest zest, to the feeding bottle, and afterwards enjoyed a sweetly refreshing sleep for two hours, after which it awoke as well as usual, and without the least disturbance of the nervous or vascular systems.—I am, Sir, yours truly,

CHARLES EDWARDS, M.D., M.R.C.S.E.

Grosvenor-street, Cheltenham.

## Correspondence.

### THE UNIVERSITY OF LONDON AND HER GRADUATES.

*To the Editor of* THE LANCET.

SIR,—Permit me to thank you, not only on my own account, but on the behalf of my fellow-graduates, for calling attention to what must be admitted as imperfections in the constitution of the University of London. Because no active steps have been taken for their removal, however, it is not to be imagined that they have not been felt, and strongly too, by the graduates at large; but they know, at the same time, that they must stand and walk before they can run—and that so infant an institution must for some time be content to go in leading-strings under the fostering superintendence of the State. Still, it has been felt that disunion among themselves, and disconnexion from their University, were not states calculated either for their own benefit, or to raise their alma mater to the position which it ought, and no doubt one day will, occupy among the learned institutions of our land. By the present charter, the graduates are not even regarded as members of the University, this title being monopolized by the senate. Not a single graduate, moreover, is connected with that body, or even at present received upon its examining board; they have no voice in the election of officers; they have a name without a local habitation; and although the strictest examinations are submitted to without a murmur, the degrees are never "conferred."

Now it cannot be supposed that the senate is blind to these deficiencies—indeed, to my own personal knowledge it is not; and I feel satisfied, that were the matter properly represented, many of its members would perceive the propriety of considering one or two minor suggestions which might be made to them. It was doubtless wise, at first, to confide the entire management of the University to the very able and illustrious individuals selected as its senate; and till the time arrives when the opportunity will be afforded it of making a judicious selection from the graduates to take part in the government, it would probably be well that the charter should remain upon its present footing, and that we should submit for a time to our less remediable grievances. But there are some things which are left to the discretion of the senate, and in which they are quite unbound by any provisions of the charter. Thus, it is in its own power to invest the proceedings of the University with something visible and tangible, and to a certain extent this has been done. An academic dress has been appointed, and so far the principle has been recognised that the public require something more than a name to satisfy their belief in an entity. Surely it is not to be supposed that the graduates themselves are to be absolved from participation in so universal a frailty, or that they will feel satisfied until some outward form is adopted for their installation into their new academic dignity. Surely it is as little fitting to the position of the University as of a graduate to be merely informed, at the close of his examination, that a certificate of having passed it awaits him in the office of the institution. Surely it would tend to elevate both in the public estimation, were the degree of the University of this mighty metropolis conferred in an open manner, at fixed and known seasons of the year. If the University apartments are not capacious enough for the purpose, the occasional use of larger might be obtained at no great distance from Somerset House. This occasion would be, at all events, one in which a reunion of graduates would take place, and an *esprit de corps* be fostered amongst them.

Another suggestion might be respectfully submitted to the consideration of the senate:—There are in London several large institutions supplying candidates for the medical and arts degrees; and some of them have already in some way identified themselves with the University by adopting the title of "College." Now although it is most desirable that the senate should exercise no control whatever over their general management, yet I feel convinced that their several directing boards would, if asked to do so, lend their aid in establishing a more nominal and visible connexion with it; and this might be done by the general adoption, by matriculated students at University and King's Colleges, at Bartholomew's Hospital, &c., of the appointed university costume, not only on public occasions, but regularly and constantly in their lecture rooms and halls. This, at any rate, would be a sign which the public could appreciate with readiness, as consonant with their customary ideas of university display. Let the senate of the University thus be urged to make such a recommendation to the several schools from which candidates are accustomed to proceed: should it be adopted by them, one step would be taken towards a most desirable object; and should it not, the graduates will yet feel that the senate has done what little lay in its own power for its accomplishment, and the confidence they already place in it will be strengthened.

Trusting that in these remarks, made in no querulous spirit, but simply from a hearty desire for the well-being and prosperity of our University, I have been expressing the feelings of my fellow-graduates, I remain, Sir, your obedient servant,

EDWARD BALLARD, M.D. Lond.,
University Medical Scholar, and Medical Tutor in University College.

Gower-street, March, 1847.

### SUGGESTION OF A MODE OF ATTAINING WARMTH IN THE HOUSES OF THE POOR.

*To the Editor of* THE LANCET.

SIR,—No one can have seated himself in the dwellings of the poor without feeling that he is exposed on all sides to currents of air, which must be the source of much disease as well as discomfort to the inmates. It is not unworthy of the philanthropist to consider how this calamity can be best mitigated.

In the ordinary arrangement of the fire-places in this country, a very great quantity of air ascends the chimney, passing into it *above* the fire, as well as that which passes through the fire itself. Both these portions of air pass by the persons who sit near the fire, whose backs are consequently starved with cold whilst their faces are scorched with heat, the sure source of inflammatory and rheumatic affections.

Now that part of this current of air which is constituted by the large quantity which passes up the chimney above the fire is an unnecessary evil. I propose to obviate it. All that is required is, to place over the common grate a piece of common iron plate, of such a form, approaching to the conical, as will receive all the air which passes through the fire, and convey it up the chimney, which is to be closed around it by a horizontal iron plate, or any other uncostly material.

The fire will now burn too rapidly—an effect which may be prevented by the simplest form of damper, which may be regulated in the simplest manner. We have thus cut off the unnecessary current; the doors and windows may now be secured, for the fire cannot smoke; the plan proposed is a cure for all smoky chimneys. The conical covering of the fire will become heated, and diffuse its warmth into the room, prevented by the horizontal plate from ascending into the chimney. The grate now approaches the structure of a stove, yet without its closeness, whilst its glow and blaze, the gladness of an Englishman's eye, are visible; and for cold and draughts we have a genial warmth; and for discomfort and disease, health and comfort.

The original cost ought to be but a few shillings; whilst to the other advantages will be added the utmost degree of economy in regard to fuel. And what I here recommend for the cottages of the poor, I would also propose, with its iron ornaments, for the smaller rooms in the habitations of the independent portion of society; for in such these partial and keen currents of air prove most injurious. To repair the waste of fuel, and for culinary purposes, a part of the cone may admit of being removed and replaced from time to time.

London, March, 1847. PHILANTHROPOS.

### THE BIRKENHEAD HOSPITAL.

*To the Editor of* THE LANCET.

SIR,—On looking over your valuable journal of Feb. 6th, I find, at page 164, a remark, made by a person disguising himself under the cognomen of a "Governor to the Birkenhead Hospital," in relation to appointing an additional consulting surgeon to that establishment, an honour conferred on me, unsolicited and unanimously, by the public, for services in the cause of the suffering poor of this neighbourhood, now for a period of fourteen years, on my retirement from that institution as an honorary surgeon, and which course I was induced to adopt, as I could not, honestly, either to my own private

practice or the poor of this increasing place, longer hold office, without either injury to the one or neglect to the other. I quite agree with you that it would appear anomalous to appoint a junior over a senior; and in this case, particularly so, were it not that, previous to my resignation, I informed the only senior surgeon in the hospital of my intentions, giving him the option either to remain or retire, and take his place before me in right of seniority, whichever he pleased; and at the same time stating, if he did not retire, that on his doing so at any future time, I would waive (if I was appointed) the priority of my position, and take my place as second to him in the list of consulting surgeons: this, I conceive, was fair and honourable on my part. If he did not choose to resign, that was no reason why I should remain in office, to my own manifest loss and inconvenience, till it was his pleasure to do so.

I make these few remarks for the purpose of informing you of the true facts in connexion with this matter, and to refresh the memory of the *soi-disant* Governor, (?) who appears, wilfully, I fear, to have suppressed the truth, and which is well-known to everybody in connexion with the institution. Your statement of this letter, if you deem it worthy of your notice, will oblige—Sir, your very obedient servant,

Hamilton-square, Birkenhead, March, 1847. JEROME SMITH.

P.S.—You are probably not aware that the duties of this institution are onerous, as you have not only to take your rota in daily and weekly attendance, but to attend at the houses of the out-patients, over a district containing 20,000 inhabitants, who are scattered over a very wide surface. How, then, is it possible for any man, who has any pretensions to practice, to accomplish this and attend to his own duties, unless aided by an assistant, which I, not dispensing my own medicine, do not keep?

## PAINLESS SURGICAL OPERATIONS.

*To the Editor of* THE LANCET.

SIR,—I have this day procured a copy of Dr. Hickman's pamphlet on suspended animation; it is dated 1824, and is in the form of a letter, addressed to the late T. A. Knight, Esq., of Downton Castle, who was much interested in the inquiry.

It appears that he produced insensibility by various means—viz., by the exclusion of the atmospheric air, the exhibition of carbonic acid gas, and by another method, which, he states, produced the desired effect much sooner than any of the others, that is "by the agency of sulphuric acid and carbonate of lime." In this latter example, he notices that the results were "not so satisfactory; some blood escaped from the wounds, which did not heal so rapidly as in the first experiment."

How far Dr. Hickman is entitled to the claim of this discovery, may be a question; it is perfectly clear that he is the originator of the idea of producing insensibility under surgical operations. The modern introduction of sulphuretted ether is at best but an improvement of that idea, or, in other words, it is carrying out the original views of one party, by means of a new agent suggested by another. It was known that Dr. Hickman was pursuing his experiments in 1828,—that is, four years after the date of the letter referred to,—and it is more than probable, that subsequent improvements may have been made, and published, at a later date.

As the discovery is now being claimed by other parties, how are we to be assured that they have not not borrowed the idea from this published work? My only object in troubling you with these remarks is, that justice may be done, and that the credit of this invention may be awarded to those to whom it is fairly due.—I am, Sir, yours very obediently,

Kingswinford, March, 1847. THOMAS DUDLEY.

## THE NAVAL MEDICAL SERVICE.

*To the Editor of* THE LANCET.

SIR,—Your very admirable article in THE LANCET of Saturday last, on the position which naval assistant surgeons hold in the service afloat, must call forth the gratitude of every member of your profession in that department of the public service, and lead them to augur much good from such powerful advocacy.

To every unprejudiced mind the force and truth of your remarks must be apparent, and the necessity and justice of giving assistant-surgeons ward-room rank undoubted. So long as this is withheld, the Admiralty regulations relative to education are worth so much waste paper; for men possessing a high standard of education will not enter—nor, indeed, will any other, unless compelled by sheer necessity; and a service that might, without costing the country one shilling, be made the most popular, is, by the present unwise regulations, at a considerable discount.

This, Sir, is impolitic and unjust—first, as regards science; and secondly, as regards those who are, or may be by the necessity of the case, unable to make choice of a medical attendant—a deprivation I feel sure my lords of the Admiralty would not like to have inflicted upon themselves.

The only serious objection ever urged by the Board of Admiralty against the claims of assistant-surgeons to ward-room rank, was the difficulty of providing them, in the event of its being granted, with suitable accommodation. Yet, strange as it may appear, cabins have been erected for the naval instructor, engineers, and additional lieutenants, since that objection was first started; and so may assistant-surgeons also be provided with cabins, even at this the eleventh hour, if the Admiralty could be impressed with the necessity of giving encouragement to education and talent, as they have been in the case of naval instructors and engineers.

A deputation from the Medical Association once waited upon the hon. member for Marylebone (Sir C. Napier) on this very subject, who stated, in reply to some question put to him, that, indeed, the position of an assistant was much improved since mates had received rank. I remember at the time feeling surprised and annoyed, that a reply so palpably absurd could have been received by grave and sober men as a sufficient answer; and only mention it now to show that even the gallant commodore is not free from the prejudices of his class—prejudices which allot less pension to the widow of a surgeon than to a lieutenant's or master's—which cut down a surgeon's share of prize-money to one-half that of a lieutenant—which allow him to rank with, but after, a lieutenant; which have called for a commission—now sitting—with the view to deprive medical officers of the epaulettes the late Board granted; and which still withhold from my junior brethren the position they are so justly entitled to.—I am, Sir, yours very gratefully,

A NAVAL SURGEON.

## ETHERIZATION.

*To the Editor of* THE LANCET.

SIR,—Physiological observations on the action of ether vapour on the nervous systems being of great interest on many accounts, and of vast importance, in so far as they may guide us in the safe administration of it, I put together a few matters respecting the phenomena of the abolition of nervous influences as they present themselves to me in numerous inhalations in my own person and those of others who have inhaled.

In the gradual inhalation of the vapour, the effects, though following and running into each other, may be divided into the following phases:—

1. Abolition of common sensation—sensation of heat and cold and tactile perception remaining.
2. Abolition also of special sensations.
3. Abolition also of mental perception.
4. Partial abolition also of excito-motory (conservative) phenomena.

1. I have found when I have inhaled for a short time that I am quite insensible to pain. Thus, whilst I can readily feel a pin held between my fingers, I can thrust it deeply into my body without feeling more than under ordinary circumstances I should were its head merely placed in contact with the skin. I am quite sensible of the difference of temperature of water into which I dip my fingers. I have performed operations on persons who, whilst sensible that the operation was being performed, did not feel any accompanying pain. They have obeyed my directions verbally given.

2. After a time my sight and hearing fail; but still I am conscious of an existence. Whilst a person has been in this state I have operated, and when the patient has recovered, the state is intimated in somewhat the following manner:—"I thought you made me inhale twice, and then drew my teeth"—(a fact in this case, as the process was accidentally interrupted in the middle:) but the patient has felt or seen nothing.

3. Next, a total unconsciousness obtains, the voluntary muscles become relaxed, and apparently I fall into a deep sleep. In this state, though insensible to pain, and quite unconscious on being spoken to, yet, on operating on a patient, excito-motory opposition, and sometimes very determined and violent, has been offered, (the patient even screaming loudly;) and yet, on recovery, the patient has been quite unconscious

of anything, but thinks he has been dreaming, and that for a long time.

4. I have operated on patients totally insensible, and not the least excito-motory opposition has been offered, showing, I presume, a partial suspension of this function.

I do not know whether further effects might be produced, but I should hesitate to try to produce any beyond those last described. I presume (if it could be brought about) it would not be very desirable to produce stertorous, or possibly cessation of, breathing, and relaxed sphincters, which may be the next step.—I am, Sir, your very obedient servant,

Hitchin, Herts, March, 1847. J. R.

## Medical News.

The Medical Registration Bill.—Some time since, a meeting of the Gloucestershire Medical and Surgical Association was convened, for the especial purpose of considering what course should be pursued in reference to Mr. Wakley's new Registration Bill, when the following resolution was adopted:—"That the Medical Registration Bill proposed by Mr. Wakley is cordially approved by this Association, and that it be energetically and promptly supported."

The Bill, it is understood, is now in the hands of Council, but when the proper time time arrives, active measures will be adopted to carry the resolution into effect.

Apothecaries' Hall.—Names of gentlemen who passed their examination and received certificates to practise on Thursday, March 18th, 1847.—Robert Finch, Greenwich; Robert Kemp Buckell, Southampton; George Anstice Knott, Bristol; James Edmund Currey, Essex.

Experiments on the Plague.—A commission of Russian physicians are at present occupied in Egypt in investigations relative to the plague. They have everywhere found fellahs ready, for a trifling remuneration, to allow themselves to be operated on in order to test the long-disputed questions of the contagion and inoculation of the malady.

Test of Death.—The Belgian papers report that a savant of that country, M. Maindle, has asserted his discovery of a simple means of distinguishing real from apparent death. It consists in establishing a burn of the second degree. If life remains, a blister always rises, even in the absence of all sensibility; but if death has taken place, the burn produces no effect.

Important, if True.—At the last return under the Income Tax, no fewer than thirty surgeons, practising in London, admitted that their professional earnings amounted to £10,000 per annum; and in three others it was upwards of £20,000.—*American Paper.*

The disgusting plan of inhuming the dead in the midst of the living is about to be abolished, the government having prepared a Bill to prohibit the further interment of bodies in the churchyards of large towns and populous districts. It is therefore probable that this, the most intolerable of national nuisances in modern times, will shortly be abated. The public are no doubt indebted, in a great measure, to the indefatigable exertions of Mr. G. A. Walker, Surgeon, for this wholesome reform.

College of Surgeons.—The quarterly examination for the fellowship of the Royal College of Surgeons will take place on Monday, the 5th, and Wednesday, the 7th of April next.

Obituary.—Letters from Tripoli, just received, announce the death, on the 27th of February, after only four days' illness, of Dr. John Dickson, a half-pay surgeon of the British navy, who had been upwards of thirty years a resident at Tripoli, and where such was the extent of his gratuitous attendance on the indigent, that the mournful event cannot but be looked upon as a great public calamity. He has left a widow and large family to deplore his loss.—At Honiton, on the 16th of March, aged twenty-one years, Henry Littledale Jerrard, younger son of J. C. Jerrard, Esq., of that place.

Suppression of a Lunatic Asylum.—We perceive that the Lord Chancellor has, we believe for the first time, resorted to the exercise of the power conferred upon him by the new Lunacy Act, and has, from and after the 13th of April next, withdrawn the licence of a lunatic asylum in the parish of Gate Helmsley, in the county of York. The reasons for this step are not assigned. The asylum in question is, we believe, in the hands of a non-professional person.—*Medical Gazette.*

University of London.—The council of the university have made the following arrangements with regard to examinations for medical degrees in the present year:—*Bachelor of Medicine.*—Pass examination, August 2 to August 9. Subjects: Anatomy and physiology, chemistry by experiments and printed papers, botany with materia medica, and pharmacy by *vivâ voce* examinations and demonstrations from specimens. Examinations for honours, the higher branches of the same subjects, with pharmaceutical chemistry.—*Bachelor of Medicine,* (Second Examination.)—Pass examination, November 1 to November 8. Subjects: Physiology, general pathology, general therapeutics and hygiene, Celsus de re Medicâ, surgery, medicine, midwifery. Examination for honours, November 16 to November 19, the higher branches of the same subjects, with comparative anatomy and physiological botany.—*Doctor of Medicine.*—November 22 to November 26. Subjects: Elements of intellectual philosophy, logic, and moral philosophy; a commentary on a case in medicine, surgery, or midwifery, at the option of the candidate; Celsus de re Medicâ, medicine, &c.

## BOOKS RECEIVED FOR REVIEW.

A Treatise on the Plague, more especially on the Police Management of that Disease, &c. By A. White, M.D. London, 1846: Churchill. 8vo, pp. 342.

Tables of the Weights of some of the Organs of the Human Body. By T. B. Peacock, M.D., &c. Edinburgh, 1846: Sutherland and Knox. Pamphlet, pp. 23.

Hood's Magazine, for March, 1847. London: H. Hurst. (Reminiscences of a Retired Surgeon. 1. The Accouchement."

The Prevention and Treatment of Disease in the Potato and other Crops. By John Parkin, M.D. London, 1847: W. Wood.

On Wounds and Injuries of the Abdomen and the Pelvis; being the Second Part of the Lectures on some of the more important points in Surgery. By G. J. Guthrie, F.R.S. London, 1847: J. Churchill.

A Treatise on Diet and Regimen. By William Henry Robertson. Fourth Edition, re-written and enlarged. London, 1847: J. Churchill.

Handbook of Angling; with the Natural History of River Fish. By Ephemera, of Bell's Life in London. London, 1847: Longman and Co.

Outlines of Structural and Physiological Botany. By Arthur Henfrey, F.L.S., Lecturer on Botany at St. George's and Middlesex Hospitals. Van Voorst, 1847.

## CORRESPONDENTS.

We shall next week insert an able appeal to the medical profession throughout the United Kingdom, respecting the General Medical Annuity Fund, which we have received from Mr. Daniell, of Newport Pagnall, the managing director of the institution.

*Non Sapiens.* We should deny the author of the quack work in question, bolstered up by its disgusting pamphlet, any real qualification for his subject except that of knavery and obscenity.

*Mr. R. Billowes.*—We never recommend modes of treatment in particular instances. Mr. B. must select his own medical attendant.

*M.D.* (Boulogne.) We shall not fail to notice the disgraceful newspaper quackery so rife amongst the English medical men at this semi-Anglicized watering-place.

To a "*Peeping Tom*" *boy at the* "*Knaves' Post,*" Coventry, and many others, who have forwarded us a mass of cards, handbills, billheads, labels, circulars, advertisements, and pamphlets, all having the true savour of quackery, we feel obliged to promise a frequent notice of these reprehensible systems of advertisement, until they are abated in the profession.

*Dr. Sheppard* shall receive a private communication.

*Studens* should apply to the publisher of "Pereira's Materia Medica." We are not ourselves able to impart the required information respecting a second edition.

*Spes.*—The letter shall appear next week.

*Mr. Foulis.*—We will shortly attend to the subject of our correspondent's note.

*Mr. Henry Sharp.*—We shall feel greatly obliged by receiving the promised information respecting the coming trial. It is one of considerable importance to the rights of the qualified medical man.

Communications have been received from—Mr. R. Stewart, (Torquay;) An Old Subscriber; Mr. Somerset Tibbs; Mr. A. B. Steele; Mr. T. B. Wilde, (Dublin;) Mr. G. Todd, (Evenwood;) Mr. J. Potter, (Manchester;) A Subscriber, (Cheltenham;) Mr. Salt; Mr. W. Smith; Mr. J. Stephens, (Birmingham;) Mr. F. Cooper, (Northampton;) Mr. Coventry, (Hatfield;) Non-Sapiens; Mr. Billowes; M.D., (Boulogne;) Dr. Potter, (Manchester;) "Peeping Tom;" Dr Shepherd, (Plymouth;) Studens; Dr. Dick; Mr. Simons, (Birmingham;) Mr. Stevenson, (Bermondsey;) Mr. Richardson; Spes; Mr. Alison, (East Retford;) Mr. Sharp, (Bolton;) Dr. Richardson, (Brighton.)

TO SURGEONS AND OTHERS.

THE Advertiser wishes to dispose of a small bonâ fide RETAIL. It is considered well worthy the attention of surgeons wishing to establish themselves. It is well situate, newly and well fitted and stocked. Within three miles east of the Post-office. Sum, £240.—Apply, in the first instance, to G. D., care of Mr. Hawkey, 9, Walker's-terrace, Cleveland-street, Mile-end-road.

TO SURGEONS AND CHEMISTS.

TO BE DISPOSED OF, a RETAIL BUSINESS, to which the nucleus of a very extensive Practice has been attached, by the present occupier, (a Surgeon.) Well suited for two brothers, or parties who would jointly conduct the Retail and Practice. The shop is handsomely fitted and well-stocked, most commandingly situated in the greatest thoroughfare on the Surrey side of the bridges. House large, in good repair, convenient for letting off, and held on lease. Retail returns averaging upwards of £200 per annum, and might, under different management, be doubled. Private Practice, £200 more. This being a bonâ fide concern, the present proprietor would undertake to remain (if required) with the purchaser a sufficient period to ensure a good introduction to the Practice, and to give satisfactory reasons for leaving. No one need apply who cannot command £500.—Application to be made personally, or by letter, addressed, A. B., to the care of Messrs. Ancell and Bryant, Wholesale Druggists, Old Swan-lane, City.

TO MEDICAL MEN.

ANY respectable Physician and Surgeon who will assist in the formation of an Institution under the Friendly Acts, based on safe and equitable principles, may be appointed Medical Officers thereto. It is requested that others will not apply.—Address, by letter only, with real name and address, to B. C. L., Hammond's Town and Country Advertisement Office. 27, Lombard-street.

MEDICAL PRACTICE.—TO BE DISPOSED OF immediately, a COUNTRY PRACTICE, averaging £200 and upwards annually, situated in Berkshire. House rent, £22 per annum, and a very comfortable place. As the present practitioner has just left, from circumstances that will be explained, £50 is only required, with sufficient introduction.—Address, W. H. Rogers, Surgeon, Swallowfield, Berks.

MEDICAL, ISLINGTON.—PRIVATE and COUNTER PRACTICE.—A Gentleman quits an increasing family connexion, near Islington. His forty years' lease, low rental, with £300 improvements, £150 stock [and fixtures, a practice of £200 annually, all to be sold for £300. The situation is a leading and truly respectable thoroughfare, with immediate income.—Application to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

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TO BE SOLD, an Old-established BUSINESS, of a very lucrative nature, situate in a leading thoroughfare, and thickly-populated part of the City. The proprietor is retiring. To save unnecessary trouble, none but principals will be treated with.—Apply, by letter, prepaid, to M. A., Mr. Harris, Dentist, 33, Moorgate-street, City. The proprietor will give a good introduction.

A GENTLEMAN, M.B. and B.A., of general Medical Education, and experienced in Midwifery, aged Twenty-eight, wishes for a situation to Visit, Keep Books, &c. Advertiser is of active habits, accustomed to riding, and would be found an efficient Assistant in an extensive country Practice. A small salary taken, in case little or no dispensing is required.—Address to C. B., Mr. Trueman's, 36, Howe-street, Birmingham.

TO SURGEONS, &c.

AN M.R.C.S. is desirous of an ENGAGEMENT as VISITING and DISPENSING ASSISTANT, or to attend to an Union Practice in town or country. Satisfactory references will be given.—Address, pre-paid, to A.B., 4, Windmill-street, Tottenham Court-road.

TO BE DISPOSED OF, a VILLAGE PRACTICE, more than fifty years established, with Union appointments, in a good neighbourhood in a Midland County, and now capable of great increase. None but principals need apply, and those only who can command from £500 to £600.—Address, B.H.G., care of Messrs. Gale, Baker, Warde, and Oldfield, Wholesale Chemists, Bouverie-street, Fleet-street.

MEDICAL PRACTICE, WARWICKSHIRE.—A respected Practitioner, of long standing, must quit for a milder climate. A well-paying family connexion. He who loves rustic and truly beautiful scenery, with almost metropolitan neighbourhood, with view to income, can alone estimate this offer. Annually, £300, with full scope for increase. Price, including well-stocked surgery, £275.—Application to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

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A LADY who may have lost her sight or hearing, or whose depression of mind requires Christian sympathy, would meet with a COMFORTABLE HOME, where Music is a source of recreation, and be introduced into good society. Terms moderate. References given and required. Apply, A. B., care of Mr. Eggington, Bookseller, Lichfield.

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For further particulars, apply to Messrs. RICHARDSON and GUTCH, solicitors, York.

LEEDS PUBLIC DISPENSARY.—Mr. CARTER having RESIGNED his Office of ASSISTANT APOTHECARY to this Institution, NOTICE IS HEREBY GIVEN, that the Medical Officers will Elect his Successors on MONDAY, the 12th day of APRIL. Besides the numerous Advantages afforded by such an institution for Professional Improvement, the Assistant Apothecaries are allowed to attend Lectures at the Leeds School of Medicine, which qualify for Examination at the Royal College of Surgeons and the Apothecaries' Hall.

Candidates for this situation must present themselves at the Dispensary on the Thursday previous to the day of Election, at Twelve o'Clock; and the successful Candidate will be required to enter upon his duties immediately.

An APPRENTICE is also WANTED for this Institution, who will board and lodge in the house, and have an opportunity of attending Lecture at the Leeds School of Medicine.—For particulars, inquire of Mr. Pigg, Apothecary to the Institution.

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Candidates for the situation are required to have the diploma of the Royal College of Surgeons, and the licence of the London Society of Apothecaries.

Applications, with Testimonials, to be addressed to Benjamin Platt, Esq., Treasurer, Parliament-street, on or before Monday, 12th April next.

N.B.—The Candidates whose Testimonials are satisfactory will have notice to appear at the Hospital on or before the day of Election.

15th March, 1847.

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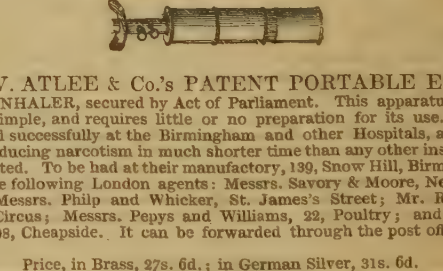

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# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

THE general outline of the last case (46) represents fever, marked during the first three weeks by great drowsiness, with symptoms referrible to the abdomen. The end of this period was marked by an acute attack, of uncertain nature, from the immediate danger of which the patient was relieved, and for a fortnight more appeared to be going on favourably, though very slowly, but for the disturbed state of the bowels. Then extreme tenderness of the abdomen, jaundice, and sloughing, are the prominent features in the gradual exhaustion which terminated in death.

Looking at the case as completed by dissection, it appears most likely that the acute attack, on which the chief interest of the case turns, was coincident with the perforation of the intestines. It was not thought so at the time; the question lay between whether the rigor had relation to any faintness induced by raising her up, or whether it betokened a coming pulmonary affection, which was beginning then to manifest itself by cough. Clearly, the means of resolving this doubt, by raising her up to make a thorough examination of the chest, were not, from the nature of the doubt, available, and the sequel gives reason to be glad that such a measure was not employed. The local affection which by the evening had prominently manifested itself by cough, was allowed to absorb all the local treatment, in the form of a large blister, and she lay quiet and closely covered, while the intestines were contracting the adhesions which so closely circumscribed the peritonitis, the position which the intestines take in the hollow of the pelvis, in all cases of long exhaustive disease, and especially in typhus, materially assisting this attempt at reparation. To this condition of parts, doubtless, was to be referred the extreme pain felt on pressure in the hypogastrium, and by it was explained, what was a cause of much surprise during her life, the extreme pain felt there arising, as was thought, from the existence of ulceration, yet withal the so healthy, and indeed costive condition of the alvine evacuations.

Where so little was left to medical treatment, merely to supply her with what she happened to fancy, or her stomach to tolerate, the feeling was perhaps rather one of curiosity, which noticed the appearance of successive symptoms. The two small abscesses were looked upon as the result of phlebitis, in connexion with the large sores on her back, but they passed away, and by the time of her death, all morbid appearances with which such a state of things might have been connected had passed away also. But the other symptom which attracted attention, the jaundice, seemed clearly explained by the state of fatty degeneration of the liver. Is it too much to say, that a high degree of temperature, perfect rest, and a stimulant diet, continued for so long a time, had produced this change in the structure of the liver?

In the previous case (45), death resulted from an accident, pneumonia, however closely that may be connected with the state to which the fever had reduced the patient; cicatrization had gone on to a greater or less extent in the ulcers, and the chronic pleurisy was nothing more than may be traced in other patients, dying years after, of other disease. In the last, anatomy held out no such encouragement: she died of processes which had been going on steadily for weeks; and, but in the subsidence of the swelling of the mesenteric glands, and the cicatrization of the slough on her sacrum, there was not a trace of any attempt at reparation. To say nothing of the organic disease of the liver, the healthy chronic pleurisy of the former was but ill replaced by the unhealthy peritonitis of the latter case.

Yet, indeed, there is great encouragement in this, even in the fatal termination of two cases; in the one, there is evidence, that but for the accidental intercurrence of pneumonia, the patient might have got over the prolonged disease, and that in her extreme state of prostration, the natural powers of reparation were at work; in the other, there is the encouragement of her having struggled so long with disease of so hopeless a kind, where the natural powers of the body appear to have been quite paralyzed. We commence the illustration of abdominal complication, with some more happy instances of the effects of treatment.

FEVER, WITH SPOTTED RASH; THE STRESS OF THE DISEASE ON THE ABDOMEN; RECOVERY.

CASE 47.—Edward R——, aged 21; admitted Oct. 20, 1846, John front ward. Spare made; dark complexion; face dull and heavy; eyes injected; skin warm and moist; tongue moist, with a white fur on the dorsum, the tip and edges clean; pulse 88, full and soft; bowels much relaxed, with pain in the abdomen; has pain in the head and limbs, and cough, following a succession of rigors, nine days back.

*History.*—A Welshman; in London for one year as a grocer's porter; healthy, temperate. Nine days ago he was taken with rigors, followed by heat, recurring for two or three days, and compelling him to lay up from work. Six days ago he took to his bed, and on that day was bled from the arm. For the last three days he has been delirious at times, especially at night. He is now sensible, but slow. His abdomen is slightly tender on pressure, with gurgling in the right iliac fossa. There are a few spots visible upon his skin. Ordered, milk diet, with arrow-root; an aromatic draught immediately; five grains of compound mercury and chalk pill thrice a day; a saline draught, with compound spirits of ammonia, twenty minims every four hours; and to have a poultice applied to the abdomen.

Eleventh day.—Quiet during the night, now conscious, but drowsy; face flushed; eyes injected; tongue rather dry, with red tip and edges; pulse 110, full and soft; bowels once open; scanty yellow evacuation; abdomen tender; skin hot and dry; urine coloured with bile. Ordered to continue; to have eight leeches applied to the abdomen.

Twelfth day.—Rambled in his sleep, now less drowsy; he vomited once this morning; tongue with a dry brown fur on the dorsum, the tip and edges clean and red; skin moist, still spotted; he has had one loose ochry evacuation from the bowels; abdomen tender and tympanitic. Ordered, to have eight leeches applied to the abdomen; to continue the pill and draught; and to take an aromatic draught immediately.

Thirteenth day.—Slept at intervals; face still flushed; eyes injected; tongue cleaner than yesterday; skin hot and dry; spots more numerous; pulse 120, full and soft; two ochry evacuations from the bowels; abdomen tense and tender; he complains of cough and great thirst. Ordered, to have eight more leeches applied to the abdomen; and to continue.

On the fourteenth day, the same symptoms continuing, the same treatment was repeated.

The fifteenth day finds him with some muscular tremors, having been noisy and restless during the preceding night. Pulse 120, small and soft; tongue with a thick white fur; he had passed two loose ochry evacuations; the abdomen was hard, but not tender; skin hot and dry; the spots more distinct than ever. Ordered to continue; to take an aromatic draught at night.

Sixteenth day.—He slept well; pulse 132, small, soft; tongue as before; two loose evacuations, one passed unconsciously; he complains much of thirst. Ordered to have four leeches applied to the abdomen; to continue.

Seventeenth day.—Quiet at night; he passes his urine and fæces in bed; abdomen a little tender; face flushed; skin hot and dry; pulse 126, fuller, soft; tongue dry in the centre, with red tip and edges. Ordered to continue the pill; to take an aromatic draught, with tincture of opium, ten minims, to-night; to have eight more leeches applied to the abdomen.

Eighteenth day.—Slept well; face flushed, anxious; pulse 132, small, soft; tongue as yesterday; two evacuations passed in bed, the last ochry, with some blood? abdomen generally tender. Ordered to continue the pill; to repeat the aromatic draught as before; and to have a blister plaster applied to the abdomen.

Nineteenth day.—Slept quietly and well; the blister plaster drew well; face less flushed; tongue clean and dry; pulse 108, small, soft; skin warm and moist; he has had two evacuations, only one of them passed in bed, one more copious and less ochry than before. Ordered to continue the pill and aromatic draught.

Twentieth day.—Good sleep; skin moist; more abundant spotted rash; tongue moist, chapped; bowels not open; pulse 128, soft, fuller; he is quite free from pain.

Twenty-first day.—Pulse 120, soft; tongue clean, dry; skin warm and moist, with the old rash remaining on the chest, and some miliary vesicles.

On the twenty-second day, when his bowels were relieved, the evacuations were solid. His tongue henceforth remained moist, with a thin fur; and when, on the twenty-seventh day, he was allowed to leave the hospital, on an opportunity for

returning home presenting itself, he had nothing but weakness to complain of.

How truly satisfactory this case is. A man in whom there was no reason to suspect any previously existing disease, and temperate in his habits, is attacked with fever during the prevalence of an epidemic of an extremely adynamic type. He is treated, first, on his general symptoms, without reference visibly being made to the character of the epidemic; then, the local complication is singled out, and treated on its own indications by repeated depletion; and lastly, when the indications for depletion failed, a large blister is applied over his abdomen, and his recovery dates in a most marked degree from that application. Such is the case as a whole; it will be worth examining in parts, to dwell on these particular periods and indications.

It has so happened, that there has not been a single patient admitted with fever during the past year whom, setting aside all notion of a fever of an adynamic type, judging from his symptoms alone, whatever might have been the disease on which they depended, it would have been thought advisable to bleed from the arm. There is the more credit due to the practitioner under whose care this patient was previous to his admission, for venturing on this treatment, which appears, from the sequel of the case, to have been perfectly judicious. It is right, at the same time, to mention, that the only three patients who were said to have been bled before admission all ultimately recovered.

Diarrhœa, with ochry evacuations, and pain in the abdomen on pressure, together with a red tip and edging to the tongue, were the symptoms which called for depletion of the surface of the abdomen by leeches, repeated as often as the state of the pulse allowed. Attempts to check the diarrhœa, and to restore the natural secretions, by the use of mercury in the mildest form, combined with opium, were also persisted in throughout, the character of the evacuations giving the indications for continuing this remedy, and all minor symptoms, such as flatulence or mere uneasy feelings in the abdomen, being treated by an occasional aromatic draught.

But the diarrhœa still went on; after so many applications of leeches he became exhausted, his evacuations passed unconsciously, and there arose a suspicion that they were mixed with blood. Here certainly were the true indications for the application of a blister to the abdomen; and the result appears in the most satisfactory condition which he assumed the next day, and thenceforth till his discharge.

A blister is a remedy so frequently applied on vague indications, with the idea of rousing a patient when his condition is already hopeless, that an analysis of the effects of blisters generally would not give any very high idea of their therapeutical value. But if those cases be selected where they were applied on definite indications, such as the above, their effects are found to be as well marked as that of most other remedies. Of course it is not at once to be assumed that the same change would not have taken place without the blister having been applied; nor, again, taking the other view of the case, that the same results might not have followed the earlier employment of the same means. The above is only one observation of the order of sequence, which must be frequently repeated before it can claim the considerations of cause and effect.

One more point seems worthy of attention:—The fifteenth day finds him with muscular tremors, after having passed a noisy, restless night. Here was one sign which commonly accompanies great exhaustion; but there were not all the signs there, and it did not appear worth while, for that one symptom, to change entirely the plan of treatment. Fortunately, there was no indication for more leeches to the abdomen at that time; but the next day, when the tongue still remained furred, and had not become dry and black, as might have been feared from that one sign, depletion was again required by his other symptoms, and again employed with advantage. Were not these muscular tremors indicative rather of irritation of the bowels than of debility?

In the above patient, there was plenty of power to allow of the abdominal complication being so treated. The following case illustrates the same complication occurring under much less favourable circumstances.

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FEVER, WITH PAPULAR RASH; STRESS OF THE DISEASE ON THE ABDOMEN. RECOVERY.

Case 48.—Christopher G——, aged about thirty-five; admitted April 1846, John front ward. A stoutly made man; was admitted for palpitation of the heart, with some cough, and glairy, mucous expectoration. He had a diastolic, and sometimes a systolic murmur at the base of the heart, the latter in the track of the aorta, the former in that of the pulmonary artery. He remained in the ward more an object of curiosity than of especial interest till May 15th, when, having had a rigor the previous night, he complained of headach. The next following night he passed without sleep, and now, May 16th, he lies in bed with a flushed face; skin hot and moist; pulse 108, small and soft; tongue moist, furred, with a central streak; bowels twice relaxed; abdomen tender on pressure. He has pain in his head and limbs, with thirst, nausea, and vertigo. Ordered, mercury and chalk, two grains and a half, twice a day; a saline draught every four hours; to have eight leeches applied to the abdomen.

Fourth day.—Little sleep; eyes suffused; skin hot and perspiring, with abundant papular rash, which seems to have been indistinctly marked yesterday; tongue rather dry, coated at the sides, the tip red, and a broad red streak down the centre; pulse 104, full, soft, thrilling; three rather scanty evacuations from the bowels; urine scanty, high coloured. He has still headach, with pain in the throat and epigastrium Ordered to continue.

Fifth day.—Sleep prevented by pain in the head and back; face flushed, eyes suffused; skin warm, profusely perspiring; the rash has extended over the face, as also over the lower extremities; tongue with a thin moist fur. Three loose sandy evacuations; abdomen tolerant of pressure. Ordered to continue; to have a poultice applied to the abdomen; to take arrow-root for food.

Sixth day.—He expresses himself as much easier, complaining only of a little pain down the sternum; skin warm and moist; the rash fading on the trunk, but more distinct on the feet; there is much less flushing of the face and suffusion of the eyes; a little ecchymosis is to be seen beneath the left conjunctiva. Pulse 120, small, soft; tongue clean and dry down the centre, a moist fur, with prominent papillæ along the sides; bowels much relaxed, with light-yellow curdy-looking evacuations. Ordered an aromatic draught immediately; comp. ipecacuanha powder, five grains, to-night; a saline draught, with comp. spirits of ammonia, twenty minims, every four hours.

Seventh day.—Good sleep; appetite returning; says that he feels at ease; throat moist, almost clean, with prominent papillæ; pulse 120, small and soft; the rash appears as small; very distinct papulæ upon the hands; four ochry evacuations from the bowels. He is deaf, and has almost lost his voice. Ordered to repeat the same treatment as yesterday.

Eighth day.—Little sleep from pain in the epigastrium; bowels open once; abdomen tolerant of pressure; tongue dry in the centre, almost clean; pulse 112, small and soft. Ordered six ounces of wine; beef for tea, one pound; compound mercury and chalk pill, five grains, twice a day.

Ninth day.—He lies on his back, quite deaf, and exceedingly anxious about himself; pulse 120, small and soft; skin warm and perspiring; two light-coloured, liquid evacuations; abdomen tender; tongue still dry. Ordered an aromatic draught at once; to have a blister plaster applied to the abdomen, and to continue.

Tenth day.—He is so deaf and nervously anxious that it is difficult to communicate with him. He says he feels as if he had some one else's body. Tongue dry, with a broad brown streak down the centre, elsewhere clean; skin hot, dry; the rash less readily fading on pressure; pulse 138, small and soft; he has passed one copious loose fæcal evacuation. Ordered to continue; to have a poultice applied to the abdomen, and to increase the daily amount of wine to ten ounces.

Eleventh day.—He had three hours sleep after midnight; since then he has lain in a stupid, irritable state; pulse 140, fuller, soft; tongue dry in the centre, moist tip and edges; two relaxed motions; abdomen much distended. Ordered, an aromatic draught immediately; to continue the draught which he was taking before, and the wine.

Twelfth day.—Deaf, incoherent, and obstinate, face and eyes flushed, expression anxious; pulse 132, small, soft; bowels profusely relaxed, evacuations green; abdomen tolerant of pressure; tongue dry, with a thicker fur; skin warm and dry, with the same rash. Ordered, an aromatic draught, with five minims of tincture of opium, at once; and ten minims of compound spirits of sulphuric ether, every four hours, continuing the wine.

Thirteenth day.—He is occasionally noisy and delirious, but now lies quietly on his back, with irregular, hurried respiration (42); face still flushed and anxious; pulse 116, again fuller, but very soft; skin hot and moist, with less distinct rash; tongue dry; five relaxed, greenish motions, two passed unconsciously, which he attributes to the second individual

whom he still supposes himself to be. Ordered to repeat the treatment of yesterday; to take two grains and a half of compound ipecacuanha powder every four hours.

Fourteenth day.—Noisy till two A.M., then had half an hour's comfortable sleep; pulse 96, soft and full; respirations 26, calm and regular; tongue dry, with a chapped crust on the dorsum, a thin, moist, white fur, running down the sides; skin cool and dry, the rash gone; no vesicles apparent. Ordered to continue; to take five grs. of comp. ipecacuanha powder to-night.

Fifteenth day.—Slept well, he lies moaning loudly at times, deaf, and hardly conscious; tongue readily drying; skin hot and perspiring; pulse 92, full, with more power; he has had two evacuations from the bowels, one passed unconsciously, green, with lumps of fæcal matter; abdomen tense and tender. Ordered, an aromatic draught, with fifteen minims of compound spirits of sulphuric ether, and five minims of tincture of opium, every six hours; to have a blister plaster applied to the abdomen.

Sixteenth day.—The blister rose well, and he had good sleep, only moaning at times; he lies on his back, deaf, but a little more conscious; respirations 22; pulse 84, smaller, soft; tongue clean and dry; skin warm, moist; bowels not open; abdomen flat; he has some return of appetite. Ordered to continue, the quantity of wine taken daily to be diminished to four ounces.

Seventeenth day.—Slept well; tongue dry in the centre, edges clean and moist; pulse 84, small and soft; respirations 27, easy. He is still deaf, and somewhat incoherent, but no longer suffers the flies to crawl unnoticed over his face.

The note of the twentieth day states that he is lying easily on his side, with a clean, moist tongue, all the bodily functions being performed regularly; and during the rest of his stay in the hospital, the only thing particularly to be noticed was, that the diastolic murmur which had so long been overlooked remained the same as on admission.

There seems no reason to doubt that the lesion in these two cases was identical, ulceration (if we may suppose that the local disease had gone so far) of the bowels. Till the eleventh day, the treatment mainly consists of aromatic draughts, directed to allay particular symptoms of uneasiness, and mild mercurials. Then, the evacuations having assumed a healthy condition, this mode of treatment was no longer pursued, but the diarrhœa was attempted to be kept in check by opium, while he was supported by stimulants. Lastly, when his abdomen became tense and tender, and he himself seemed, though unconscious of what was going on around him, to be suffering a good deal of distress in it, on two occasions, a blister plaster was applied, and once with as good effect as in the previous case, albeit subject to the same fallacy that the favourable change might have been, independent of the remedy. The perusal of the case shows why it would not have been safe to treat this patient in the same way as the previous one; how, though the disease on which the symptoms depend may be the same in the two cases, yet a hot and dry skin, with a moist, furred tongue, afford quite a different field of treatment to what is offered by a dry tongue and a hot, perspiring skin; and generally with how much better a prospect of success.

These two cases have been purposely selected from the practice of the same physician, Dr. Burrows, to illustrate the necessity of considering each case of fever as a study in itself, that neither is all fever to be treated according to one unvarying rule, nor yet the same complication always by the same means, but each symptom as it arises by its appropriate remedy, due regard always being paid to what cases occurring at the time show to be the prevailing tendency of the epidemic.

We pass on, just noticing the curious hallucination of double consciousness displayed by this patient to a circumstance apparently trivial—the fact of his being on the seventeenth day sensible of the flies crawling over his face. How much may be told of the condition of a patient without asking a single question, by merely observing that he lies low in bed, and that the flies crawl unnoticed across his face. A change in these signs for good or for ill may be detected when the indications which we more usually and certainly rely upon altogether fail us.

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In all novelties, the introduction of which are opposed, their advocates clamorously appeal to the opposition to Jenner, Harvey, Hunter, &c., as though the opposition endured by these eminent men could be used as a proof of the truth of everything novel. The more loud the appeal, the less important the subject is generally found to be, for real merit and the real labours of genius seldom need such diatribes.

## Original Papers.

# ON ETHER-VAPOUR,

## ITS MEDICAL AND SURGICAL USES.

By JOHN GARDNER, M.D.,

EDITOR OF LIEBIG'S LETTERS, AND LECTURES ON ORGANIC CHEMISTRY.

*Adoption of, and opposition to, the use of ether-vapour.—Etherization not intoxication.—Alleged fatal cases from its use.—History of the therapeutic employment of ether-vapour.—An essay by Dr. R. Pearson.—Dr. Beddoes' Pneumatic Institution.—Sir Humphry Davy.—Paper from Journal of Science and the Arts of 1818.—Inhalation of ether-vapour for amusement in the schools.—History of the discovery of the power of ether-vapour to prevent pain in surgical operations.—Relative merits of Drs. Morton and Jackson.—Disposal of other claimants.*

The employment of ether in vapour, to induce insensibility to pain during surgical operations, and the attempts to discover its value as a therapeutic agent so universally in progress, are so important as to demand from every one who possesses any information, or who succeeds in eliciting any new facts, their immediate publication. In the application of ether-vapour to obviate pain in surgical operations, a great discovery has been achieved altogether unparalleled in the history of the healing art. It would, however, be an anomaly in human affairs, should a discovery of any conceivable nature be announced for the benefit of mankind, without finding opponents, and without exciting hostility. The antagonists of Jenner have only just now escaped, veiled in the obscurity of past time, from the sarcasms and ridicule excited by their puny opposition and total failure. Unhappy would it be for us to lose the better lesson taught by the success of vaccination—viz., that no partial interests can stand against the progress of public good. It is too notorious to admit the affectation of disbelief, that amongst English surgeons there are some, whom all of us have been accustomed to regard with intense admiration for their brilliant talents, who have steadily set their faces against the use of ether, and who (probably from the best motives) are exerting all the influence their reputation gives them to discourage its employment. Of course they will be followed by numbers, *servum pecus*, to whom self-reliance or self-thinking is wearisome or impossible.

It appears to me that an obligation lies upon the distinguished surgeons alluded to, not alone involving professional character, but moral principle, to avow publicly their opinions, —to set forth in print their reasons, in order that they may be judged of and have their due weight. So long as their opposition to the use of ether is confined to mere conversation, it may do immense mischief, whilst their rational objections cannot reach the quarters in which they might do good. The floating report extends no further than to a mere *ipse dixit*, except it be coupled with the opinion that *pain* is an element essential to the success of surgical operations. Now, I would respectfully submit that this is a mere hypothetical assumption, capable of proof or disproof by the employment of ether, and, as far as we know at present, in no other way. Operations on patients under its influence are now multiplying so rapidly, that this question will soon be determined. If any credit is due to the reports already published,—if there be not in reserve, as some persons have suggested, all the adverse facts,—then we must conclude that the sequelæ of operations are, *cæteris paribus*, more favourable after the administration of ether than without it. In Mr. Cutler's patients at St. George's Hospital, and in many other recorded cases, the smarting of the wound, and the spasmodic muscular twitches, were far less than ordinary. The testimonies of very many hospital surgeons in London, in the provinces, and in America, are already recorded, that there are no circumstances in the after-treatment of any published cases rendering the use of ether objectionable.

I am aware that some surgeons have refused to use ether vapour on the ground that its effect is simply intoxication, and they deprecate the performance of an operation while the patient is in that condition. Moreover, a leading article in the *Medical Gazette*, evidently intended to throw cold water on the matter, quietly assumes that the comatose state of a person etherized is neither more nor less than intoxication. Now, if people are willing to be misled by such reasoning— if they are resolved not to see with their own eyes, or

to judge with impartiality—argument would be useless. But I confess the etherized state appears to me altogether different from any intoxication I have ever witnessed. I have administered the ether-vapour sixty-three times, and have endeavoured to read carefully the symptoms, with the view to understand its *modus operandi;* and I purpose, in the sequel, to give some details of the results, confining myself at present to one remark—namely, that in far the majority of cases, the recovery of the etherized person is sudden, precisely resembling the act of waking from sleep; and in no case have I seen sickness, or heard of headach. Would it be possible, with any form of alcohol, to intoxicate persons unaccustomed to its influence without both these symptoms occurring on recovering from unconsciousness?

*Alleged fatal cases:* 1. *Mr. Nunn's case of lithotomy;* 2. *Mr. Robbs' case of tumour.*

It has, however, been stated, that some cases of death have occurred, after surgical operations, where ether has been used; but no one can assert that deaths did not occur after surgical operations before the use of ether was known. The question is, "Has any person been destroyed by the ether vapour?" Only two cases are at present on record, in which this is alleged, in this country: 1. That of Mr. Nunn, of Colchester, —lithotomy; 2. That of Mr. Robbs, of Grantham, Lincolnshire, —removal of a tumour from the thigh.

The facts of the first case were as follow:—The patient was a man, aged fifty-two. The ether was inhaled seven or eight minutes, and the operation commenced. There was neither difficulty, nor loss of time, in cutting into the bladder, but this being done, some little delay occurred in grasping the stone, which was small, very flat, and lying in the posterior part of the bladder; the delay was also increased by the extremely relaxed state of the bladder itself, which seemed to fall in folds on the forceps, and to cover the stone. The operation was performed in ten minutes; the ether was administered at intervals during the whole time. The patient was fully under its influence, and the breathing first became heavy, and ultimately stertorous. He recovered, however, from this state after a short time, and continued in a quiet, passive condition, but without decided reaction, for twenty-four hours. At this period he had a chill, lasting twenty minutes. Two ounces of brandy were given him, with two ounces of water, after which, he dozed till eight o'clock P.M., when a state of collapse ensued. Brandy-and-water repeated, hot blankets &c. externally, until nine o'clock the next morning; then ammonia and brandy-and-water alternately. A slight reaction appeared the following day, but he died at five P.M., being sensible to the last. The operation was performed on Friday, death ensued on the Sunday following.

*Post-mortem examination, sixty-seven hours after death.*—Membraneous congestion of the brain, but no effusion; brain firm; lungs permeable throughout, anteriorly exsanguineous, posteriorly engorged, heart flaccid, of a natural size, and nearly empty; the left kidney pale; the right slightly congested; the bladder and the adjoining parts presented the usual aspect after an operation.

On his case Mr. Nunn thus comments:—"It is not my intention or inclination to attribute the loss of my patient wholly to the influence of the ether. . . . . The suffused eye, livid lips, and stertorous breathing, accompanied first by convulsive struggles, and next by a sudden cessation of all motion, are often indicative of the effects of ether . . . . the patient expressed no signs of suffering." Mr. Nunn concludes by expressing his opinion, that the prevention of pain in surgical operations is *not a desideratum.*

On the facts of this case, Mr. John Moore, of Bourton-on-the-water, observes, "Would it not be better, before assuming that in a given case death has resulted from the agent, to consider—

"1st. Whether such symptoms and such a result as those which happened after the operation in question do not occasionally occur, and may not have occurred in this instance, independently of etherial inhalation, and even in a healthy subject?

"Only one answer, and that an affirmative one, can be made to this query by any one who has been accustomed to witness operative surgery.

"2ndly. Whether any disease existed which had a tendency to render the patient more liable to collapse?

"That there was, there is strong presumptive evidence in the fact that the 'left kidney was pale, the right kidney congested,' appearances indicative of Bright's disease—a disease peculiarly liable to induce a fatal result to any operation. The existence of this disease, too, would account for the relaxed state of the bladder, and the disposition of the small vessels to bleed during the operation, and for the flaccid state of the heart 'post mortem.'

"3rdly. Whether there were present any symptoms or post-mortem appearances which would clearly indicate poisoning by the vapour of ether?

"Now, as regards symptoms, 'the patient recovered from its effects (the effects of the ether) after a short time;' and here I think that the influence of ether may be said to have altogether ceased; for all the subsequent symptoms—viz., 'a quiet, passive state, but without decided reaction for twenty-four hours; a chill, which lasted for nearly twenty minutes; complete prostration; incoherence;' death on the third day—would have been considered an unhappy, but not unusual, sequence of the operation of lithotomy had no ether been administered.

"With respect to the state of the lungs,—'anteriorly exsanguineous, posteriorly engorged,'—it was evidently dependent upon post-mortem gravitation of the blood. To arrive at any just conclusion as to the meningeal congestion, it should be known whether it were general or partial, and if the latter, whether, as in the lungs, situated posteriorly—a very probable consequence of the fluid state of the blood. The fluid state of the blood as a post-mortem appearance is not sufficient to substantiate a supposition of poisoning; it is not even an universal symptom of poisoning by gases; for the fatal inhalation of oxygen induces an unusually rapid coagulation of the blood. (Christison on Poisons.)

"In his deductions from the case, Mr. Nunn observes, that 'pain is doubtless our great safeguard under ordinary circumstances.' This may be freely admitted; but to conclude that it is also a 'healthy indication, and essential concomitant of surgical operations,' is by no means equally allowable; for pain may primarily, as well as by its after effects, be fatal to life. The avoidance of pain during an operation is not the only good end attained by the letheonizing agent, for the prostration consequent upon that pain, and the perpetuation of pain by a morbidly vivid recollection of its infliction, are avoided also; and these are often more trying to the patient than the primary shock to the nervous system.

"A patient of great mental power may bear a most formidable operation with stoic fortitude, and yet the nervous prostration consequent upon such unwonted exercise of the will, and the recollection of the suffering he has undergone, will afterwards so unman him, that the comparatively trifling pain of dressing the wound will induce the most urgent expressions of pain."—*Medical Gazette*, March 19th.

To this excellent criticism I would add, that in the effects which Mr. Nunn attributes to ether-vapour, every one who has carefully experimented on the subject will recognise the incipient strangulation consequent upon the use of an instrument for inhalation having the air-passages too narrow, or being in some other respect defective. It has been too much overlooked, that in administering ether-vapour we are making the patient breathe a diluted atmosphere, and, moreover, inducing a state of insensibility, in which the voluntary part of the act of respiration is suspended; consequently there should not be the slightest impediment to the free influx and efflux of the air and vapour.

In a circular addressed to the profession by Mr. J. A. Dorr, the writer observes, "It is possible to strangle instead of letheonizing; and I would therefore urgently advise every operator to be careful that all the air-passages of the apparatus used be of large diameter, sufficient to allow of perfectly free and easy respiration through the apparatus." I have found it necessary to make the size of the air-passages throughout not less than five-eighths of an inch in diameter; and even then, if a ball-valve is used, or a swing-valve, which acts stiffly, an effort is required to breathe through the apparatus, and it must be regarded as so far imperfect.

When the proper precautions have been taken upon this point, I have found that in every case the lips have remained as purely red as before the inhalation was begun; I would scarcely venture to say the hue becomes more red, but in many cases it has been so pronounced by bystanders. M. Roux has observed that the blood in etherization is not affected in colour. The inference is inevitable: either Mr. Nunn's instrument was imperfect in construction or use, or the idiosyncrasy of the patient produced the "livid lips." Perhaps Mr. Nunn will be kind enough to publish the exact bore of the air-passages of his instrument.

The second case in which the use of ether-vapour is alleged to have caused death, occurred at Grantham, in Lincolnshire. If the report published in the *Times* of the 19th inst. can be depended on, the manner of conducting the inquiry relative

to the death of a patient operated upon, reflects no credit on those concerned in it, and the verdict of the jury will be considered of very little worth.

First, the case was one of a tumour situated at the back part of the thigh, in a female, aged twenty-one, which one of the surgeons describes as an osteo-sarcomatous, malignant tumour. The patient was made to inhale the ether vapour on two occasions, by way of experiment, before the operation, and its usual influence was produced. At the time of the operation, (Tuesday, March 9, at one o'clock,) she inhaled it for ten minutes, and was reduced to a state of unconsciousness. The only witness whose *evidence was taken to these facts being an old woman:* she deposes that the patient was laid on her stomach upon a table, and after the first incision, the ether vapour was inhaled a second time; but whether the inhalation continued during the whole time the operation lasted, or not, witness could not say. The operation lasted *one hour all but five minutes.* She did not appear to bleed much. When put to bed she was conscious, and shortly after, said she felt better. On the Wednesday, she complained of a numbness of both legs and lower part of her body; on Thursday morning, at five o'clock, she died.

Such being an outline of the case, I would remark, secondly, that the charge of the coroner is the most extraordinary I ever saw in print. Throughout, it proceeds upon the assumption, either that Mr. Robbs was guilty of manslaughter, or that death was the effect of the ether. The jury have no alternative but to return one of these conclusions: "If," it concludes, "you shall find that Mr. Robbs has been guilty of culpable negligence, inattention, or rashness, it will be your duty, as jurors, upon the oath you have taken, which is paramount to all other considerations, to bring in a verdict of manslaughter against him; but if, on the other hand, you shall find, after hearing and weighing the whole of the evidence, that the death of Mrs. Parkinson was purely the result of the application of ether, as generally practised, in order to alleviate pain under surgical operations, and not from any other cause, it will be your *satisfactory* duty to simply record that fact, and this inquiry may be the means of checking a practice that will then appear prejudicial to human life, and your labours may conduce, not only to the benefit of this immediate neighbourhood, but to the advantage of the public at large."

It is said, in the report, that previous to holding the inquest, Mr. G. Kewney, the coroner, "having made a strict inquiry into the facts, and having ascertained that, in the opinion of persons well qualified to judge, the death had resulted from the application of ether, thought it his duty to institute an inquiry," &c. In other words, having first decided on the cause of death, a jury was called together to pronounce the predetermined decision. As to inquiry, there was none, except from one old woman who acted as nurse. I would ask, why were not the surgeons who assisted Mr. Robbs called? Why was the question as to whether the ether was or was not inhaled during fifty-five minutes not settled? What were the circumstances which kept the "patient on her stomach on the table" for this protracted period? Mr. Robbs, indeed, tells us the operation lasted twenty-five minutes, the remainder of the time being occupied by the inhalation and necessary bandaging.

May we not infer from this that considerable dissection was required? Does Mr. Robbs mean to say that he never saw a patient sink after an operation, without any reaction, when ether was not used? Such a consequence of a protracted operation is surely no very extraordinary occurrence.

What was the appearance of the patient's countenance? The posture of the patient, no doubt rendered necessary by the situation of the tumour, was the most dangerous that could be selected for a patient in a state of insensibility. I believe that very few persons who read this report will agree with the jury, that the patient died from the effects of the vapour of ether, even fortified as it is by Mr. Robbs' concurrence. On the other hand, I see no one to blame, except for not sifting the matter more thoroughly, calling other and better qualified witnesses, and for not perceiving that it is the reverse of benevolent and praiseworthy, to obstruct, by a hasty and ill-considered judgment, the employment of an agent which, judiciously used, promises so greatly to benefit mankind. I do not believe, however, that any practitioner who carefully reads this report will decline the use of ether-vapour on this account, in a single case, either for the alleviation of pain or as a therapeutic agent.

*History of the Medicinal Use of Ether-Vapour*

The first idea of employing the vapour of ether as a therapeutic agent by inhalation is referable to Dr. Richard Pearson, of Birmingham. It seems to have occurred to him as an equivalent for hydrogen gas, in 1794, just at the period when the difference of character of various airs became well established, and an attempt was made in France by Fourcroy, and in England by Dr. Beddoes, to introduce them into medicine. The term, inflammable gas, being applied to hydrogen, and the vapour of ether being inflammable, Dr. Pearson thought the latter more easy of preparation and application than the gas, and on the ground of this loose analogy suggested its substitution, in a pamphlet, entitled, "A Short Account of the Nature and Properties of Different Kinds of Airs. London, 8vo, 1794." In a letter to Dr. Beddoes, dated Feb. 2, 1795, he claims originality for this idea. On Jan. 15th, 1796, he writes,—"My facts in favour of ether-vapour in phthisical cases are multiplying so fast, that in about another half year, or by next winter at farthest, I expect to have a number of cases worth communicating to the medical world." On the 28th of January, he forwarded the following case:—"Eliza Vyse, aged twenty-seven; had been subject to cough for three winters. She had a quick and small pulse, flushed cheeks, dyspnœa, pains of the side, constant cough, attended with copious expectoration, and night sweats. She was very feeble and much emaciated. I ordered her, on the 12th of November, to breathe the vapour of vitriolic ether, impregnated with extract of cicuta, two or three times a day. On the 19th, when I saw her again, she informed me that she had obtained great relief from the ether-vapour, having much less tightness across the chest, and less pain of the side. She said she was somewhat giddy after every inhalation.

"Dec. 3rd.—Less fever, less cough, and considerably better in every respect. Has found more benefit (to use her own words) from the ether application than from anything else.

"Dec. 10th.—Cough and other complaints so slight, that she says she does not require any more medicines." She took with the ether-vapour a decoction of cinchona and sarsaparilla, and pills containing cicuta and rhubarb.

"In another case," continues Dr. Pearson, "of a boy about fifteen years old, of a consumptive habit, a catarrh, attended with fever of the hectic type, was removed in less than three weeks by the application of the etherial tincture of cicuta, in the form of vapour, to the internal surface of the lungs."—(Considerations on the Medical Use of Factitious Airs, Part I.)

In Part III. of the same work, Dr. Beddoes publishes a letter from a Mr. Townshend, dated March 21, 1795, who says that he suffered very greatly whenever he took cold, having a severe catarrh, with cough, and pungent pain in the chest. He was advised by Dr. Thornton to try ether-vapour, and received almost instant relief from the oppression and pain. By repeating the inhalation, he was enabled to return to business the next day. On this case, Dr. Thornton observes:—

"The manner of inhalation is very simple. Two teaspoonfuls of ether are put into a teapot. This is held near a candle, and the thumb is put over the spout. When the vapour begins to press upon the thumb, it is transferred to the mouth, and the air is drawn into the lungs. This is to be repeated until the whole be consumed, or ease acquired."

Nothing more appears respecting ether-vapour until Dr. Pearson published, in 1797, the following paper in a publication, entitled "Medical Facts and Observations," vol. vii.

The republication of the entire paper verbatim, here, will doubtless be acceptable to the profession.

"*Some Account of the Effects of the Vapour of Vitriolic Ether in cases of Phthisis Pulmonalis. Communicated in a letter to Dr. Simmons, F.R.S., by Richard Pearson, M.D., Member of the Royal College of Physicians, London, and Physician to the General Hospital near Birmingham.*

"Having for the last two years prescribed the vapour of vitriolic ether to patients labouring under phthisis pulmonalis, and having, both in hospital and private practice, experienced the best effects from its use in this frequent and formidable disease, I am preparing to lay before the public a report of the cases in which it has been given, accompanied with remarks on some other remedies that may be employed with advantage in the cure of consumption. Being desirous, in the recommendation of a new medicine, to have my own evidence supported by the concurrent testimony of other practitioners, I take the liberty of calling your attention to this subject, and of submitting to your notice my method of using this application, which is simply this: I direct the patient to pour one or two teaspoonfuls of pure vitriolic ether (or of vitriolic ether impregnated with cicuta, in the manner hereafter described) into

a teacup or wine-glass, and afterwards to hold the same up to the mouth, and draw in the vapour that arises from it with the breath until all the ether is evaporated. This is repeated three, four, or five times in the course of a day, for a month or six weeks, more or less, according to circumstances. The loss of a part of the vapour, which is unavoidable, in this mode of applying it, may be prevented, as a medical friend has suggested, by setting the teacup containing the ether in a small basin, and inverting a funnel over it. By applying the mouth to the tube of the funnel, and making an inspiration, the patient draws in all the vapour, along with the atmospheric air, which enters at the bottom of the funnel. In winter, the evaporation may be promoted by setting the teacup in hot water, in which case the funnel is to be inverted, *not* into the basin containing the water, but over both teacup and basin, so as to rest immediately upon a table, tray, or plate, having a bit of doubled paper, or a quill, put under it, to allow the external air to enter more freely.

"Children, and even infants, may be made to inhale this vapour, by wetting a handkerchief with ether, and holding it near the nose and mouth. It must be confessed that this is attended with great waste; but in urgent cases of hooping-cough and croup, in which it promises to be of use, this consideration can have little weight.

"The *first effects* of this application are an agreeable sensation of coolness in the chest, an abatement of the dyspnœa and cough, and after ten minutes or a quarter of an hour, easier expectoration. The *ultimate effects* (provided other proper measures be not neglected; for this is not to supersede the use of other medicines, but to be employed in conjunction with them) are a removal of the local inflammation, a cleansing and healing of the ulcerated lungs, and a suppression of the hectic fever. To assert that all these beneficial consequences will flow from its application in every species and degree of phthisis pulmonalis would be to adopt the language of quacks, and insulting the understanding of every one experienced in the profession; but, to say that none of these good effects are likely to result from its use in most instances, and most of them in a great number of instances, is only asserting what an experience of two years in a situation where the opportunities of making trial of it have been very frequent, has fully confirmed. The salutary operation of ether applied to the lungs in the form of vapour I have found to be greatly promoted by several volatile substances that are soluble in it; but by none more so than by cicuta. By macerating a sufficient quantity of the dried leaves of this plant in ether for the space of three or four days, or at most a week, and occasionally shaking them together, a very saturated tincture is obtained, which may be inhaled in the same manner and in the same doses as the pure ether. My proportions are a scruple or half a drachm of the powdered leaves to every ounce of ether. The narcotic particles of the cicuta conveyed in this manner along with the ether-vapour to the diseased lungs act as a topical application with the best effect; hence, ether thus impregnated succeeds in most instances better than when it is employed alone. The only unpleasant circumstance attending the inhalation of this etherial tincture of cicuta is a slight degree of sickness and giddiness, which, however, soon go off.

"It cannot be expected that I should here point out every symptom or set of symptoms which indicate or forbid the use of this application. I shall only remark, that it appears to be best suited to the florid, or what is commonly termed, the scrofulous consumption. When the pulmonic affection is complicated with mesenteric obstruction, or diseases of the other viscera, or a dropsical condition, it affords but transitory relief; and in the very last stage of the disorder, the proper time for using it is past.

"Should you be induced, sir, by this address, to make trial of the vapour of vitriolic ether impregnated with cicuta, in phthisical cases, I shall be glad to be favoured with your remarks and observations upon it, whether in its favour or not.

"N.B.—In catarrhs, the ether-vapour, without the cicuta, succeeds very well. In these cases, it is seldom necessary to continue the inhalation more than three or four days, or a week at farthest.

"Birmingham, July 1, 1796."

The history of the Pneumatic Institution, founded by Dr. Beddoes, is well known. The loose methods of experimenting, and the total inconclusiveness of the attempts to employ gaseous remedies, both there and amongst the profession generally, received a most contemptuous rebuke from Davy, in his "Researches on Nitrous Oxide." The more exact, more satisfactory, and more fruitful methods of chemical research, diverted the mind of that great man from medicine. He was, probably, so disgusted with the want of precision, the vague notions then prevailing, as to disregard the report of the effects produced by inhaling the vapour of ether. On Dr. Pearson's suggestion it however was employed, according to Dr. Stock, the biographer of Beddoes, in the Pneumatic Institution, as an equivalent for hydrogen; and he observes, "In general it produces transient vertigo, and is equally beneficial with hydrogen obtained by any other process. It was found beneficial in catarrh, phthisis, and in certain forms of asthma. It was also found serviceable as an anodyne."—*Life of Beddoes*, p. 310.

Notwithstanding this, Davy appears not to have perceived at this time the very curious analogy which exists between the effects of nitrous oxide and the vapour of ether; the former he studied with infinite pains and great success. Had that analogy struck him, he would, doubtless, have been the discoverer of the use of the latter in destroying sensibility in surgical operations. He says of nitrous oxide, amongst other inferences from his experiments, "As nitrous oxide, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place."

The failure of pneumatic medicine has been attributed mainly to the inefficient means possessed at that period for conveying gases and vapours into the lungs. The apparatus of Watts, consisting of a mouthpiece, a square box with two valves, and a large bladder, or oil-silk bag, as a reservoir, would not secure the sedative effect of ether-vapour. An attempt made by one of Davy's patients to continue the inspiration of nitrous oxide without breathing into the reservoir of the gas, is said to have produced effects too powerful to admit of repetition. In this unsatisfactory state did Davy (a philosopher, whose reputation, great as it was and is, is still far beneath his great qualities) leave a subject, worthy of even his powers to have pursued.

In 1803, Dr. Pearson had removed from Birmingham to London, where he published a pamphlet on the epidemic catarrh, or influenza, which prevailed most extensively and fatally in that year. In a note to that publication, he observes—"The inhalation of ether-vapour is not so beneficial in this epidemic as it is in simple catarrh; where, however, the cough is dry, and the dyspnœa urgent, without being accompanied with pneumonic inflammation, it may be resorted to with advantage." And here he seems to have dropped the ether, probably from being disappointed with its effects in the epidemic.

The next notice we find of the inhalation of ether-vapour is in the *Journal of Science and the Arts*, (a publication emanating from the Royal Institution of Great Britain,) vol. iv., 1818. Under the head of Miscellanea, (p. 158,) and anonymously, appears the following:—

"*Effects of inhaling the vapour of sulphuric ether.*

"When the vapour of ether, mixed with common air, is inhaled, it produces effects very similar to those occasioned by nitrous oxide. A convenient mode of ascertaining the effect is obtained by introducing a tube into the upper part of a bottle containing ether, and breathing through it: a stimulating effect is at first perceived at the epiglottis, but soon becomes very much diminished; a sensation of fulness is then generally felt in the head, and a succession of effects similar to those produced by nitrous oxide. By lowering the tube into the bottle, more of the ether is inhaled at each inspiration, the effect takes place more rapidly, and the sensations are more perfect in their resemblance to those of the gas.

"In trying the effects of the etherial vapour on persons who are peculiarly affected by nitrous oxide, the similarity of sensation produced was very unexpectedly found to have taken place. One person, who always feels a depression of spirits on inhaling the gas, had sensations of a similar kind produced by inhaling the vapour.

"It is necessary to use caution in making experiments of this kind. By the imprudent inspiration of ether, a gentleman was thrown into a very lethargic state, which continued, with occasional periods of intermission, for more than thirty hours, and a great depression of spirits; for many days the pulse was so much lowered, that considerable fears were entertained for his life."

To this paper, unquestionably, must be referred the employment of ether-vapour in the schools of pharmacy and chemistry by many professors, affording a temporary diversion for their students, which has prevailed ever since. The apparent similarity of its effects, under these circumstances, to intoxication, has probably been the cause of their neglecting to study the therapeutic bearings of this remarkable agent. Numberless instances might be cited where men have held in their hands, looked at with their bodily eyes, but

without perceiving, the elements of great discoveries. Thus it is well known that Daniel and others saw frequently the delicate impressions and marks of their moulds, copied by the precipitated plate of metal in the electric circle, but never perceived its bearings on the arts of copying, to which it has since been so extensively applied.

We may now consider the question,—

*To whom are we indebted for the discovery of the use of Ether-Vapour in Surgical Operations?*

The first published intimation in the medical journals, in this country, of the power of ether-vapour, was that contained in a reference and paragraph in THE LANCET, of December 26th, 1846, and published at length in the communication of Dr. Bigelow, of Boston, and Dr. H. J. Bigelow, of Massachusetts, U.S., transmitted to Dr. Boott, of Gower-street, (see LANCET, January 2nd, 1847,) in which it was stated, that "the patent bears the name of Dr. Charles T. Jackson, a distinguished chemist, and of Dr. Morton, a skilful dentist, of this city, as inventors, and has been issued to the latter gentleman as proprietor."

It is certainly a matter of no slight interest to trace the history of the discovery,—to ascertain the respective merits of the two persons who are willing to share the honour,—to learn whether, by a happy accident, by a train of reasoning, or by long-continued and anxious experiments, it was at length arrived at. Moreover, the questions will arise, Is there any other person claiming the discovery? Have they any grounds for their claims, real or apparent? What aid or assistance did the discoverers derive from sources beyond their own minds?

I am fortunately enabled, by a communication just received from Boston, from the very best authority, to return a very satisfactory answer to some of these questions.

To Dr. W. T. G. Morton, a native of Massachusetts, practising in Boston as a dentist, is the world *mainly* indebted for this great discovery. The history of the discovery is as follows:—Dr. Morton having received the impression from some source, (of which more in the sequel,) that a means of obviating the pain of surgical operations was greatly desired by surgeons, and no doubt confirmed in this feeling by his own practice of extracting teeth, commenced, upwards of two years ago, making experiments to attain the object. He tried, it appears, a number of agents, always *first making his experiments upon himself*, often incurring no small danger, *and once during that period with very nearly fatal results.*

Dr. Morton had, whilst a student, attended the lectures on chemistry of Dr. C. T. Jackson, and he communicated to Dr. Jackson the object of his experimental inquiry. The latter, in answer, observed that he had seen, in his college days, sulphuric ether, in a highly concentrated state, produce insensibility, and it might therefore answer his purpose. On receiving this hint, Dr. Morton hurried home, and locking himself up in his room, saturated a sponge with highly concentrated ether, looked at his watch to note the time, and then covering his mouth and nose with the saturated sponge, he inhaled the ether as freely as possible. He soon began to feel approaching insensibility, the sponge fell from his hand, he reclined back in his chair, and entirely lost his consciousness. As he began to recover, he felt a numbness of his limbs, a sensation like nightmare, and he anxiously desired some one to come and rouse him. At length, however, he fully recovered his consciousness, and "looking at his watch, he found, to his inexpressible delight, that he had been insensible *eight minutes!*"

As soon as he was able to leave to leave his room, he was anxious to try the ether on a patient. A stout, healthy man soon presented himself to have a tooth extracted. The ether was inhaled, the tooth extracted, and the patient asserted that he was entirely unconscious of pain. Other operations followed, and Dr. Morton became satisfied of the safety and efficacy of ether vapour. This was in the month of September, 1846.

He now applied himself to the construction of a suitable apparatus with which the ether vapour could be administered; and having attained this object, he waited on Dr. John C. Warren, surgeon to the Massachusetts General Hospital, Boston. It is important to remark, that Dr. Morton did not at this time inform Dr. Warren in what his means of inducing insensibility to pain consisted.

In a communication to the *Boston Medical and Surgical Journal*, dated Dec. 3, 1846, Dr. Warren says:—

"The discovery of a mode of preventing pain in surgical operations has been an object of strong desire among surgeons from an early period. In my surgical lectures I have almost annually alluded to it, and stated the means which I have usually adopted for the attainment of this object. I have also freely declared, that notwithstanding the use of very large doses of narcotic substances, this desideratum had never been satisfactorily obtained. The successful use of any article of the materia medica for this purpose, would therefore be hailed by me as an important alleviation to human suffering. I have, in consequence, readily admitted the trial of plans calculated to accomplish this object, whenever they were free from danger.

"About five weeks since, Dr. Morton, dentist, of this city, informed me that he had invented an apparatus for the inhalation of a vapour, the effect of which was, to produce a state of total insensibility to pain, and that he had employed it successfully in a sufficient number of cases in his practice to justify him in a belief of its efficacy. He wished for an opportunity to test its power in surgical operations, and I agreed to give him such an opportunity as soon as practicable.

"Being at that time in attendance as Surgeon of the Massachusetts General Hospital, a patient presented himself in that valuable institution a few days after my conversation with Dr. Morton, who required an operation for a tumour of the neck; and, agreeably to my promise, I requested the attendance of Dr. Morton.

"On October 17th, the patient being prepared for the operation, the apparatus was applied to his mouth by Dr. Morton for about three minutes, at the end of which time he sank into a state of insensibility."

This operation was only partially successful.

"On the following day (October 18th) an operation was done by Dr. Hayward, on a tumour of the arm, in a female patient at the Hospital. The respiration of the gas was in this case continued during the whole of the operation. There was no exhibition of pain, excepting some occasional groans during its last stage, which she subsequently stated to have arisen from a disagreeable dream. Noticing the pulse in this patient before and after the operation, I found it to have risen from 80 to 120. . . . .

"The success of this process in the prevention of pain for a certain period being quite established, I at once conceived it to be my duty to introduce the apparatus into the practice of the hospital, but was immediately arrested by learning that the proprietor intended to obtain an exclusive patent for its use. It now became a question, whether, in accordance with that elevated principle long since introduced into the medical profession, which forbids its members to conceal any useful discovery, we could continue to encourage an application we were not allowed to use ourselves, and of the components of which we were ignorant. On discussing this matter with Dr. Hayward, my colleague in the hospital, we came to the conclusion, that we were not justified in encouraging the further use of this new invention, until we were better satisfied on these points. Dr. Hayward thereupon had a conversation with Dr. Morton, in consequence of which Dr. Morton addressed to me a letter. In this he declared his willingness to make known to us the article employed, and to supply assistance to administer the inhalation whenever called upon. These stipulations he has complied with.

"This being done, we thought ourselves justified in inviting Dr. Morton to continue his experiments at the hospital, and elsewhere; and he, directly after, (Nov. 7th,) attended at a painful and protracted operation performed by me, of the excision of a portion of the lower jaw, in which the patient's sufferings were greatly mitigated. On the same day, an amputation of the thigh of a young woman was performed at the hospital by Dr. Hayward. In this case, the respiration of the etherial vapour appeared to be entirely successful in preventing the pain of the operation; the patient stating, afterwards, that she did not know that anything had been done to her."

That Dr. Morton, for a brief period, did not disclose the nature of this agent, is also testified by Dr. Bigelow, another surgeon of the Massachusetts Hospital.

Dr. Bigelow witnessed the first two operations under the influence of Morton's agent, and he says of the latter, "No doubt, I think, existed in the minds of those who saw this operation, that the unconsciousness was real, nor could the imagination be accused of any share in the production of these remarkable phenomena."

"I subsequently undertook a number of experiments, with the view of ascertaining the nature of this new agent. . . . The first experiment was with sulphuric ether, the odour of which was readily recognised in the preparation employed by Dr. Morton."

In the meantime, Dr. Warren having met Dr. Charles T. Jackson, and speaking of the first operations, the latter said, "that he first suggested to Dr. Morton the inspiration of *ether*, as a means of preventing pain of operations on the teeth. He did not claim the invention of the apparatus, nor

its practical application; for these we are indebted to Dr. Morton."

The subject now became a matter of general interest and conversation. Dr. Bigelow witnessed numerous operations on the teeth, by Dr. Morton, at the house of the latter, and became so satisfied of the safety of the process, that he submitted his own daughter to it, to have a tooth extracted under its influence; and on the 7th of November, Dr. John C. Warren and Dr. Hayward employed the ether in two capital operations. On the 12th, Dr. J. Mason Warren removed a tumour from the arm of a young woman, with complete success; and on the 21st, the same gentleman removed a tumour which covered nearly half of the front of the right thigh, in the presence of a numerous body of the profession, amongst whom was present, Dr. Charles T. Jackson; and this was the first operation upon a patient, under the influence of ether, which that gentleman witnessed.

This is a most remarkable feature in the history of this discovery. The merit of having suggested the inhalation of ether to Dr. Morton, as an agent promising to supply the object he was seeking, is due to Dr. Charles T. Jackson, nevertheless, the latter did not himself witness its application until several weeks had elapsed after Dr. Morton had put it to the test of actual experiment, and succeeded.

A state of momentary unconsciousness must have been frequently witnessed, amongst other effects of inhaling the vapour of ether, in the various schools of pharmacy and chemistry, since the publication of the paper, above extracted from *Brande's Journal*. It was probably regarded as the result of some peculiarity of constitution of the individual so affected. This notion is one of the most formidable obstructions which exist to the extension of therapeutics. Whilst the phenomena presented by the nervous system, in what were deemed curious cases, were so regarded, physiology made in this direction very little progress. But as soon as the peculiarities of individual and rare cases were studied and compared, the true functions of the nervous system emerged from the apparent chaos of particulars.

In the present case, it does not abate in the least from the greatness of the discovery, or the high merit of the discoverers, that ether vapour was previously used in medicine, and also made a toy of by a thousand professors, and ten thousand students. They, as all mankind, saw, but perceived not. They did not think of interpreting the curious phenomena they witnessed. Everything recorded, everything known previously, is as widely different as possible from the discovery that ether vapour produces insensibility to pain during surgical operations. It betokens either want of information, or defect of principle, when a man attempts to detract from the merit of the discovery on these grounds.

Whatever may ultimately be the feeling of the profession towards the discoverers, whether it be of gratitude for the blessing thus presented to them, or dislike and aversion for their having made the application of the discovery the subject of a patent in America and Great Britain, the odium or the honour must be shared alike by Dr. C. T. Jackson and Dr. Morton. It is not always easy to determine precisely the respective merits of two men when they become, by their united labours or thoughts, the joint authors of a discovery. I have stated all which is at present known. It will be for Drs. Jackson and Morton to determine whether the public shall have a more minute acquaintance with the matter. They are joined both for good and evil. Joint discoverers — joint patentees. If time should prove the discovery to realize our present impressions, their names will be for ever recorded in the annals of our profession, perhaps with Jenner, in the common history of mankind. The exact share each bore in the discovery will be always interesting to the curious, and therefore the more accurately it is known the more acceptable.

The knowledge which enabled Dr. Jackson to suggest ether for trial, evidently was derived remotely from the paper in *Brande's Journal*. The source of the first impulse on the mind of Dr. Morton, which induced him to undertake his researches, we do not at present know. Whatever it may have been, I, for my part, cannot conceive that it lessens the merit of the experiments or the discovery.

On the subject of the patent, I would observe that many persons are obviously misled by a word. They forget that the law has granted the privilege of a monopoly for fourteen years, to any person who, having made a discovery or invention, will, on his part, give the result of his labours to the public. The patent law prevents men from keeping secret their discoveries and improvements. What are called patent medicines are mere secret compounds. Whatever feelings or opinions we may entertain respecting the law in question, whether it be wise or unwise, just or unjust, who will deny that the discoverers in the present case are entitled to a commensurate pecuniary recompence? Should the public contribute the necessary funds by subscription?

But it is said—Are there not other claimants for the honour of the discovery? Yes; but what are their claims?—1st, Dr. Collyer says that he published, some years since, a sentence to the effect, that pain might hereafter be obviated in surgical operations by inhalation of vapours. What the value of such a hint may be, is easily determined. Broader hints had already been given, as by Davy for instance. 2ndly, It is claimed for a deceased physician, a Dr. Hickman, that he was on the track, as early as 1828, trying the effect of suffocation, and of carbonic acid gas; and, as he says, *another* method, that is, "by the agency of sulphuric acid and carbonate of lime." Can we be surprised at this gentleman's failure? 3rdly, Mr. Horace Wells claims that, in the year 1844, he extracted teeth without pain, by means of nitrous oxide; that he visited Boston in that year, and communicated his discovery to Dr. J. C. Warren, and Drs. Jackson and Morton; that it was tried at the hospital, and failed; and that he first heard of the pretensions of the latter gentlemen when he was in Paris, in January 1847. Then a Dr. Marcy says that he suggested to Mr. Wells the use of ether, but afterwards advised him to abandon it.

The able answer already given to these claims by Mr. Dorr (see THE LANCET for March 13th) leaves nothing to add, except that the same Dr. John C. Warren, who published the first experiment made for Dr. Morton, with an unknown agent, and partially failed, makes no allusion to Mr. Horace Wells. It is scarcely possible that Dr. Warren could have written the passages quoted above, without referring to Mr. Wells and nitrous oxide. Again, the parts severally assigned to Dr. Morton and Dr. Jackson in the actual discovery renders it very improbable that Mr. Wells had communicated his method to Dr. Jackson, or that the latter in any way was acquainted with it.

But the most curious part of Mr. Wells' story is his association of Dr. Morton with the eminent names of Dr. J. C. Warren, Dr. Hayward, and Dr. Jackson. Dr. Morton is quite a young man, a dentist; he was scarcely at that time even known to the other parties, who are veterans in surgery, and teachers. Where was Dr. Bigelow on the occasion of Mr. Wells' visit to Boston? Let us see what that gentleman says on the subject:—

"I have no prepossession in favour of the tribe of *ex post facto* inventors, who always settle like parasites upon every recent invention of any pecuniary value. Either the discovery was previously made or it was not. If it was, we have only the alternative of supposing that the fortunate individual saw fit, for some inexplicable reason, to keep in his own bosom a secret which he knew to be of inestimable value to the whole human family. I prefer to believe it was not.

"But what sort of claim is now made to previous knowledge on the subject? Is the maid-servant, mentioned by Dr. Christison, who died in the cause, to be held as the discoverer? or the gentleman (in *Brande's Journal*) who recovered from his lethargy? or another, who "almost fell asleep"? Obviously not. These facts were mere suggestions, pointing to a hypothetic principle; and it was the business of those who received such hints to have pursued them till the single fact was generalized, and the principle established. Drs. Jackson and Morton have done all this. They have struck out a new path; and even when future science shall have abridged and improved the present method, or substituted another for it, it will not detract in the slightest degree from the merit of the original discoverers of a great and novel principle."

It is scarcely possible that the reward of Drs. Morton and Jackson, whether it is to consist of honour and reputation, or the more substantial one of cash, can be intercepted by the pretensions of other claimants, unless they are far better founded than any at present advanced. With respect to the invention of apparatus, and the numerous attempts to gain some of the profits, made by registering alleged improvements, I shall have to speak when treating of the best way of administering ether-vapour to the lungs, for the various purposes to which it can be applied for medical and surgical purposes. The physiological phenomena induced by ether-vapour, the therapeutic uses to which those phenomena point, the precautions necessary in its administration, and the limitations which will probably be found to its application, will be severally discussed in my next paper.

Mortimer-street, Cavendish-square, March, 1847.

## ETHERIZATION AND ASPHYXIA.

By JOHN SCOTT, Esq., Shelton, Stafford.

Perhaps the history of medicine presents no instance of an active remedy being brought into extensive use with so little injury resulting from its operation, as the late introduction into practice of vapour of ether. The consideration that it has been extensively used by classes of persons little qualified to judge of any untoward symptoms as they presented themselves, or to regulate its most favourable effects so as to prevent their becoming injurious, speaks strongly in its favour, and proves it to be a safe as well as a powerful agent. But as in some few cases injurious results have been produced, it would be well that every attention should be paid to the phenomena exhibited during the process of inhalation, so that the approach of any dangerous pathological state may be more readily distinguished than it has hitherto been, and care be taken to prevent injuries resulting from it.

With this object, it would be well if the profession generally would discontinue communicating instances of its use, where etherization exhibits nothing but its most ordinary phenomena, except where it has been applied to some new purpose; and communicate, more freely than they have hitherto done, instances of disappointment as to its results, and disagreeable consequences resulting from its employment. It is also important to give a clear account of the process employed, recollecting that it is almost an axiom of scientific communication, at the present day, that it is not sufficient to publish the result, but is especially necessary to state the processes by the aid of which they were obtained. If this were carefully done, the result would be, that we should soon have as correct a pathology of etherization as we have of the action of any established remedy; and it would present another example of the progress of this age, if the therapeutic knowledge was completed in a few months instead of being the labour of generations.

There is one circumstance which appears to have been but little thought of in England, although it has attracted attention in France: that is, the pathological condition produced during inhalation from the vitiated quality of the air breathed. With the purpose of calling attention to the subject, I send you an abstract of an article which appeared in *La Presse* on the 3rd and 7th of this month. The importance of his view of the subject is perhaps there overrated by M. Doyère, the writer, but it is one at least worthy of some consideration. After speaking of the manner in which ether has been administered, and giving a rather dramatic picture of etherization, he says:—

"We see that the vapour of ether has acted thus far only in more or less active conjunction with another agent, terrible in its effects, and to which circumstances, altogether independent of the inventor, the invention, or the administrator, may give a preponderance such as, had it been observed at first, would have stifled the discovery at its birth, and left no other memorial of the experiments than the memory of irreparable disasters. This agent is asphyxia. We hesitate not to attribute to it the greater part of the accidents which have resulted from etherization, and which have brought down upon it those reproaches of which this great discovery has been the subject. What we wish particularly to call attention to, and consider a matter of great moment, is the distinction between etherization and asphyxia, two conditions which have been too much confounded with each other. The phenomena of the latter are well known, and have been so ever since men hanged and drowned themselves, and have been yet better studied in physiological experiments where animals have been enclosed in nitrogen or hydrogen gas. Those of the former are still unknown; for they have never yet been observed isolated from those of asphyxia, by subjecting men or animals to an etherous mixture, containing twenty-one per cent. of oxygen. The mixtures of etherous vapour which have been hitherto employed have generally contained less than fifteen per cent. of this gas, and consequently the resulting phenomena have been the combined result of inhalation of ether and deprivation of vital air. Suppose that 100 parts of air are mixed with 100 parts of vapour of ether, the twenty-one parts of oxygen contained in the air will be the entire oxygen of the 200 parts of the mixture, and, consequently, the patient respiring it will be breathing an atmosphere containing, not twenty-one, but ten and a half per cent. of oxygen. This is what actually takes place at a temperature of seventeen centigrammes, (62° Fahr.,) a temperature frequently found in a well-warmed room, not higher than the coolest apartment in summer, and one which the inhaling apparatus is likely to acquire in the immediate vicinity of the patient and the administrator: much more is this the case when heat is applied to the vessel.

Temperature is therefore an important element in the problem we have to study. When a volatile fluid is enclosed in a vessel, the air enclosed with it is always saturated with its vapour, and the saturating quantity is always the same at the same temperature. But as the temperature changes, the proportions of vapour and air change also; the increase in the proportion of vapour being very great as the temperature becomes elevated. The ratio of increase is one, however, which can be very easily calculated, and the following table presents a view of the proportions of ether held in solution at different temperatures, and the proportions of oxygen contained in the mixture:—

| Temperature. | | Ether. | Oxygen. |
|---|---|---|---|
| Centigrammes. | Fahr. | Vapour of, to 100 of air. | Per cent. of, in mixture. |
| 0° | 32° | 25 | 15 |
| 10° | 50° | 37 | 13 |
| 20° | 68° | 57 | 9 |
| 30° | 86° | 83 | 3½ |
| 35° | 95° | 100 | 0 |

Had the discovery come into use last summer, during the seventy-six days between the 1st of June and the 15th of August, then on thirty-nine of these days surgeons would have administered a mixture containing less than five per cent. of oxygen, and on the 5th of July and 5th of August, the vapour of ether would have been administered almost pure.

Now although the difference between etherization and asphyxia may not be so great as M. Doyère imagines, yet these are facts worthy of consideration. The inhalation of air so poor in oxygen cannot be without its proper influence, and will at least modify the specific results of the inhalation of ether.

Stafford, March, 1847.

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CASE OF

## DELIVERY BY PERFORATION AND EXTRACTION, IN A CASE OF EXTREME PELVIC DISTORTION.

By EDWARD WM. MURPHY, M.D.,
PROFESSOR OF MIDWIFERY, UNIVERSITY COLLEGE, LONDON.

(*Read before the Westminster Medical Society, March 27th*, 1847.)

The following case of delivery by the crotchet, in extreme distortion of the pelvis, may perhaps interest the members of this Society, as additional facts to assist us in determining the rule of practice in these serious and most difficult cases.

E. B——, aged thirty-three years, born of diminutive parents, was perfectly healthy and well-formed until five years of age. She was then attacked with measles; the eruption suddenly disappeared, and she was seized with inflammation of the chest. During her illness, her parents, from limited means, were obliged to depend on parochial assistance, and from this date the disease commenced that produced her deformity. The account given of its progress is homely, but sufficiently expressive. Her parents say, "she was neglected by the doctor; that she could not lie down for seven days, from difficulty of breathing, during which time she scarcely passed any water. The disease fell into her ankles; then into her knees, and eventually settled in her back. It remained in her back for seven years before she could get up and down stairs. She was eighteen years old before she could walk half a mile without a stick. She forgets whether there was any sediment in her water during her illness." Such is her history. The deformity that resulted, affected chiefly the spinal column. All the extremities were small, but no other deviation in them than that she was knock-knee'd. There was a curvature in dorsal vertebræ strongly to the right side, and the whole of the lumbar vertebræ were thrown forwards in extreme convexity, so that the aspect of the pelvis was changed, the axis of the brim of the pelvis being nearly horizontal. Her height was about four feet three inches.

About June last she became pregnant; and the duration of her pregnancy, dated from the cessation of the catamenia, (June 15th,) would be 280 days, to March 22nd. Unfortunately, for an obvious reason, her pregnancy was concealed, which was more easily accomplished in consequence of the natural prominence of the abdomen, produced by the curvature of the spine. She was taken in labour on Tuesday, March 8th; the

pains continued for about six hours, when the waters broke. They then ceased for twelve hours, were again renewed, and continued regularly during Wednesday and Thursday, on which day I saw her for the first time.

This patient, living in humble life, resided in Rickmansworth: she placed herself under the care of Mr. Codd, a very intelligent gentleman, practising in that locality. As soon as it became evident to him that the deformity of the pelvis was an obstruction to the delivery of his patient, he requested my assistance, and having accompanied him on Thursday evening, I found her in active labour, her spirits good, and her pulse tranquil. A vaginal examination proved the justice of Mr. Codd's fears. The pelvis afforded an interesting example of the ovate deformity; there was sufficient space in the outlet and cavity of the pelvis to admit the finger readily; but when it passed upward, the projecting sacrum at once arrested it, and presented such a prominence, that a superficial observer might mistake it for the head of the child. It was necessary to introduce the left hand, in order to make a satisfactory examination, and when the two first fingers were passed upwards and forwards above the pubis, the os uteri was found open to the size of a shilling, soft, dilatable, and free from tenderness, although the head seemed to press it firmly between the pubis and promontory of the sacrum. It was impossible to determine the position of the head; neither sutures nor fontanelles could be reached; a smooth surface of bone (presumed to be the parietal) occupied the mouth of the womb.

The difficulties which this case presented were not diminished by the circumstances in which she was placed, being in a confined apartment and dwelling, in a village sufficiently far from London to render any additional aid impracticable. The state of her labour also rendered it impossible to remove her thither. I therefore gave up the idea of an operation, which then seemed to me the only one available, because the distance between the pubis and promontory of the sacrum was only an inch and a half, and it appeared a very hopeless matter to expect to succeed with the crotchet. Had she been in London, and I had had the support of my colleagues who are eminent in obstetric practice, I think I should have undertaken the Cæsarian section, employing every precaution for its success, such as has been recently introduced in operations very similar to it; but in Rickmansworth this was out of the question. Perforation of the head was the only operation that could be attempted.

Having explained my views to Mr. Codd, and also to Dr. Ayres and Mr. Garlick, the resident medical gentlemen who were present, I undertook the operation. About seven o'clock P.M. the perforator was applied cautiously to the cranium, and finding that the head did not recede, it was forced through to the stops. An opening was easily made in the transverse axis of the brim; but the blades could not be separated in the conjugate direction. The moment the instrument was withdrawn, the opening closed. It was therefore necessary to reintroduce it, and to keep the finger within the cranium until the crotchet was applied. This was accomplished with no little difficulty. Having at length succeeded, and removed as much of the brain as possible, two fingers of the left hand were placed between the head and os uteri, with the object of guarding the crotchet, as well as dilating, in this artificial way, the os uteri itself. The instrument being thus placed, traction was made with every pain, and discontinued in the intervals, in order that the patient might have rest, and be saved from the effect of continuous pain when there seemed to be no hope of any immediate termination to her sufferings. In this manner, three hours were spent without any advance of the head being made. The cranium on the left and depending side of the pelvis was broken up completely; and having carefully removed all the fragments, I thought it advisable to cease any further efforts then; to give her an anodyne, so as to secure some rest, and, if possible, sleep. I hoped that then, the action of the uterus being renewed, the head might descend somewhat more within reach. Mr. Codd, who was present during the operation, agreed with me in this view, and we left her for the night.

March 12th.—About eight o'clock this morning we returned. She had some sleep during the night, after which the action of the uterus returned; but the pains were less powerful, and at longer intervals than before. The pulse had increased in frequency to about 110; in other respects there was no alteration. The operation was resumed. The vagina was still moist and free from tenderness; the os uteri dilated to about one-half, and the broken bones of the cranium protruded through it sufficiently to prove that the head had advanced a little during the night. The attempt was made to replace the crotchet as before; but this could not be done. I then endeavoured to fix it in the foramen magnum: this also failed. Several varieties of craniotomy forceps were tried, for the purpose of seizing the bones firmly. I found it very difficult to use them in so confined a space, and when applied, they only broke away that portion of the bone within their grasp, leaving the remainder of the head unmoved. The fragments of bone were thereby increased, and having carefully removed them, I again returned to the crotchet, placing it in a direction the opposite to that I had used before. The point was now directed to the right side of the pelvis, and fixed within the cranium, close beside the sella turcica; traction was used cautiously; the force was sufficient to break through the orbitar plate of the frontal bone, and thus a firm purchase was obtained. There was no risk now of the instrument slipping; the extractive force was consequently increased gradually to my utmost strength; still I could not move the head. After the interval of rest, Mr. Codd also tried to do so, but was equally unsuccessful. I endeavoured, in imitation of John Clarke, to get the base of the cranium obliquely in the brim of the pelvis, but it made no difference. This was to me an anxious moment, because the obstacle seemed to be insuperable. However, I persevered a little longer, and found that the bone was separating; half the frontal bone was removed; it was broken across at the orbit, and separated at the frontal suture. The crotchet could not now be reapplied within the cranium; I resolved, therefore, before making any further attempt, to allow the patient some time to rest. We left her for some hours, and on our return I found the pulse increased to 120; she had no sleep, but complained of constant pain in the lower part of the back; the action of the uterus continued as before; the vagina was becoming a little heated; the head, or rather the fragments of it that remained, had occupied the brim more fully; the mouth of the uterus was quite dilated. I applied the crotchet on the outside of the scalp, and passed it along until I could hook it in the fold of the neck. By this means I was at length able to extract the head. When this was accomplished, there was very nearly as much difficulty in the passage of the shoulders. Having seized the head and neck firmly, steady traction was made so as almost to dislocate the cervical vertebræ, and yet it produced no effect. A blunt hook was then placed in the axilla, and with it one arm passed over the body of the child, and extracted; seizing hold of the neck and this arm, the remaining shoulder was more readily brought through, and the rest of the body easily followed. The child was small; putrescency was commencing in the funis, but in no other part.

The separation of the placenta was now an object of great anxiety, because if it were adherent, it would be extremely difficult to get the hand into the uterus for the purpose of removing it. Fortunately, this did not happen. In about a quarter of an hour after the operation, firm pressure was made by the hand over the fundus of the uterus, by which means the placenta was shot out of its cavity on the floor. So far this was very satisfactory, as it proved that there was no want of power in the uterus from exhaustion, and saved us from any apprehension of hæmorrhage. The patient was then given a full anodyne, and left in charge of her friends, with strict injunctions that she should not be disturbed.

Having agreed with Mr. Codd on the plan that should be pursued in the future treatment of the case, I returned to town. Mr. Codd kindly undertook to communicate with me from day to day, and I am thus indebted to him for the subsequent report of its progress.

March 13th.—She was free from pain during the night, but slept very little; the pulse 108, soft, and very easily compressed; tongue soft and moist, covered with white fur; countenance placid; skin soft and moist; the abdomen soft, slightly tympanitic, but free from pain, except in the iliac regions. She passed urine freely during the night. The external parts were very slightly swelled, and free from soreness. She seemed scarcely to have recovered from the shock of the operation. During the day the pulse rose to 120; the tenderness in the iliac regions increased, particularly in the left. She complained of tightness at the epigastrium, and pain on deep pressure over the abdomen. She was bled to sixteen ounces; given calomel and opium, of each one grain, every three hours; and in the evening, six leeches were applied to each iliac region. The vagina was fomented with poppy injections.

14th.—Spent a restless night, but towards morning slept soundly for an hour. Pulse 132, soft, and compressible; tongue covered with a creamy fur; countenance and spirits good; abdomen very slightly tympanitic, but no tenderness in any part of it. The sense of tightness at the chest has disappeared. The blood drawn was buffed and cupped; the coagulum very firm in a whey-coloured serum. The passages

were free from tenderness, and very slightly swelled. The same treatment was continued.—Nine o'clock P.M.: Pulse more feeble, 132; tongue very soft and flabby, covered with a great quantity of white fur; twitchings in the fingers; pupils contracted; patient drowsy, but had no sound sleep, nor any desire for food. The abdomen was more tympanitic, but still without pain. The lochia scanty, slimy, and fœtid; no swelling of the external parts. Calomel and opium were discontinued, and the following pills substituted:—Sulphate of quinine, two grains; camphor, one grain; opium, quarter of a grain, every third hour. Decoction of cinchona, two ounces; compound tincture of cardamoms, three drachms; nitric acid, nine minims; water, six ounces: for a mixture. Two tablespoonfuls to be taken every third hour. Turpentine fomentations to the abdomen.

15th.—Had a good night. Pulse still 132, but not so irregular; tongue cleaner and moister. The nervous tremor has disappeared. The abdomen is still tympanitic, but no pain. The bowels have been three times relieved, and she has passed water freely. The lochia still scanty, but less fœtid; no appearance of milk in the morning, but towards evening the breasts are becoming full.

16th.—Pulse still 132; tongue cleaner; abdomen less tympanitic; countenance good, without any expression of anxiety; more milk in the breasts; lochia still slightly fœtid: she says she feels more comfortable than she possibly could expect.—Seven P.M.: has been very easy all day, and has taken arrow-root.

17th.—Pulse still 132; in every other respect improved.

18th.—Pulse 120; tongue soft and moist; abdomen soft, and less tympanitic: says she feels languid: to take a small cup of weak broth every four hours.

19th.—She passed a very good night; pulse 120, soft and compressible; abdomen soft, and free from pain; lochia more abundant, of a good yellow colour; still a little fœtid. She felt so well that she sat up in the bed, and, without leave, took part of a mutton-chop. She was allowed a small quantity of porter, beef-tea, or mutton; and, to correct the fœtor of the discharge, a solution of chloride of lime was injected into the vagina.

Thus far, the progress of the case was most satisfactory; there was every prospect of a perfect recovery, when a new series of symptoms presented themselves that blighted all our hopes.

20th.—She had passed a very restless night from a troublesome cough, and feels an unpleasant weary sensation all over her. She was ordered, morphia, one grain; nitric acid, four minims; infusion of orange-peel, six ounces. Two large tablespoonfuls of the mixture to be taken with each dose of the quinine and camphor.

21st.—Passed the best night she has yet had; pulse 120; the bowels not being relieved, she was ordered an aperient draught, (castor oil, and compound tincture of senna, of each, two drachms; peppermint water, four drachms,) which acted seven or eight times. Mr. Codd was summoned hastily at ten o'clock at night, and found her faint and weak; pulse feeble; abdomen more tympanitic, and some pain in the iliac regions. She was given brandy-and-water, the abdomen fomented with turpentine, and half a grain of morphia every three hours.

22nd.—She slept last night until half-past four o'clock, when she asked for something to take, as she felt pain; she took two cups of tea, said she felt much better, and thought she could sleep a little. Her friends left her about two hours, and were induced to return from hearing her moan heavily. They found her in a dying state. Mr. Codd was again hastily summoned, but she died before his arrival. To explain the cause of death, a post-mortem examination was of the utmost importance. The friends of this patient were greatly opposed to it, more especially as she had herself a great horror of it; and when she feared dissolution, obtained from her sister a promise that she should not be opened. By much persuasion they consented to allow the abdomen to be examined in their presence, but would not suffer the thorax or head to be touched. This was particularly unfortunate, because it has wrapped the cause of death still in mystery. The suspected cause, slough of the cervix uteri, opening into the peritonæum, was proved to be incorrect.

*Inspection after death.*—Countenance placid; extremities moveable and extended; abdomen slightly tympanitic. On opening the peritonæum, the transverse arch of the colon protruded forwards distended with air; the omentum over it was marked with some vessels filled with dark blood; the peritonæum covering the viscera and walls of the abdomen were free from any abnormal appearance excepting at the back of the vagina and neck of the uterus whic was slightly ecchymosed over a space about the size of a crown, but had no appearance of slough, nor was it at all friable; there was no perforation of the peritonæum in any part of it. The uterus was of the ordinary size for that period, the peritonæum covering it pale and glossy; when cut into was rather softer than usual, but very slightly so; the walls were six eighths of an inch thick; its cavity covered with a reddish glairy fluid of the consistence of cream, perfectly inodorous. The pelvis measured in its conjugate axis an inch and a half; the transverse axis, four inches and a half.

The lengthened detail of this case will not permit me to add many observations upon it; I shall therefore merely confine myself to a brief explanation of the principle I kept in view in the operation, as it will give a reason (I trust, satisfactory) for the time it occupied. Knowing that it was quite uncertain how long the operation would take, I was desirous to avoid as much as possible exposing the patient to protracted and continuous pain. I certainly dreaded the effect of this in producing nervous irritation, and subsequently exhaustion, much more than any danger of inflammation which might arise from delay. So long, therefore, as the action of the uterus continued, extractive force was used only with the pains; when it became more feeble, and the pains were suspended, or came on at longer intervals, the same period of rest was observed between the extractive efforts as when the pains were more powerful. Twice the operation was discontinued, in order to diminish as much as possible any nervous irritation which might cause constitutional shock. In this manner, the delivery, which was commenced on Thursday evening, was not completed until the Friday evening following, and the time actually occupied in the operation, taken collectively, was about seven hours.

## ALPHABETICAL NOTICES
### OF SUBJECTS CONNECTED WITH
## THE TREATMENT OF DYSPEPSIA.
### By ROBERT DICK, M.D.

(*Continued from p.* 334.)

*Condiments.*—Condiments fulfil two ends. They gratify, during the act of mastication, the gustatory sense, and when justly selected and used, they undoubtedly facilitate, though unconsciously on our parts, the act of digestion. There can be no doubt that, by divine provision, our gustatory predilections, as regards condiments, are, when simple and unsophisticated, precisely those which are necessary or favourable to perfect chymification. Thus the use of common salt is so universal as to seem the result of a sort of instinct. As chloride of sodium, it serves us as a condiment, in the first place; and afterwards, its hydrochloric acid and soda fulfil various important purposes in primary and secondary assimilation.

There are one or two apparent anomalies in the use of condiments and stimulant food at first sight perplexing, but on reflection easily explicable: knowing that our food is partly respiratory, partly formative, (if we may suggest that word,) and that one of the ends of respiration is to maintain animal temperature, we can account for the predilection, among the inhabitants of northern latitudes, for stimulant food, drink, and condiments. But it seems opposed to nature and consistency that the natives of warm latitudes should make large use, as some of them do, of the most pungent spices. Thus both the indigenous and exotic inhabitants of the East and West Indies, and of other southern countries, employ extensively curries, gingers, tomatos, peppers, mustards, cloves, cinnamon, garlic, &c., while we should, *à priori*, expect them to use only a mild vegetable diet; and the fact is, that they have a liking for such food, yet, at the same time, make a simultaneous use of the warm condiments referred to; and herein consists the seeming incongruity. The explanation is as follows:—

In these warm countries, the heat, acting strongly on the skin, renders the peripheric circulation full and active, and, in proportion, lessens that of the central organs. Hence some degree of languor and debility in these. The digestive organs act feebly, and the secretion of the liver, pancreas, &c., are less profuse than they should be,* unless stimulated by

* To this cause is owing the frequency of icterus in these countries, whether arising from the non-secretion (suppression) of bile, or to absorption of it, after being secreted. Nor is the occasionally profuse biliary diarrhœas of tropical climates any proof of an habitually greater energy of the liver in these countries than in more temperate ones. For these formidable biliary discharges are only the consequences of previous interregna of torpor and deficient secretion, during which the bile has accumulated to excess in the liver or in the blood.

piquant aliment. Hence the (as it were) instinctive craving for high-spiced dishes in the inhabitants of tropical countries.

The tendency of stimulant condiments, unless cautiously used, is to aggravate ultimately the evil which they temporarily mitigate, or to induce it, if not already suffered from. This is too obvious to need explanation. They also necessarily tend to produce hyperæmia of the gastro-enteritic mucous membrane, and to give rise to hæmorrhoids.

As spicy or warm condiments are appropriate in debilitated states of the digestive organs, (that debility not depending, of course, on inflammatory conditions,) or as a corrective of insipid aliment, as boiled rice, &c., acidulous condiments, as vinegar, lemon-juice, &c., suit, on the contrary, cases directly the opposite of the above, and are appropriate in erythemic states of the gastro-enteric mucous membrane, and as correctives of diet too rich and too stimulant. By their refrigerating and astringent effects, they reduce the hyperæmia of the mucous membrane, remove the tumid pressure on, and constriction of, the orifices of the innumerable glands and follicles caused by that hyperæmia, and thus set secretion free. It is possible, also, that when the normal acids (hydrochloric, lactic,* &c.) are supplied in less than the required quantity, or when the diet is too stimulant or plentiful to be duly acted on by the natural acids, the ingestion of a foreign acid, such as the acetic, may be seasonable and useful. I have never been able to satisfy myself that acetic acid, in the degree of concentration in which it is used as a condiment, sensibly softens muscular fibre. But this it appears to do rapidly and effectually when brought into contact with muscular fibre, simultaneously with the principle, pepsin.

*Congestion of the ventriculo-intestinal† mucous membrane.*—This is a morbid condition of the very highest importance. We are not, perhaps, in possession of data sufficiently accurate and extensive to enable us to institute a satisfactory comparison as to the relative frequency of the various lesions incidental to the digestive tube, and to determine which, among these lesions, is to be regarded as the most fruitful cause of derangements of assimilation and excrementition; but certainly there is no small presumptive ground for thinking that congestion, active or passive, would scarcely be found second to any.

It would be out of place here to enter far into speculations as to the nature of congestion, or details of its phenomena. The causes of congestion, and what is the exact condition to which that name is or ought to be applied, are still, to no small extent, *quæstiones sub lite* in pathology. The following seems to be the amount of our present information—viz., that congestion (we now speak of active congestion) consists in, or results from, a dilatation of the capillaries, caused by a recession of the organic nervous influence. This dilatation of the capillaries leads necessarily, and according to hydrostatic laws, to a retarded flow in the blood, on precisely the same principle that a body of water in a pent channel flows more rapidly than in a wide one. We must notice, however, that the hydrostatic law just adverted to does not alone fully account for the degree of retardation of the blood which takes place in the capillaries, in inflammatory congestion; for that degree of retardation is greater than the law in question would explain. We must therefore suppose that the same organic nervous influence which kept the capillaries in a normal degree of tension, and the withdrawal of which has led to their dilatation, exerted some influence on the blood, as well as on the capillaries which contained that fluid. It is believed, that by means of nervous influence, a mutually repellent action is caused between the internal walls of the capillaries and the blood globules; and hence the facility with which these globules are, in health, impelled along the tract of the vessels. In the congestion of incipient inflammation, this mutually repulsive action between the globules and capillaries, it is supposed, is suspended or greatly lessened; and hence the tendency of the globules to crowd on and cling to each other, and to adhere to the walls of the capillaries themselves.

Such are the phenomena of active or inflammatory congestion, which, as well as passive congestion, are extremely common conditions of chronic dyspeptics. Inflammatory and passive congestions differ in this respect, that, in the former, the cause, or action of the cause, is identical, in seat, with the effect produced. In passive congestion, on the contrary, the cause is more or less distant, in seat, from the effect. Thus, a frequent cause of passive congestion in the mucous membrane of the stomach and bowels is disease of the heart, or liver, or lungs, causing a disturbed circulation in these organs, and opposing the free return of the blood from the abdominal vessels.

The modes in which congestion interrupts secretion are various. First, the stagnation of the circulation of the capillaries prevents renewed supplies of the very *pabulum* of secretion—namely, the blood. Secondly, active congestion implies in itself suspension of nervous action in the organic nerves; and passive congestion, from the state of distention of the vessels and *remora* of the circulation, must benumb or debilitate these nerves, as well as cause occlusion of the orifices of glands, follicles, &c. Hence, though the first stage of inflammatory congestion is sometimes characterized by increased secretion, the ultimate tendency of all congestion is to impair secretion.

The treatment of congestions of the gastro-enteric mucous membrane will be referred to under particular heads. Of course, inflammatory congestion requires very different measures from passive. Thus, in inflammatory congestion of the gastric mucous membrane, from too stimulant diet or drink, iced drinks, acid fruit and fluid, saline draughts, &c., are required. In passive congestion of the gastric mucous membrane, from valvular disease of the heart, we must direct attention to the cardiac disease, and do what we can to lighten the circulation through that organ by digitalis &c.

*Conium.**—There are many circumstances, historical, physiological, &c., of extreme interest, connected with the subject of this notice. Hemlock was the substance employed by the Athenians in capital punishment, when inflicted on more distinguished criminals. The most celebrated sufferer by it was Socrates, and his case is not without some professional interest. I follow Plato's immortal narrative, which others besides Cicero may truly assert, cannot be read without tears. After swallowing the poisonous preparation, which seems to have been either an infusion, or rather, perhaps, a potion formed from the squeezed-out juice of the plant, Socrates, by the direction of the jailer, who administered the draught, commenced walking up and down, which he continued to do for some time, conversing meanwhile with his disciples and friends. He then became weary, and sat, or rather lay, down. And now coldness and insensibility began to seize his extremities, more especially his lower ones, and gradually crept upward. From time to time the jailer gently pinched his legs and asked him if he felt him do so. On Socrates replying that he did not, the man informed him, that when the numbness reached the heart, death would take place. Socrates now (I think, for I write from memory) covered his face, and remained for some time quiet. He then uncovered himself for an instant, and said to Crito, "Recollect, Crito, we owe a cock† to Esculapius: see that you do not forget it." Some suppose that as Socrates was far from being an implicit believer in the religion of his country, and was, indeed, now suffering death under a charge of atheism, the above command to Crito was given when the hemlock had begun to affect the brain, and that he did not know what he was saying. This opinion I reckon at the least doubtful; for while it is true that Socrates saw far into the absurdities of his country's superstitions, yet it was one of his maxims that a wise man, whatever might be his private views, should conform to the national religion. To resume the narrative: Crito, after assuring him his wish would be obeyed, inquired if he had any other commands. To this, Socrates, according as Plato, with inimitable pathos, describes it, (I write the Greek in the English characters,) *ouden eti apekrinato*,—i. e., "replied, nothing further;" "but" as the account proceeds, "after remaining quiet for a short time, was convulsed. The jailer then uncovered him, and he himself" (that is, Socrates) "fixed his eyes; which when Crito perceived, he closed his eyes and his mouth." (See the "Phædo.")

* I say lactic; for I think there is some reason to doubt whether lactic will not be found to be a physiological acid.

† The writer has himself, on former occasions, made use of the term "gastro-intestinal," and far higher authorities than he are in the constant habit of doing so. Still, as it is a mixing of two languages, it is as well either to employ the word "gastro-enteric" or else the one used above.

* Since writing the above, we have laid our hand on the Phædo. We observe that the poison was brought in a cup in a triturated state, (tetrimenon.) It may have been in the state of a dry extract, and was ground or pounded previous to solution, though of this process no mention is made. The dose necessary to destroy life seems also to have been known, and no more than this quantity to have been administered; for, after Socrates had received the cup from the man, which he did without the slightest change of colour or expression, he said, with a sort of comic gravity, (tauredon, "bull-like," literally,) "What say you? May I pour out a little of the contents of this cup, by way of sacrifice?" [It was usual to pour out part of the wine in sacrifice.] "We have only," replied the man, "triturated what we think sufficient for the purpose." "I understand you," answered Socrates, "but at least it is both allowed me, and is proper to pray the gods that my transmigration be auspicious, which I do imprecate, and wish it may be." And with these words he took the cup, and drank it cheerfully.—(Phædo.)

† That is, the sacrifice of a cock.

In this detail we notice some points slightly at variance with modern accounts of the action of hemlock when taken in a toxical dose; yet, on the whole, I am disposed to prefer Plato's account. Thus, according to it, asphyxia seems not to have supervened at all, or, at least, only immediately before death; though some modern writers assert that asphyxia occurs early. Yet again, the open mouth and eyes favour the supposition of a death due to interruption of the respiratory process.*

It is a very remarkable fact, and one of great physiological interest and importance, that while goats and sheep browse harmlessly on hemlock, and horses suffer only slightly from the use of it, the cow, the wolf, and the dog, are poisoned by a moderate quantity of it. Surely some very valuable facts connected with digestion might be elicited from an investigation of the causes of these different effects of hemlock on the stomachs and systems of different animals, some of them of the same genus, and of very nearly related species.

Hemlock is a useful sedative. In gastrodynia it acts well combined with the tris-nitrate of bismuth, with nitrate of silver, and the oxide of zinc. In scirrhus and cancer of the pylorus, it is indicated, since while it relieves pain it does not constipate. I have seen it useful also in mesenteric affections of strumous children. In France, they combine it (and, I think, judiciously) with the iodide of iron and with quinine, in cases of scrofula. From one to ten pills, made from about half an ounce of extract of hemlock and one ounce of iodide of iron, are given daily in cases of scirrhous and scrofulous tumours, and in phthisis. In phlegmonous scirrhus, the hemlock is, in France, joined to extract of cinchona.

Giacomini, in his celebrated classification, places conium among lymphatico-glandular hyposthenics, and also, from its reducent action on the contractions of the heart, among cardiaco-vascular hypothenics.

Bentinck-street, Manchester-square.

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ON

## DIFFUSED INFLAMMATION OF THE CELLULAR TISSUE OF THE SCROTUM.

By GEORGE L. COOPER, Esq., F.R.C.S.E., Surgeon to the Bloomsbury Dispensary.

This disease is nearly allied, in character and symptoms, to erysipelas, appearing, in its earliest stage, under the class exanthema, with a like tendency to spread from its primary seat of attack to the neighbouring parts, exciting an effusion of serum in the subcutaneous cellular membrane, and in cases of severity, a similar disposition to end in mortification. Under this appellation I proceed to describe two forms of diffused inflammation which have occasionally fallen under my notice —the one mild and tractable in its nature, the other phlegmonous and severe, running, in the course of a few hours, into a state of gangrene. In the first, or mild form of this disease, the symptoms are ushered in by slight pyrexia, which is soon followed by an erythematous blush, extending over the groin, perinæum, and scrotum; the last becomes œdematous, hot, and painful, but speedily yields to a mild, antiphlogistic treatment, with rest, fomentating, and a farinaceous diet. This species of diffused inflammation is usually the result of some local irritation, consequent upon fatigue and exhaustion, and may be met with in persons of all ages. In the second and acute form, the progress of the disease is more rapid and dangerous, showing itself, in the first instance, under apparently trifling circumstances; but ere many hours have elapsed assuming the character of phlegmonous infiltration, and placing the life of the sufferer in the greatest jeopardy. It is seen in persons of intemperate and cachectic habits, who have been subjected to cold and wet, or to any depressing agent of the vital powers. In the earliest stage the patient complains of a sense of irritation in the situation of the rectum, when an erythema may be observed on the integuments of these parts, which soon spreads over the neighbouring surfaces, accompanied by constitutional disturbance; the redness extends along the perinæum, over the scrotum, penis, and even to the inferior portion of the abdomen, committing ravages in its course. Thus, in forty-eight hours, the perinæum becomes tumid and boggy to the touch, the penis œdematous, amounting to a state of phymosis, with superficial ulcerations, and the scrotum, the principal and worst seat of the disease, in an enormously swollen and distended condition; it is of a dull, reddish hue in appearance, tense, shining, and void of rugæ; on handling it, the temperature is rather below what it ordinarily is, with an emphysematous crackling on pressure being made. At the posterior and most pendulous part, dark, ash-coloured spots, varying in size, may be observed, these conveying conclusive evidence of the gangrenous state of the cellular tissue, occasioned by infiltrated serum compressing the circulation. The system deeply sympathizes in these results, the countenance becomes depressed and anxious, the pulse weak and labouring, the tongue coated with a brownish fur. I mentioned, in an earlier part of this paper, the great rapidity with which gangrenous symptoms come on; the consequences are, that the case is seldom presented to the notice of the surgeon until serious mischief has taken place; it then behoves him to treat it as if under the poisonous influence of infiltrated urine. In fact, the appearances and symptoms are very similar to that condition when in the scrotum, and are followed by extensive sloughing, oftentimes leaving the testes, with the tunica vaginalis, entirely denuded of their natural coverings. The prognosis in these cases is favourable, provided the person has strength of constitution sufficient to bear up against the shock, and the subsequent exhaustion which attends the result. The treatment required must be decisive. If seen in the earliest stage, fomentations, with saline medicines, might check its progress, also the application of nitrate of silver is highly calculated to be of service for this object; but if neglected until a later period, free incisions through the skin and cellular membrane must be made without delay, to enable the morbid serosity to escape, and to favour a loosening of the sloughing tissues. Poultices and fomentations are now necessary, with a strict attention to the preservation of cleanliness. A solution of the chloride of soda or lime is required to neutralize the excessive fœtor, and the strength of the patient is to be supported by tonics and ammonia, aided by nourishing diet.

Two of these formidable but very interesting cases have been admitted under my care, as patients at the Bloomsbury Dispensary, within these last twelve months, which I beg leave to relate:—

Case 1.—James T——, aged fifty-two, by trade a modeller for jewellers, was admitted March 1st, 1846, a patient at the Bloomsbury Dispensary. On visiting him, I found him to be a stout man, of sanguineous temperament. States that up to the last month he has always enjoyed good health; but has drank freely, principally spirits. About six weeks previous to his present illness, he went to Ireland on business, where the whisky suited his palate, and he accordingly enjoyed abundance of it. On his return to England, he remained in Manchester a few days; but feeling unwell, he left for London in an open third-class carriage. The weather on this day was bitter cold. Two days after his arrival in London, he complained of an uneasiness about the anus; but thinking it might go off, delayed applying for relief. In the course of twenty-four hours, he found this to increase, as also his scrotum to be much swollen, when he procured a letter of admission, and came under my care.

March 1st.—The scrotum is much swollen, deep reddish hue, shining, very tense; and the rugæ quite absent. A crackling sensation is perceived on squeezing it, as if air was in its interstices. The perinæum is also boggy on pressing it. Pulse 80, tremulous, and rather weak; tongue dry and furred; bowels open. Incisions were made on each side of the raphé, also in the perinæum. Ordered, linseed poultice, and fomentations to the scrotum and perinæum. Solution of the acetate of ammonia, one ounce and a half; sesquicarbonate of ammonia, twenty-four grains; camphor mixture, six ounces, for a mixture; dose, two tablespoonfuls three times a day.

2nd.—Has passed a restless night; pulse 84, rather weak; much serum has escaped. The medicines to be repeated, and ten grains of compound ipecacuanha powder at bedtime.

3rd.—The sloughing of the scrotum is extensive; fœtor very great; pulse 84; he complains of much debility; bowels open. Ordered, disulphate of quinine, sixteen grains; diluent sulphuric acid, forty minims; water, half a pound, for a mixture; dose, two tablespoonfuls three times a day. Lotion of chloride of soda to be applied; the compound ipecacuanha powder repeated. Diet to be nourishing.

4th.—Was called up last night for retention of urine; the catheter passed with some difficulty; deeper incisions in the perinæum were made; much fœtid serosity escaped. Repeat the medicines.

5th.—Has passed a better night; pulse 82; sloughs beginning to loosen. Repeat the medicines.

* That is, death occurring, as in strangulation, from privation of oxygen, and while the nervous system and the circulation are in comparative vigour. When death results from a gradual and simultaneous subsidence of all the vital powers or organs, the lips, and often the eyes also, are closed, and the expression of the countenance tranquil, and even smiling—facts of some importance in medico-legal examinations.

6th.—Feels comfortable. Repeat the medicines.

8th.—The sloughs are loosening; complains of debility; pulse 84 and weak. Repeat the medicines.

10th.—Much the same.

12th.—Sloughs have come away. Ordered, sulphate of zinc lotion. The parts to be supported by a bandage. Appetite good, and is gaining strength.

15th.—Continues to improve. Lotion repeated. From this time, cicatrization took place rapidly.

April 10th.—Discharged cured.

Case 2.—Jesse W——, aged fifty-five, by trade a sawyer; admitted Dec. 27th, 1846; of plethoric habit; works hard; has drank freely; and does not get nourishing food every day. Pulse 78, and easily compressed; countenance anxious; tongue dry; and complains of thirst. States that on the 23rd he was exposed to wet and cold during the day's work. In the evening shivered much, and "felt uneasy about the anus, as if he had got piles." On the following day, he returned to his work, but was very unequal to much exertion. On the 25th, Christmas day, he perceived a redness on the perinæum; kept himself quiet. On the 26th, worked in a sawpit the principal part of the day; and in the evening was much worse. On the following day, Sunday, 27th, his wife called at my house with a letter for the dispensary. From her description, my expectations were fully realized on visiting him. The scrotum was very œdematous, tense, shining, emphysematous to the touch, quite void of rugæ, and of a deep reddish hue; at the inferior and posterior parts, dark ash-coloured spots were observable, about the size of a four-penny-piece. The perinæum unsound and boggy on being pressed; the penis œdematous, with superficial ulcerations, and in a state of phymosis. Incisions were made through the cellular membrane of the scrotum, also of the perinæum; hæmorrhage very slight; much infiltrated serum has escaped, together with fœtid air. Ordered, linseed poultice and fomentations to the parts. Infusion of cascarilla, seven ounces and a half; sesquicarbonate of ammonia, twenty-four grains; tincture of cardamoms, four drachms, for a mixture; dose, two tablespoonfuls three times a day.

28th.—Has had no sleep; pulse 90; diarrhœa has been frequent during the night; the exudation from the scrotum is very great, and extremely offensive. Ordered, chalk mixture, six ounces; tincture of opium, forty drops, for a mixture; dose, two tablespoonfuls every four hours. Diet nourishing.

29th.—Has slept better last night; diarrhœa is somewhat abated, but feels very weak; the scrotum is sloughing extensively. The last mixture to be repeated.

30th.—Diarrhœa has stopped. The chalk mixture to be omitted, and the cascarilla mixture to be resumed.

31st.—The sloughing continues; pulse 80; complains of great debility. All the medicines to be repeated; they were continued onward to the 18th proximo.

Jan. 1st.—Has passed a good night, and feels better.

2nd.—The sloughs are loosening; infiltrated serum very abundant; fœtor excessive; bowels regular.

4th.—Is much the same.

6th.—A large portion of slough has loosened; he says he feels comfortable; pulse 78 and weak.

8th.—Going on well.

10th.—Sloughs are coming away both in the scrotum and perinæum; he feels stronger, and sleeps well at night.

13th.—The whole of the anterior integuments of the scrotum have sloughed away, leaving the testes quite denuded.

16th.—A large slough in the perinæum has come away; appetite good; in fact, could eat more than he gets.

18th.—Is going on well. Ordered, nitrate of silver, one grain; water, an ounce, for a lotion. Poultices to be omitted.

22nd.—Continues to progress favourably. The parts to be supported by a bandage.

26th.—Going on well. Lotion repeated. This treatment was continued until Feb. 15th, when the scrotum and adjacent parts were healed. Discharged cured.

Keppel-street, Russell-square, March, 1847.

## Reviews.

*Meade's Manual for Students.* Second Edition. London: Renshaw.

We are not amongst those who think this class of books injurious. There is a remarkable centrifugal force always acting on the student's sensorium, by which the knowledge he has acquired from lectures and large books, during the first session, is so diluted, that at the termination of his hospital studies he finds himself all abroad in the matters of chemical decomposition, &c. The centrifugal power will be supplied by this new edition of an old favourite: it is corrected and enlarged, to suit the march of improvement, which, during the last seven years, has been so distinctive of the English medical schools. When Mr. Meade—in his day a very popular private teacher amongst the transpontine students of the metropolis—originally published his Manual, no student was required to "get up" the stethoscopic signs of disease; microscopic anatomy was scarcely dreamed of; the physiological chemistry of Liebig was unbegotten; and the discoveries of Marshall Hall unacknowledged. Much credit is due to the editor, for the great labour and care he has bestowed upon this epitome of medical science; as the power of amplification is so fascinating and so natural to all authors, so is the conciseness and concentration shown in this Manual the more praiseworthy. We would particularly specify the chapters on toxicology and the practice of physic; we can imagine them to be the concentrated notes of a very diligent student of the last session. The visceral anatomy is very concisely given; but why omit all notice of the theory of the reflex function? Surely medical examiners will require their candidates to have some acquaintance with so important a part of physiology. The editor has behaved so well towards the stethoscope and the animal chemistry of Liebig, that we regret to have to remind him of this unfortunate omission. There is just room for complaint, too, concerning the physiological chemistry—some two or three subjects remain unnoticed, the theory of the formation of dew, &c. Whilst in this suggestive mood, induced by the general excellence of the work, we would hint at the propriety, when another edition is called for, of a formulary for the doses of medicines in combination: they are, of course, given separately, but students require to know the quantities of each medicine they may give, when it is desirable to combine the action of two or more.

We have taken these few exceptions, because the book is a good one, and we should like to see it as perfect as possible.

*Braithwaite's Retrospect of Medicine.* Vol. XIV. July—December, 1846.

The practitioner in medicine is much indebted to Mr. Braithwaite, for enabling him, without wading through the voluminous articles of the Quarterlies, or the long speeches of projectors and objectors at the various societies, to keep up his information as to the progress of improvement in his profession.

No man can look over this work without feeling proud of the profession to which he belongs, and of the men who ornament it. Here are 450 closely-printed pages of concentrated information, touching upon 200 subjects, and we dare to affirm that not half-a-dozen of those pages is without a highly practical suggestion. To reduce ingenuity and hypothesis to practice is peculiar to our country, and in this work it is delightful to see how every new invention, or discovery, or suggestion, is weighed as to its applicability to the relief of the suffering patient. With this book in his hand no man need be ignorant of the improvements of the day. We scarcely know how to select, amongst the numerous articles of interest, the most interesting. Perhaps the most novel, and the one most likely—should future experience prove its truth—to show itself of signal benefit to the physician in his diagnosis, is Mr. Hutchinson's, on the use of the spirometer.

"In a paper read before the Royal Medical and Chirurgical Society, by Mr. Hutchinson, he speaks of the difference in the quantity of air respectively drawn in or thrown out of the lungs, as follows:—

"'1. Residual air; which is that air remaining in the lungs that cannot be expelled by the most violent muscular effort.

"'2. Reserved air, or that which remains in the lungs after

a gentle expiration, but which could be expelled by muscular effort.

"'3. Breathing air; that which is required in performing the ordinary gentle inspiration and expiration.

"'4. Complemental air; that air which may be drawn into the lungs by the most violent inspiration.

"'5. Vital capacity; all the three latter divisions combined, being the greatest voluntary expiration following the greatest inspiration.'

"Mr. Hutchinson has proved that the quantity of air which can be expired does not depend upon the girth of the thorax, but the height of the individual; and this being known, the number of cubic inches he can expire in a healthy state may be ascertained with accuracy."

It appears that persons in the earliest stage of phthisis expire much less air than a healthy person; but then many abdominal diseases can limit the respiratory movements, so that there are many calculations yet to be made ere any dependence can be placed upon this new method of diagnosis. When Mr. Hutchinson's paper was read, Dr. Taylor, after many commendatory remarks, said—

"A great advantage in the use of the spirometer in disease of the chest is this, that comparatively little education is required for it. The practice of auscultation requires a long education and constant application; the spirometer may be used for the purposes to which it is applicable, with very little previous study. Hence the importance of the instrument, as pointed out by the author, to army and navy surgeons, to insurance companies, and in private practice generally."

If experience shall give its *imprimatur* to this instrument, how great will be the benefit conferred upon mankind. We believe that is only necessary for us to be able to diagnose phthisis in its earliest stage to enable us to overcome it.

We would particularly direct the attention of our medical brethren to Sir B. Brodie's plan of administering mercury to infants by inunction; we can personally speak highly of its superiority, and shall be glad to hear of its more general adoption.

The account of Mr. Avery's instrument for examining the urethra and other internal canals; the treatment of aneurism by galvanized needles, and a host of interesting practical subjects treated of in this volume, render it a most useful book.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

March 23.—J. M. Arnott, Esq., F.R.S., President.

Successful Removal of an Ovarian Tumour, complicated with Pregnancy. By H. E. Burd, Esq., Senior Surgeon to the Salop Infirmary.

(*Communicated by* James Paget, Esq.)

A. J——, aged twenty-five; inclined to be stout; has been married four years and had three children. She was admitted into the Salop Infirmary, February 28th, 1846. She stated that she detected a tumour in the belly after her last confinement, which occurred seven months since. All her confinements have been natural and favourable. The measurement of the abdomen at the time of her admission was thirty-seven inches: the tumour was moveable, and influctuation was perceptible in it. An elastic bandage to support the swelling was recommended, as well as abstinence from all medical treatment. On September 5th, she returned to the Infirmary, much increased in bulk, the measurement over the umbilicus being then forty-five inches, and fluctuation had become distinct. Above the navel the swelling was irregular, and apparently solid. Her dyspnœa was urgent, and she was unable to lie down. She said she had menstruated regularly since her return home, and was satisfied she was not pregnant—a statement which the absence of all local signs of that condition seemed to confirm. It being now determined to remove the tumour by operation, on the 15th of September, the patient was conveniently placed for the purpose, and a small incision was first made through the parietes of the abdomen, which was subsequently extended upwards to within an inch and a half of the ensiform cartilage and downwards to the pubes; no adhesions presented themselves. The largest cyst was then tapped, and more than three gallons of glairy fluid withdrawn; the tumour was then drawn out, and it was found that the uterus was in a gravid state, pregnancy being advanced probably to the third or fourth month. The very thick pedicle required the application of strong twine ligatures in three different compartments; and yet it was further thought desirable to tie each of the divided vessels separately after the pedicle was divided. The wound was then closed by sutures and adhesive plaster, and an opiate administered when the patient was placed in bed. The tumour was found to consist of a multiplicity of sacs, surrounded in some instances by solid matter; their walls were thick and solid; and the whole mass removed was computed to weigh about fifty pounds. In the evening the patient had uterine pains, for which an opiate was administered. On the following day (16th) she had much pain and tenderness in the left iliac region, for which she was bled to four ounces in the afternoon, with marked relief. On the 17th, abortion took place, without the occurrence of hæmorrhage. In the evening of the same day there was much tympanitis, with restlessness and hiccup. For this, brandy-and-water with ammonia, and three grains of opium powder were given. On the 18th, she had rallied, but again sank towards evening, though beef-tea, milk, &c. had been allowed through the day. Opium and ammonia were again administered with decided benefit. She was further ordered ox-gall, ten grains; opium powder, three grains; which prescription was repeated at intervals, when called for, through the remainder of the time that the patient was under treatment. It was some time, however, before she threw off all alarming symptoms; for on the 20th her features were sharpened, her extremities cold, and she suffered from spasmodic contractions of the diaphragm; and on the following day her abdomen was much distended with flatus, and tender. These symptoms, however, yielded to the exhibition of the opium and ox-gall, together with gentle stimulants, and the employment of fomentations and an injection. After the close of the month she rapidly improved, and early in November the wound was quite healed. The last report of her (on December 24th) states, that since leaving the hospital she has felt no further inconvenience, and was then fully employed in her domestic duties. The author remarks, that he did not consider the operation justifiable when his patient was first an inmate of the Infirmary, because her general health was undisturbed; and that the fact of her pregnancy being subsequently overlooked is referrible to the absence of all signs of that condition, as well as the recurrence, according to the patient's account, of regular menstruation. An explanation of this apparent return of the catamenial period was afforded by examination of the aborted placenta, which was found to have been partially separated at one point, with a considerable clot adhering. It was not peritonitis, but the frequent occurrence of collapse, which excited alarm; and this was invariably and readily relieved by the administration of opium, ammonia, and brandy, of which the first exercised the most potent and immediate influence in rousing the system.

The President remarked, that though the operation performed in the case before the Society had been often resorted to, it was scarcely yet admitted into the regular category of surgical operations. It was desirable that we should have an impartial record of the experience of all those who had performed the operation.

Mr. Phillips did not rise in the hope of throwing much light on the question of the operation of ovariotomy, although he had certainly had opportunities of witnessing its performance. He would make some comments on what, he thought, might be considered the drawbacks referrible to this operation. 1st. It had led the profession to believe that operations of magnitude on the abdominal cavity were attended with less danger and mischief than was formerly supposed. Now he thought that this opinion was erroneous, and tended to the production of mischief; for these cases could not be fairly allied to the ordinary operations on the peritonæum, inasmuch as that membrane, in cases of ovarian tumours, was from some cause so much changed in character as to be less liable to inflammation than when these tumours did not exist. Another drawback in arriving at an opinion respecting this operation was our ignorance of the real results of the proceeding; for whilst successful cases were published with alacrity, most of the unsuccessful ones never saw the light. The difficulty of diagnosis in cases of ovarian tumours was also another drawback in regard to this operation. Cases had occurred in which the operation had been begun, and left off in consequence of an error in diagnosis, either no tumour being present, or if so, not of a kind that would bear removal. Even the case before the Society was strongly illustrative of

our difficulty of diagnosis; for had the operator known of the presence of pregnancy he would not have operated. Indeed, had the case gone wrong, he would probably not have escaped without censure. This was not, however, the first case in which pregnancy had been overlooked, and the operation commenced, more than one such mistake being on record. Operations had also been begun in which the operator had been certain of finding fluid in the tumour; but no fluid whatever was present. Added to all these difficulties, he might fairly assert that at the present moment we know of no certain means of determining the presence of adhesions. No doubt in some cases this might be ascertained; but in all cases, however ingenious the aids we might employ, no positive diagnosis on this point could be formed. What, then, were the circumstances which would justify us in the removal of an ovarian tumour? To answer this question, he might state that a very general conclusion was now come to, that the operation of tapping an ovarian cyst was a much more serious and dangerous proceeding than had been formerly supposed. It was at one time considered as a very simple matter; but his experience, and particularly as it related to four recent cases, had led him to a different opinion; for out of these four cases one died in a few days, and one only survived to undergo a second tapping. Here, then, was our position. A case was before us in which we knew that ordinary remedies were of little or no avail; and if ordinary tapping were as dangerous as he believed it was, we must inquire whether there was more danger in the operation for removal than in tapping, and whether it offered a better chance of cure. The danger, he believed, was no doubt more imminent; but still tapping was uncertain, and often fatal. If we knew the honest results really of the operation of ovariotomy,—if, in fact, the unsuccessful as well as the successful cases had all been given to us, then we should be in a position of knowing how far we were justified in recommending the removal of an ovarian tumour, and not, as now, in a state of uncertainty and doubt regarding the proceeding.

Dr. Mayo inquired what were the statistical results of tapping? Was it generally so dangerous and fatal as in Mr. Phillips's opinion it appeared to be?

Mr. Phillips could not answer the question as to the general result of tapping in ovarian dropsy. The average time, he believed, that life lasted, between the first and last tapping, was three or four years, or, he believed, even less.

Dr. Locock could not refrain from offering a few remarks on the subject before the Society. He had certainly been astonished at the statement made by Mr. Phillips, that the danger of tapping was so much greater now than it was formerly. We had the same number of cases as formerly, and knew as much about the disease; he could not help, therefore, feeling surprised at the statement made by Mr. Phillips. He believed that the proceeding of puncturing a simple cyst was no more dangerous than it was formerly. He could not help thinking, that in the comparison which Mr. Phillips had drawn between the dangers of tapping and ovariotomy he had quite overlooked the difference of the cases operated upon; but in our inquiry on this point, to arrive at an accurate conclusion, we must take into consideration the nature of the cyst. Now in cases of unilocular cyst, in which the patient was in good health, tapping would prolong life for many years; he himself had known cases of twenty years' duration. If, on the contrary, we tapped an unhealthy cyst, in a broken-down constitution, then there was little use in the proceeding; and these, and these only, he believed, were the cases in which danger resulted from tapping. He had heard surgeons of great experience in this town state that death after a single tapping was very rare indeed. The late Dr. Gooch had told him that he never lost but one patient after tapping, although in a second instance severe peritonitis came on; but this was subdued and the dropsy permanently cured. We could only, then, compare the operations of tapping and ovariotomy properly, by taking into consideration the nature of the cyst, its character, complications, &c. Which were the cases, then, in which we could substitute a better mode of treatment than by tapping? In solid tumours, without fluid, we had no good grounds for endangering the lives of our patients by an operation for their removal, because we knew that in the majority of these instances, though often painful and inconvenient, life might go on for many years, and the patient attain a good old age. In cases where the cyst was simple, and the health unbroken, and where the fluid was of a serous character, the experience of the last few years had convinced him that the most successful treatment was a single tapping, followed by due and well-regulated pressure; the pressure to be continued for months, at the expiration of which the patient would be well; or even if the fluid again formed, an operation of a more formidable character could be resorted to, for the little adhesion which might have resulted from the pressure would offer no obstacle to such a proceeding. He had seen several cases in which pressure had been employed with the most favourable result. In one case of common ovarian cyst, the tumour had been completely and permanently dispersed. It was well known that Sir Astley Cooper retarded the growth of solid ovarian tumours by the application of long continued pressure. A case had occurred to him (Dr. Locock) of a perplexing character, in which an ovarian cyst kept filling and bursting every six weeks into the cavity of the peritonæum. This continued for the space of twelve months. There could be no doubt that a tumour formed in the period named, and as regularly burst into the peritonæal cavity. After this had occurred eight or nine times, Sir Benjamin Brodie let out a very small quantity of the fluid from the ovarium; it was of a dark pea-soup colour. No further attempt was made to reduce the size of the cyst by evacuating it, and, of course, a quantity of fluid was left behind. To this collection pressure was made, the cyst never filled again, and it did not burst. The patient died subsequently from malignant disease of the liver, and on examination after death, the ovarian cyst was found collapsed in the pelvis, containing a few shreds of coagulable lymph, similar to that found in the peritonæum. Four months since, another case had occurred to him; the cyst was simple, the health good. Eleven pints of fluid were drawn from the tumour, and firm pressure was applied, and had been kept up to the present time. There had been no return of the collection, and no sign of it. It might, perhaps, be said, that in this case sufficient time had not elapsed to determine the success of the proceeding. He (Dr. Locock) thought that the cases treated by Mr. Brown deserved the attention of the profession, though he thought that Mr. Brown was wrong in giving mercury and diuretics, for they were not only useless, but did positive harm. In his (Dr. Locock's) cases, Mr. Brown's plan was followed, but no mercury was given, and they went on well. He had said enough of this class of cases to show that in simple ovarian cysts we had a simple remedy, which offered a fair chance of recovery to the patient. Now one kind of case was left, and that was where the growth was of a malignant character or the tumour many cysted. In such cases, little benefit could result from tapping or pressure, and in these alone was an operation for removal to be performed; and it was in these, it must be recollected, that such operation was less likely than in others to relieve or cure.

Dr. Chowne considered that it had become the practice to defer tapping ovarian cysts, in consequence of their great proneness to refill, but that delay had the disadvantage of rendering the operation less successful, owing to the greater magnitude acquired by the cyst. In regard to the existence or non-existence of pregnancy, the difficulty of diagnosis was deeply to be regretted, where immediate decision was necessary; the usual symptoms were so interfered with and modified by ovarian disease as to render them liable to great uncertainty. He had, some time since, a patient who became pregnant, who had a large ovarian cyst, of more than three years' standing. The usual symptoms of pregnancy were so interfered with as to prevent absolute reliance upon them. After careful application of the stethoscope, however, he heard the fœtal heart. The child was born soon after the termination of the sixth month, and lived a few days. He considered the utility of the stethoscope, in such cases, to be very great. The patient is at this time nearly as well as she was prior to the event. She wears a belt, which appears to be useful in restraining the disease. The disease has existed nearly six years.

Dr. Cursham inquired if the experience of Dr. Locock confirmed that of Sir Astley Cooper, that pressure was useful in cases of ovarian tumours of a solid character?

Dr. Locock had found pressure of service in cases of solid ovarian tumours, but not so when the tumour was of a mixed character. He could not agree with Dr. Chowne, as to the certain indication afforded by the stethoscope, of pregnancy. If the child were dead, the stethoscope afforded us no assistance; and if there were a large quantity of water between the ear and the fœtus, it might be difficult, if not impossible, to detect the pulsation of the heart. He thought there were other means, more to be depended upon, and the one most unequivocal in its results was the examination per vaginam or ballottement. In the case before the Society, the uterus

was probably too high up to be reached by the finger, but if pregnancy had been suspected, the surgeon would no doubt have insisted on passing his hand into the vagina.

Mr. Thomas Safford Lee said that the subject which was at present under the attention of the Society—viz., the result of the operation of tapping—was one of the greatest importance. The operation itself would, he thought, on examination, be found to be a very dangerous remedy, and if so, would be an important argument in favour of the extraction of ovarian cysts. He begged leave, therefore, to present to the Society a number of cases in which the results of tapping were distinctly stated, and which, he was sorry to add, did not accord with the experience of Dr. Locock. Mr. Southam, who had been a successful operator in two cases of ovarian dropsy, was greatly struck with the frequency with which unfavourable symptoms and death had followed the application of paracentesis, and more especially after the first operation; he therefore drew up a table consisting of twenty cases, (*Lond. Med. Gazette*, Nov. 24th, 1843,) in which the mortality was very apparent. The result of this table was, that of the twenty cases, fourteen died within nine months, two within eighteen months, and four in several years, after the first operation of paracentesis. "And it further appears," said he, "that paracentesis does not prolong life for more than eighteen months and nineteen days, and that one in five dies from the effects of the first operation." He (Mr. Lee) had also collected a table in which forty-six cases have been referred to, and thirty-seven of which died. Death took place in one in a few hours; in one, in twelve hours; in one, in twenty-four hours; in two, in two days; in one, in three days; in three, in four days; in one, in seven days; in one, in twelve days; in one, in two weeks; in one, in three weeks; in two, in one month; in three, in two months; in one, in three months; in two, in four months; in six, in twelve months; in one, in eighteen months; in one, in twenty months; in two, in two years; in two, in three years; in one, in six years; in one, in eight years; in one, in fifteen years. Thus proving, that when the patient arrived at such a period of the disease as that in which the operation of tapping ought to be performed, great danger was very frequently the result. Now, this danger not only arose after tapping, but more especially after the first operation; and in the thirty-seven cases already referred to, eighteen had died after the first tapping. For instance, eighteen were only tapped once; two, twice; one, three times; two, four times; one, five times; one, seven times; one, ten times; one, twelve times; one, twenty times; one, twenty-three times; one, twenty-nine times; one, sixty-six times; one, seventy-eight times.

Not only was the operation of tapping dangerous, but the disease itself was of only short duration. He had collected 123 cases indiscriminately, from all the periodicals, in which the duration of ovarian dropsy, under any or every treatment, was mentioned. That was to say, the space, from the time of abdominal enlargement, to the death of the patient, was observed. Of the 123 cases, ovarian dropsy had existed at death in thirty-eight, one year, or under; in twenty-five, two years, or under; in seventeen, three years or under; in ten, four years, or under; in four, five years, or under; in five, six years, or under; in four, seven years, or under; in three, eight years, or under; in one, nine years, or under; in one, ten years, or under; in five, twelve years, or under; in five, sixteen years, or under; in one, twenty years, or under; in one, twenty-two years, or under; in two, twenty-five years, or under; in one, fifty years, or under. So that it will be seen, that ninety patients of the 123 did not survive four years. Also, in forty additional cases, collected from private sources, ovarian dropsy had existed in eight, one year, or under; in eleven, two years, or under; in eleven, three years, or under; in four, four years, or under; in two, six years, or under; in one, seven years, or under; in one, eight years, or under; in one, twelve years, or under; in one, thirty years, or under. Thus giving an additional evidence as to the mortality of ovarian disease, thirty-four out of forty having died within four years. Dr. F. Bird had also kindly favoured him with fifty cases, which had occurred in his own practice, where four died within one year; twelve within two years; twelve within three years; ten within four years; six within five years; two within eight years; two within nine years; two within ten years. It was thus seen, from the combined results of these observations, that the duration of ovarian dropsy was, in the great majority of cases, confined to four years—viz., 162 to 213.

Mr. Cæsar Hawkins, in reference to cases treated by tapping and pressure, inquired whether Dr. Locock had seen the last case mentioned by him lately.

Dr. Chowne said, that of course it was only when the child was living, that the stethoscope could give certain information with respect to pregnancy. Even, indeed, in some cases in which the child was living and strong, the heart's action could not be detected. Other causes, such as deficiency of the liquor amnii, prevented our arriving at a definite conclusion.

Dr. Locock had seen seven cases in which pressure had been applied during the last two years, and in none had there been any return. The patient respecting whom Mr. Hawkins had made the inquiry, he (Dr. Locock) had not seen of late; but he had heard from her friends, and there was no sign of the disease returning. In all the cases but one, tapping had preceded the pressure, and in one only two teaspoonfuls of fluid were drawn off. Pressure alone, in cases of solid tumour, had decreased the size of the growths. With respect to the mortality after tapping, as exemplified by the statistics of Mr. Lee, he could only say, that it was contrary to the experience of all practical men and hospital surgeons. He could only compare such statistics to the collection of deaths resulting from tooth-drawing, which would only be collected from their rarity; so death in these cases was remarkable from its so soon occurring after operation. No man of experience would bear out those statistics.

Mr. Cæsar Hawkins remarked that the question of the propriety of removing ovarian tumours by operation must still be doubtful, until we knew more respecting the ultimate results of pressure. He had put a question to Dr. Locock respecting a patient of his, because he had doubts regarding the success of Mr. Brown's treatment. Thus two of the cases returned as cured Mr. Lee had discovered were dead; a third had died from suppuration in the sac, and he (Mr. Hawkins) had heard of a fourth case which was fatal. He could not speak from experience of the effects of pressure in those cases, but reasoning *a priori*, it would not appear to be likely to be of service, for in cases of simple cysts in other parts, something more than pressure, in inflammation or suppuration, was necessary to effect a cure. The irregularity of the pressure in ovarian cases was also a drawback to this plan of treatment; but it was a practice requiring further examination. He proceeded to speak of the occasional difficulties of diagnosis in these cases, and believed that fibrous tumours of the uterus were occasionally mistaken for ovarian growths. He agreed in opinion with Mr. Lee, that statistics showed that tapping was followed by length of life in only a very few cases, the generality of instances being comparatively soon fatal. He repeated that the plan of pressure required further investigation, and believed that in other cases incision was justifiable. He remarked that it was by no means necessary that the incision should be so large as that made in the case before them; in cases of simple cysts a small incision was often quite sufficient; he meant an incision under five inches in length. Mr. Lee had collected twenty-five cases in which ovarian tumours had been removed by what had been called the "large" and "small" operations: four only of these had died, showing a success greater than we found in other capital operations, as amputations. An incision of twelve or fourteen inches in length could only be necessary in cases of solid tumour.

Dr. Murphy, in reference to the effects of tapping, remarked that no one man's single experience could give us a correct idea on the subject, for in many cases we knew only the immediate result, the tapping, it was said, having "cured." Statistical information only could be fairly relied on, and Mr. Lee's attempt in this respect was valuable. Those statistics went strongly against the operation of tapping, for they showed that generally it was unsuccessful. Some cases, indeed, were remarkable, from the patients having survived twenty-five or thirty years; but the large numbers of rapidly fatal cases were decidedly against the operation. One point of inquiry in these cases was our facility or non-facility of deciding whether the tumour were unilocular or multilocular. He believed that it was very difficult to decide this point. Indeed, it was his belief, that the simple cyst was the mere primary stage of the multilocular form of the disease. If this opinion were correct, the removal of fluid from one cyst could not cure the disease, as the other cysts would form and fill. To show the difficulty of treatment in these cases, he alluded to two instances of what were apparently simple unilocular cysts, fluctuation being distinct all over the tumour. In one, pressure was resorted to, with all means to keep up the health of the patient, as tonics, good diet, exercise, &c. At the end of three years the tumour had not increased in size; whilst in the other case, in which both tapping and pressure had been resorted to, the patient went from bad to worse.

The next meeting of the Society will be on the 13th of April.

## MEDICAL SOCIETY OF LONDON.

Monday, March 15, 1847.—Mr. Dendy, President.

### NASAL TUMOUR; FALSE ANEURISM.

The President stated, that the gentleman affected with bronchitis, whose case he had mentioned at a former meeting, was now quite well; there was no râle, and only a slight gleet.

Mr. Linnecar related the following case:—A child five years old came under his notice, affected, to all appearance, with a polypus of the nose, all the symptoms of that disease being present. The upper part of the nose bulged out; and on looking into the right nostril, where appeared to be a polypus, the colour of the tumour was that of the Schneiderian membrane. This rapidly increased in size, until it came to the level of the ala on that side; and examination showed that the disease had begun in the left nostril also. All these symptoms supervened on a cold. On attempting to pass a probe round the root of the growth, it was found that the probe would not pass round the side next to the septum, but it did on the other side. There was a discharge of mucus and blood, and it was determined the next day to pull away the growth. The next morning, however, to his surprise, on examining the nose, all the swelling was gone. He had never seen a similar case. No matter had come away with the mucus and blood; there was no pain.

Mr. Hilton had seen cases of the formation of matter under the lining membrane of the septum of the nose, which he believed were not described in books. In these cases puncture was resorted to, and relieved. He considered Mr. Linnecar's case was somewhat of that character. With respect to the situation of the growth, he remarked that polypus of the septum of the nose was very rare; he had never seen one in that situation. It was evident that some communication existed between both sides of the tumour, or puncturing it on one side would not have evacuated both sides of the growth.

Mr. Pilcher questioned if cases like that related by Mr. Linnecar were uncommon. The cases referred to by Mr. Hilton were more rare. He had seen many cases similar to that first related. He believed that the fluid was not contained in a sac at all, was not an abscess, but simply a collection of serum or sero-fibrine infiltrated into the sub-mucous tissue, occurring almost always in scrofulous children. These cases simulated to some extent polypus, but were removable by astringents.

The President related the following case of

### FALSE ANEURISM.

Mrs. T——, of about the middle age, residing in the vicinity of London, consulted her surgeon on account of a severe chronic lepriasis. Previous to her leaving his room, she requested him to lance a gum-boil on the right side of her mouth. On introducing his finger, he found a tense tumour, of the size of a thrush's egg, between the masseter muscle and the lower jaw. She complained of much pain on pressure; the tumour and adjacent tissues were hot, and the teeth were extremely tender. As she was anxious to return immediately to her country residence, he introduced a lancet through the tense tissue, which, on being withdrawn, was followed by an instantaneous jet of florid blood.

It would have been useless to have placed a ligature in the vicinity of branches so freely anastomosing, and as the attendant was anxious, of course, to avoid the more serious ligature of the carotid, he decided on dilating the aneurismal sac itself. He freely opened the sac, (which felt crisp, as if it were a fibrous or semi-cartilaginous degeneration of the periosteum or other tissues,) and then introduced lint, soaked in nitric acid, pressing it firmly to the bottom. The impetus of the blood, however, which was streaming in profusion, rendered it extremely difficult to lodge the pads of lint firmly. He at last filled the sac, and placed dry lint between the maxilla and the cheek, and applied firm external compression. About thirty ounces of arterial blood, he judged, were lost, and temporary faintness ensued. There was no subsequent recurrence of hæmorrhage: the patient was kept cool and quiet, her diet consisting of barley-water, broth, and tea. She took salines and anodynes. The lint was firm until the fifth day, when the surgeon removed it cautiously, and with it, one of the molar teeth, and some minute spiculæ of bone. The granulations gradually filled the sac, and the action of the jaw, which he then learned had been much impeded, was restored.

Now he was aware that errors in diagnosis regarding these tumours have often been made; some are recorded by Vesalius, Kuysch, Dettaen, Richerand, &c. He had himself seen, in one of our hospitals, a large popliteal aneurism poulticed and condemned to the knife, and the femoral, subclavian, and even the common iliac, have been tied for supposed pulsating tumours in bone, or those in the vicinity of large trunks. The fault here recorded, however, was one of precipitancy, arising from locality, solidity, and want of distinct pulsation; but above all, from the off-hand and confident request of the lady herself. The nature of the tumour had never formed a question in the surgeon's mind.

The statements and discussions regarding two late operations, and some remarks on aneurism in bone, by Mr. Toynbee, have rendered us alive to the subject of blood tumours in soft parts, and revived his recollection of this unusual case.

On the etiology of the primary disease he was unable absolutely to decide. It could not be referred to unheeded contusion. Mercury had not been unguardedly administered, nor could it for a moment be suspected that syphilitic contamination was the cause. The disease was probably the development of latent taint or spontaneous morbid growth. The result proved it not to be highly malignant; and scrofula would rather attack the spongy tissue of bone; and strumous disease was unusual at the period of life which the patient had attained. The tissues in the vicinity of the maxilla certainly remained during the remainder of life (about five years) in a chronic, tumid, and somewhat painful condition, but without anything like corroding or phagædenic extension; and the centre of the ramus of the maxilla, which was removed after death, was enlarged, softened, and discoloured. He would refer it to a semi-fungoid degeneration of bone, (though he feared he coined a term,) its proximate cause perhaps being a varicose condition of the capillaries, rather than that the osseous degeneration was itself the effect of aneurismal pressure and frequent absorption. The result was, a false aneurism in a fibro-cartilaginous or osseous blood cyst. He was not sure that modern surgery would (as a principle) approve of this mode of imitating those spontaneous obliterations of blood cyst, by adhesion, or suppuration, or gangrene, recorded by Valsalva, Petit, Dessault, and others: the emergency of the case, however, rendered the plan adopted one almost of necessity, and it was a redeeming point in the surgery that the aneurism itself was cured.

## WESTMINSTER MEDICAL SOCIETY.

March 27, 1847.—Mr. Hancock, President.

Dr. Murphy related a remarkable case of perforation and delivery by the crotchet, in which the conjugate diameter of the pelvis was only one inch and a half. We refer for the details of this extraordinary case to page 355.

Some discussion followed, in which

Mr. Streeter took occasion to say, that he felt particularly glad that so eminent and philosophical an accoucheur as the author of this most instructive case—the professor of midwifery in one of the largest London schools, had personally felt the difficulties that surround operative midwifery in country districts—places in which the surgeons of England had no large staff of hospital colleagues to share the responsibility of dangerous complications and severe operations, and where the entire responsibility of operative interference rested upon themselves. So strongly had this feeling of the difficulties of country position acted upon a man of such large experience, as to lead Dr. Murphy to lay aside his avowed preference for the Cæsarian operation, and to adopt in its stead that of embryotomy. He could not but express in public, as he had often done in private, the opinion, that great criminality attached to the authorities of both the British Colleges, in their attempts to lower the character and station of English accoucheurs, by the missives of their secretaries, and by holding them forth as an inferior order of men by their internal regulations. No class of men were more deserving of state countenance and collegiate support than the thousands of English surgeons spread over the country districts of this kingdom, and to whom the well doing and lives of English women and their infants were entrusted during the pains and perils of childbirth. These men, he firmly believed, were as capable, when surrounded by appropriate aid and circumstances, of performing surgical operations as the London hospital surgeons themselves. Unless they were so capable, they were not fitted to encounter the dangers and complications of the practice of midwifery, into which no one should be allowed to enter who was not capable of undertaking its highest operations in case of need.

THE LANCET.

LONDON, SATURDAY, APRIL 3, 1847.

We have seen a good deal of the disgraceful manner in which medical men are remunerated, or rather, suffered to go unremunerated, by New Poor-Law Boards of Guardians; but we have seldom seen anything more thoroughly dishonest and discreditable than an advertisement in the *Norfolk Chronicle*, which we quote below. In this advertisement, the Directors and Guardians of the Union (which includes the hundreds of Happing and Tunstead, in the county of Norfolk) propose to some duly-qualified medical man, that he shall attend the poor of ten parishes, supply medicines, &c., the said parishes comprising a population of 2529 persons. Besides attending the poor of the ten parishes, other labour is required. By an odd and most improper arrangement, it appears that the four medical men of the Union, which includes these parishes, attend the workhouse (situated in another parish) alternately, during the four quarters of the year, and the medical attendant of Tunstead and Happing must take his quarter's attendance with the other three, and supply medicines, &c. The salary for *all* this is to be £37 16*s.* per annum, in quarterly payments of nine guineas per quarter, or something less than one guinea per parish per quarter, for attendance, medicine, &c., (what the et cetera may mean we cannot say,) the rotation attendance and medical supplies for the workhouse being given for nothing! We wonder what ideas these "directors and acting guardians" can entertain of the value of the services of a duly-educated professional man; of proper payment for his toil and skill; of the cost of medicines; and of other expenses incidental to medical practice. We have often maintained, that such an administration of the New Poor-Law, such a grinding down of the poor, and of the professional man, is heartless and dishonest. Either the medical man supplies the proper medicines, and time, and skill, in which case, his parochial duties must, under such a scale of payment, become an actual expense to him; or the poor are neglected, and proper medicines are withheld. In either case, gross heartlessness and dishonesty are perpetrated by the Boards of Guardians. If there be any clergyman among these "directors and acting guardians," he should be asked, how he can justify to his conscience the morality of placing either the sick poor or the medical man in such circumstances. Will he say, in his closet or in his pulpit, either that the poor must be neglected, or that the burden of the charity of ten parishes must fall upon the shoulders of the unfortunate surgeon? If there be a landed proprietor upon the Board, he should be asked, whether it is not important, as a mere pounds, shillings, and pence question, that the health of the poor should be adequately provided for? The health, the bone and sinew, of a labouring population, only cared for in this iniquitous manner, must deteriorate; and where there is most physical weakness, there also pauperism is most rife. To preserve the physical condition of our peasantry, it is quite as important that they should have proper medical attendance in sickness, as it is that they should have an adequate supply of food in their health. We need not say that, in the end, a medically misattended or neglected population must become unnaturally burthensome to the parish and the poor's-rate. The labour power of the strong man must be risked, the pauper progeny must be enfeebled, and thus the seeds of pauperism be sown for future generations. There is not, in the long run, any man half so expensive in a parish or union as an economic guardian, who pushes his economy to the length of lowering the health and physical status of the population he meddles with or presides over. Again, if there be a farmer among these guardians, he should be asked, whether he and his fellow yeomen of the ten parishes in question would allow a veterinary surgeon to contract to attend and supply medicines to the sick brutes of the district? Whether they would think the lives and limbs of their cattle, the horses, and swine, and sheep, and oxen, or even dogs, on their farms safe, if the physic and attendance for the brute beasts were to be paid for at the rate for which they have advertised the professional attendance upon the human inhabitants of their district? To all—clergymen, landed proprietors, yeomen, and rate-payers, it must be said, that the public proposal of such a rate of payment is an abundant proof that they attach less value to human life and health than to the health and life of their cattle; that such a low state of morality exists amongst them, that they take more care for the brute creation than for the men, women, and children, of whom the law makes them the protectors. We should like to know how these guardians would like the sick of their own families to be handed over from one medical man to another every three months—a system which could not but be inimical to the sick, and unpleasant to the medical men. These remarks, we know, apply to other places besides this poor, miserable Norfolk parish. There are but too many Andovers in England, in which the wealthy, and, as far as station is concerned, the respectable, inhabitants attempt to make it a passport to their favour and patronage, that the medical man shall grind down the faces of the poor, with the view of sparing their own pockets. In the great majority of cases we know that the burthen of this vicious and demoralizing system falls upon the medical practitioner, who is least of all able to bear it; but the iniquity of the guardians is not on this account the less. We conclude with the advertisement itself, which speaks trumpet-tongued;—

"Tunstead and Happing Hundreds.—*To Surgeons.*—Notice is hereby given, that the board of directors and acting guardians of the above hundreds will, at their weekly meeting, to be held at the Board-room, on Tuesday, the 5th day of January, 1847, at twelve o'clock at noon, proceed to the election of a Surgeon, to act as medical officer, in the room of Mr. H. Bidwell, deceased.

Candidates must be duly qualified according to Article 3 of the Medical Order of the Poor-Law Commissioners (dated 12th March, 1842,) and will be required to attend personally at the Board-room, on the said 5th day of January, and produce evidence of such qualifications in one of the modes mentioned in the said order of the poor-law commissioners.

The person elected will be required to attend to and supply medicine &c. to all paupers residing in his district, which consists of the following parishes—viz., Bacton, Bradfield, Crostwight, Edingthorpe, Felmingham, Paston, Ridlington, Swafield, Westwick, and Witton, and comprises a total population of 2529 persons.

He must also attend to and supply medicine &c. (in alternate quarters with the other three medical officers) to the sick inmates of the workhouse in Smallburgh.

The salary will be £37 16s. per annum, payable quarterly, in addition to the remuneration for operations and services performed in cases of fractures, &c., according to the said order of the poor-law commissioners, the provisions of which must be observed in every respect.

The person elected will be required to reside in or near his district, and to vaccinate therein, and will receive the sum of

one shilling and sixpence per head for each person who shall be successfully vaccinated by him, and is to execute (if required) a vaccination contract, according to the prescribed form of the poor-law commissioners.—By order of the Board,

Worstead, 22nd December, 1846." JOHN BERNARD, Clerk.

THE attention of the public has been lately called to the subject of prostitution, in consequence of a public meeting held in the city of London, relative to the proposed introduction of a measure into the House of Commons, entitled, "A Bill for the more effectual suppression of trading in seduction and prostitution, and for the better protection of females." The readers of THE LANCET will expect us, perhaps, to make a few observations on the Bill, inasmuch as we have taken some pains to put them in possession of the present state of prostitution, and its consequences on society; we shall therefore take the opportunity of making a few remarks on public opinion relative to that important question. An eye-witness thus describes to us the meeting held at the London Tavern. A large number of respectable persons were present: those who took part in the proceedings were principally ministers of various denominations, and great unanimity prevailed in the resolutions, which went to deplore the frequency of prostitution, and the feebleness of our present means of checking it, and expressing a belief that legislative measures would benefit woman. As usual, however, little that can be called practical was advanced; but the public were indulged with several stories, of which the following may be taken as a fair sample of the rest:—Two young and beautiful girls, relatives of an Irish baronet, were placed in a French school. On their return to England, they embarked on board a steamer, and their friends were waiting their arrival in this country. Can it be credited? the young ladies never came to hand, or have been since heard of. A woman was, however, observed in earnest conversation with them on board.

Admitting, as we do, the philanthropic motives of the noble lord who related this story, we doubt whether the cause can be advanced by statements such as this. Many will agree with an ironical friend, who recommends the story to be stereotyped, in the hope that it may become a standard tale, to be cited by those who rave about the superiority of a French education for the future wives and daughters of England. Novelists might enlarge on the topic, and a D'ISRAELI or a BULWER might draw a parallel between the barons of old and the impudent procuresses of the present day, who thus carry off fair and defenceless young ladies within sight of the cliffs of Dover. The recital of the "dangers by flood and field" encountered by these damsels, might, moreover, he thinks, cause a wholesome panic among the moustached loungers on Boulogne Pier, and induce them to pause before commencing any practical incursions on board ship, now that they know that Lord Mountcashel and his party are about to introduce legislative measures to put a stop to their predatory habits, as we no longer live in the early ages, when young ladies could be carried off with impunity.

Another story, equally pertinent, was thus given:—A beautiful young widow, (the cases occur usually to young and beautiful persons,) being left in destitute circumstances, advertised in the *Times* for the place of wet nurse. In a few hours, a hoary old villain (such was the expression employed by the reverend narrator) called on her, inquired into the particulars of her condition, and, it is stated, made dishonourable proposals to her.

But to be serious: is it not time to rescue the question out of the hands of a party who advance these impracticable views on prostitution?—or can we be surprised if the House of Commons should turn their attempts at legislation into ridicule, and thus frustrate all hope of amendment.

There were, however, some practical remarks made by the chaplain of the Bridewell House of Correction, which deserve much attention: they sustain many of the statements in former numbers of this journal. Mr. MONROE stated that he thought it wrong for gentlemen at public meetings to assert that women are compelled to remain as prostitutes; his experience went to prove, that it was not difficult to find penitentiaries for prostitutes, but it was very difficult to find prostitutes who would enter penitentiaries. What reflection does not this statement give rise to, coming as it does from a chaplain of one of our metropolitan prisons? and yet the philanthropic individuals who have investigated prostitution in this country, have done little else than subscribe money to support asylums, which are thus spoken of. Any censure passed by us on these institutions cannot equal this admission by a friend of the cause he was there to advocate. But these are the consequences of misplaced philanthropy, many of which we have had occasion to point out; yet these charitable persons would not subscribe a sixpence to the support of hospitals to cure the bodies of these unfortunate creatures. And this brings us to remark that the general tone of the meeting seemed to imply that prostitution could be checked in proportion as we improve the religious education of the people. This was the single preventive. Yet these are the persons who propose to legislate on the subject.

Mr. BUCKINGHAM told the meeting, that in his travels in Europe, Asia, Africa, and America, he had nowhere seen so much profligacy or open prostitution as in England, which every true Briton believed to be the most moral nation under the sun. This, perhaps, many may think exaggeration; but Dr. RATIER, whose mission to this country we lately noticed, tells us, that in no capital which he has visited has he observed so many prostitutes as in London; but the French philanthropist evinced no surprise when there was pointed out to him the want of female employment in London, and the tempting sums to be gained with such facility in the streets of this large and wealthy metropolis.

An honourable M.P., who addressed the meeting, stated he was thankful that prostitution and profligacy were thus patent and disgusting in England. He had no wish that we should follow the *decent police-tolerating profligacy of France*. He thought our plan far preferable in deterring persons from the paths of vice. When we heard this speech, we regretted that the public mind should remain so unenlightened on this subject. That because the French regulations are bad, therefore we should continue in our own vicious course. Little is the honourable member aware of the social consequences on society of allowing so many women to become each a focus of disease, infecting our soldiers, our sailors, and mechanics, and truly visiting the sins of the fathers on the subsequent generations. All this the British philanthropists would support, in defiance of Mr. ACTON's statistics, to which we have so often alluded, showing the consequences of thus publicly allow-

ing the prostitute, diseased or healthy, to parade our streets, and entice our youth into her dens; and when she herself is diseased shutting her out, as is done at the London Hospital, from the full benefit of our public charities. O philanthropists! that a little more judgment and discretion entered into your views; you would then consider the causes of prostitution, and try to remedy them, not only in instructing, but finding occupation for, your female population; you would not then shut up your MAGDALENS, cut their hair, give them only the Bible to read, and after two years of penitence find yourself unable to find them occupation; you would not, we repeat, then hear Mr. MONROE complaining that he cannot find prostitutes for the Penitentiary. But if your money, now spent in supporting a large staff of paid officers, went to the support of charities that relieved diseased woman, you would give her a better chance of regaining the paths of virtue, and becoming a useful member of society, instead of that plague-spot we have elsewhere shown her to be.

## Operations Without Pain.

### MIDDLESEX HOSPITAL.

OPERATIONS UNDER THE INFLUENCE OF ETHER.

Reported by HENRY ROGERS, Esq., Acting House-Surgeon.

JANUARY 25th.—Mr. Arnott. Lithotomy. Male, age sixty-eight. Inhaled — minutes. Perfect insensibility.

25th.—Mr. Shaw. Circumcision; venereal warts. Inhaled — minutes. No recollection of pain; symptoms of intoxication.

February 1st.—Mr. Arnott. Excision of venereal warts from labia and perinæum. Female, age nineteen. Perfect insensibility.

2nd.—Mr. Tuson. Strangulated femoral hernia. Female, age fifty-five. Could not be brought fully under the influence of the ether, from the mouth-piece not fitting properly. Died in twelve hours, of peritonitis. Perforation of the bowels by separation of a slough.

3rd.—The House-Surgeon. Amputation of the forefinger at the middle of the metacarpal bone. Male, age forty. Drank. Inhaled — minutes. Struggled much, but no knowledge that the operation had been done.

5th.—Mr. Arnott. Removal of left mamma-carcinoma. Female, age fifty. Inhaled thirteen minutes. Perfect insensibility.

5th.—Mr. Arnott. Entropium. Female, age fifty-nine. Inhaled ten minutes. Scarcely any effect. Had long been in the habit of drinking spirits.

8th.—Mr. Tuson.* Male, age sixty-six. Inhaled after the operation for strangulated hernia. No endeavour to produce relaxation of the muscles and facilitate the reduction of the intestines, of which a large mass had been out of the wound full three quarters of an hour. Died in forty hours, of peritonitis.

12th.—Mr. Shaw. Reduction of dislocation of the shoulder forwards. Three weeks. Male, age fifty-one. Inhaled fifteen minutes. Insensibility and relaxation of the muscles.

12th.—Mr. Arnott. Excision of venereal warts around the anus. Female, age nineteen. Inhaled twelve minutes. Struggled, but no recollection of pain.

13th.—Mr. Shaw. Removal of the great toe-nails of each foot. Inhaled five minutes. Perfect insensibility.

17th.—Mr. De Morgan. Amputation of little finger, with portion of metacarpal bone. Female, age twenty. Perfect insensibility.

23rd.—Mr. Arnott. Excision of the prepuce, and a vast crop of venereal warts, from the glans penis of a man, age twenty-four. Inhaled thirteen minutes. Struggled, but no recollection of pain.

23rd.—Mr. Shaw. Amputation of the thigh for scrofulous disease of the knee. Male, age eleven. Inhaled fifteen minutes. Perfect insensibility.

23rd.—Mr. Shaw. Removal of great toe, with its metatarsal bone, for scrofulous caries. Male, age eleven. Inhaled eight minutes. Perfect insensibility.

* This case is reported at length in THE LANCET of February 20th.

26th.—Mr. Arnott. Removal of breast for carcinoma. Female, age forty-seven. Inhaled twelve minutes. Perfect insensibility.

26th.—Mr. Tuson. Amputation of forearm for caries of the wrist. Male, age fifty-seven. Inhaled twenty-seven minutes. Perfect insensibility.

26th.—Mr. De Morgan. Removal of finger, with portion of metacarpal bone, for necrosis. Male, age twenty. Inhaled twenty-three minutes. Perfect insensibility.

March 5th.—Mr. Tuson. Amputation of the thigh for scrofulous disease of the knee. Male, age six. Inhaled fifteen minutes. Perfect insensibility.

11th.—Mr. Arnott. Excision of venereal warts from the glans penis. Male, age twenty-four. Inhaled — minutes. Perfect insensibility.

17th.—Mr. Tuson. Attempted reduction of a strangulated inguinal hernia. Male, age forty-four. Inhaled — minutes. Perfect insensibility. Hernia not returned. Operated on eight hours after, but refused to take the ether again.

19th.—Mr. Tuson. Amputation below the knee; compound fracture into the ankle-joint. Male, age thirty-four. Inhaled eighteen minutes. Perfect insensibility.

26th.—Mr. Shaw. Removal of the left mamma, for a large carcinomatous tumour. Female, age sixty. Inhaled twenty minutes. Was not perfectly insensible.

26th.—Mr. Arnott. Excision of an enlarged and thickened bursæ patellæ. Female, age thirty. Inhaled five minutes. Said she felt some pain.

The period of inhalation is calculated from the time of the adjustment of the mouth-piece to its final removal. In all the cases, the inhalation was kept up during the operation, and the subsequent process of dressing, air being occasionally admitted through the nostrils.

In every case in which the ether was fairly inhaled perfect insensibility was produced.

No unfavourable symptoms, which could fairly be attributed to the ether, have occurred in any case in which it has been employed. The deaths in the two cases were both from peritonitis, after the operation for strangulated hernia, and evidently quite unconnected with the inhalation of ether.

The apparatus employed in these cases, with the exception of the two last, was supplied by Messrs. Bell, of Oxford-street. The rectified sulphuric ether, which was used in every case, was also obtained from the same house.

### ST. GEORGE'S HOSPITAL.

ON Feb. 25th, there was a third operation, in addition to the two reported in our last number. It was an amputation of the thigh, for disease of the knee-joint, in a little girl extremely emaciated and feeble. The patient was rendered insensible by ether some time before the operation commenced, in order to get the limb, which was rigidly flexed on the abdomen, into a position in which it could be amputated. This was very readily done under the effects of the ether, and the operation was performed, without causing the least suffering, by Mr. Henry James Johnson, who stated, at its conclusion, that without ether he did not think it could have been undertaken at all. This patient died, eight days afterwards, from phlebitis and secondary abscess in the lung. It may be remarked here, that all the other patients to whom ether has been given in St. George's Hospital, including those in the present report, have either recovered, or are recovering favourably; and that no ill consequences have in any case followed the use of ether. Besides the eighteen cases in which it has been administered by Dr. Snow, it has been given with complete success, by means of the same apparatus, in three operations that did not admit of being delayed till the operating day; and there has been but one operation—viz., one for hernia, in a woman aged seventy-four—without ether, in this hospital, since Jan. 28th.

On Thursday, March 4th, Mr. Tatum amputated the leg of a man for scrofulous disease of the ankle. After inhaling three or four minutes, the man, who was pale and emaciated, struggled so much, that the process was discontinued for a minute or two till he became quiet. He commenced to inhale again before he had altogether recovered his consciousness; and in three or four minutes he became totally insensible, and the operation was begun within ten minutes from the first commencement of inhaling. He remained quite insensible during the operation, and remembered nothing of it; but he complained of having felt pain all over him during his recovery from the effects of the ether, after the operation was concluded.

Another amputation of the leg was performed on the same

day by Mr. Tatum, for diseased ankle-joint. The patient, a boy, was soon insensible, and the operation was performed as he lay perfectly placid and composed; and he recovered quietly at its conclusion. In these, as in former operations, the vapour, which was given by Dr. Snow with an equal volume of air until insensibility was induced, was continued in a much more diluted state during the operations, and the patients were also allowed to take two or three inspirations of the external air, now and then, by the nostrils.

On Thursday, March 11th, Mr. Cutler performed an operation for disease of the metatarsal bone of the left great toe on a little boy named Henry B——, aged fourteen, but diminutive for his age. He coughed a little as the strength of the vapour was increased, and consequently it was diluted again, for a time, by means of the stopcock; afterwards, he struggled and held his breath, and to relieve this, was allowed to take a few inspirations by the nostrils. Soon after this, the breathing became deep, and the eyes were turned up; and the operation was commenced within five minutes after the process of inhaling begun, without producing the least effect on the patient. He continued to breathe diluted vapour during the operation, with now and then a few inspirations of air by the nostrils. There was a tendency, once, to return of sensation, as evidenced by a little groaning; but the quantity of vapour was increased a little, and in a few seconds he was passive as before, and remained so during the operation, which lasted ten minutes, it being found necessary to remove the toe, with its metatarsal bone, after having first tried to remove the diseased bone and save the toe. The inhalation lasted for fifteen minutes altogether, and he recovered his consciousness almost directly, but seemed drowsy. The pulse was 100 whilst he was coughing; afterwards 80, as he was getting under the influence of the ether; and it was 140 for a minute or two during the operation, when he seemed about to recover sensibility; but during the greater part of the time, it was 108, his muscles being relaxed, and the eyes turned up; and the pulse was not small or feeble at any time, nor did the pupil of the eye dilate at all. In bed, after the operation, he seemed very comfortable and unconcerned, and the pulse was 72.

On the same day, Mr. Tatum amputated the thigh of Samuel S——, aged fifteen, who was reduced to a state of great debility by disease of the knee. He was carried into the operating theatre on his water-bed, and inhaled the ether previous to being put into a position for the operation. The pulse was 140, small, and feeble, before he began to inhale; it rose to 160 during the inhalation, and he became insensible in three or four minutes, without any struggling or uneasiness, his eyes turning up, and his breathing becoming deep, and of rather a snoring character. He showed no signs of uneasiness during the operation, which was performed by two flaps, and was tedious on account of the œdematous state of the limb causing a great deal of hæmorrhage from small arteries which did not contract, and a great number of which had to be tied. He inhaled altogether for about twenty minutes. The pulse during the operation, whilst he was breathing vapour much diluted, was 160, but stronger than before the inhaling began.

On Thursday, March 18th, there were three operations. Mr. Keate amputated the leg for diseased ankle-joint in a boy aged nine years, of negro parentage as regards the father. He was crying lustily when brought in, but was soon quieted by the ether, and the amputation was begun a minute and a half after he commenced to inhale. He was perfectly quiet during the operation, and recovered his consciousness directly it was concluded, and the ether altogether discontinued, and when removed, his countenance was quite placid. The next patient, H. K——, aged forty-five, had been a hard drinker. In America, he had been in the habit of drinking three half pints of strong rum before breakfast, and had likewise drank hard since. The apparatus was placed in water at 70°, and he began to inhale through the wide tubes, three quarters of an inch in diameter, which Dr. Snow has now got to his apparatus, and at the end of four minutes he was quite insensible, lying quite passive, with his limbs relaxed. Mr. Cæsar Hawkins now amputated the forearm for disease of the wrist-joint, without exciting the least symptom of sensation in the patient; the respiration was deep and regular during the operation, and the pulse increased only by four beats in the minute—viz., from 100 to 104. The operation was concluded in eight minutes, during which time he was breathing diluted vapour and air through the nostrils by turns. One fluid ounce and three quarters of ether were expended in this case. He was in a half-drunken state when taken out of the theatre, which, however, quickly subsided afterwards. The third operation was the removal of a scirrhous mammary gland in a woman, aged forty-eight, and was performed by Mr. H. Charles Johnson. She became insensible in between three and four minutes, and the operation was performed without causing pain or any appearance of it. At the conclusion of the operation, and before recovering her consciousness, she vomited, whilst still on the operating table, her dinner, which she had swallowed without mastication just before the operation. This patient inhaled with the wide tubes, and used an ounce and a half of ether. She was troubled with vomiting for three days after the operation; but she is liable to bilious attacks, attended with vomiting, and generally has one if confined to bed from any cause.

## Correspondence.

### INFLUENCE OF ETHER ON THE NERVOUS SYSTEM.

*To the Editor of* THE LANCET.

SIR,—Will you kindly do me the favour to insert, in an early Number, the following extract from a letter which I have just received from Paris, from the pen of the first physician of our day? Sir Humphry Davy used to say—"A philosopher may generally discover how his labours will be appreciated in after ages, from the opinion entertained of them by contemporary foreigners, who being unbiassed by circumstances of personality, will reduce every object to its just proportions and value."*

"En attendant, on parle de l'action réflexe de la moelle épinière, dans les discussions qui le comportent, comme d'un fait établi, comme on parle des nerfs du sentiment et du mouvement; et Mardi dernier encore, il en a été question à l'Académie Royale de Médecine, à l'occasion de l'éther.

"Tout vient à point, à qui peut attendre, dit le proverbe; mais comme il faut attendre, comme la vérité a de la peine à se faire jour, à se faire admettre pour ce qu'elle est! Et si les inventeurs ne vivaient pas assez pour lutter, ce serait bien pis encore, car la vérité succomberait le plus souvent."

In the midst of the attempts at detraction here, it is a relief to be informed of the success of truth elsewhere. Well may my correspondent speak of the time required for this triumph. It is already more than *fifteen* years since I laid my discovery before the profession—a great part, it has been justly said, of the life of man. The viper detraction is only just crushed; being cold-blooded, it has been very tenacious of life.

Fortunately, an all-engrossing question has arisen,—that of the mode and seat of action of ether, in which we cannot proceed a step without adverting to the threefold division of the nervous system. Does ether act on the cerebral system, the reflex spinal system, or the ganglionic system?—or on two of them?—or on all of them? Such are the questions which now interest every one deeply.

These questions have been ably and fairly brought before the profession here by Dr. W. Tyler Smith, in the last number of THE LANCET, (who has also the merit of having first sketched the true physiology of parturition, in its relation to the spinal centre, making that important subject his own;) and they are occupying the Institute and the Royal Academy of Medicine, in Paris.

The questions of the anatomy, the physiology, the pathology, of the nervous system, are not less interesting than that of the therapeutics, or the action of remedies; and I think that that of the action of ether will lead the profession carefully to investigate the others. In all this, the distinction and insulation of the spinal centre, with its special, incident, and reflex nerves in essential connexion with it, *is the one true* DIAGNOSTIC!

I am, Sir, your obedient servant,

London, March, 1847. MARSHALL HALL.

We append an inadequate translation of the expressive paragraph quoted by our correspondent.—ED. L.

"Meanwhile the reflex actions of the spinal marrow are cited in the discussions which admit of it, as an established fact, just as the nerves of sensation and emotion are cited; and on Tuesday last they were again brought forward at the Royal Academy of Medicine, on the occasion of a discussion relative to ether.

"'All is right at last for those who can wait,' according to the proverb. But how long it is necessary to wait! How difficult is it for truth to make its way, and to accomplish its recognition for what it is! And if the discoverer does not survive long enough, the event is worse still, for truth itself would fail."

* Life, by Dr. Paris, i. p. 256.

## ON PLACENTA PRÆVIA.

*To the Editor of* THE LANCET.

SIR,—Your last number contains three cases and some observations "On Floodings before Delivery, arising from Adhesion of the Placenta to the Os and Cervix Uteri," by Dr. Barnes; and as it is a subject in which I feel a deep interest, I have written these few remarks, to draw, as courteously as possible, his attention to my published papers, which I feel charitably disposed to believe he had not seen.

Dec. 10th, 1844, I delivered a lecture on galvanism applied to the treatment of uterine hæmorrhage, published in the *Provincial Medical and Surgical Journal*, Dec. 24th, 1844, in which I mentioned the names of several gentlemen who had adopted the practice of first entirely detaching the placenta. Reference was also made to a number of cases of spontaneous expulsion of the placenta. Afterwards, in the same Journal, were inserted a number of propositions intended to point out the precise but modified treatment applicable to different cases of placenta prævia, in which were included cases of partial presentation of the after-birth. The controversial remarks which were afterwards made went to prove to whom the merit belonged of originally suggesting entire detachment as a principle of practice. Since then, I have inserted a case of complicated placenta prævia, with distortion of the pelvis, in which this practice was first adopted, and the child's head afterwards opened. (*London Medical Gazette*, Oct. 24th, 1845, page 1110.) The same journal (Nov. 14th, 1844, page 1246) contains a statement of the sources of bleeding in cases of placenta prævia; and (Nov. 21st, 1845, page 1291) a few observations on the mode &c. of performing the operation. In a recent number of THE LANCET (No. ix. Feb. 27th, 1847) will be found further observations on the sources of hæmorrhage in cases of placenta prævia.

Dr. Barnes, I trust, will find that I have already stated, I hope truly, that there are more sources of bleeding in these cases than one. He will also see that I am an advocate that a modified plan of practice should be used in these cases. The use of the plug I warmly advocate, but its abuse I as strongly condemn.

I hope Dr. Barnes will read this letter with the same spirit it is written in, as it is alone my object to draw his attention to the state of facts. And as to any personal concern in the merit of having done anything to draw the attention of the profession to this important subject, I shall say nothing, but leave it to be decided by the respectable, unbiassed, and liberal members of it. I will, however, say, that I shall lay before them, at some future time, a full statement of the whole matter, with references to all publications, in order that merit may be awarded to the party to whom it is due.

I have the honour to be, yours most respectfully,

Manchester, March, 1847. THOMAS RADFORD.

## TREATMENT OF NEURALGIA.

*To the Editor of* THE LANCET.

SIR,—It is not my intention, nor would it be suitable, that I should notice all objections to any principles or details of treatment which I have brought forward in the "Alphabetical Notices" which you have favoured with a place in your valuable columns. I think, however, a very few observations on a paper of Dr. Allnatt's, which appears in last LANCET, may be made practically useful in more ways than one.

Dr. Allnatt objects to me and others treating neuralgia on the "narcotico-tonic" system, as he designates it. I am sorry I have not perused the work which Dr. Allnatt himself informs us he published some years ago, on Neuralgia, and its Treatment; but he tells us the work was intended to establish that "neuralgia almost invariably arises from some aberration of function of the chylopoietic viscera," which doctrine he also acknowledges was condemned at the time, "as of too sweeping a nature."

This part of the subject, however, we dismiss for the moment, to examine briefly the case with which Dr. Allnatt fortifies his own opinions, and treats with some contempt and severity my own. A gentleman called on him a fortnight since, with neuralgia of the nerves of the cheek and brow; "his appetite was good; the functions of the stomach apparently uninjured; the liver secreted a due quantity of bile; the bowels acted with regularity, and nothing could be detected, after the most minute search, to account for the agonizing pain in the peripheral expansion of the sentient nerve." Dr. Allnatt, gave (as he informs us his custom is) a preliminary course of active purgatives, which aggravated to a considerable extent all the symptoms. Disregarding this, Dr. Allnatt carried on the purgation, and at length, "undetected scybala, in large quantities," were evacuated, and the patient was cured.

There is nothing in the smallest degree remarkable in this case, except Dr. Allnatt's error of diagnosis. At the very moment that "nothing could be detected," and that, "after the most minute search," to account for the neuralgia, "undetected scybala, in large quantities," loaded the abdomen? This case requires no comment. It is one which Dr. Allnatt is quite welcome to class among those due to derangement of the chylopoietic viscera.

But what if Dr. Allnatt's diagnosis had been correct; what if the digestive organs had been, not "apparently," merely, but positively "uninjured;" what if there had been not only no "undetected" scybala, but no scybala at all (to a morbid extent, I mean) in the bowels; what, I ask, in such a case, would Dr. Allnatt have done? Dr. Allnatt will not deny such cases are. If he did, I would dare to say he had not studied neuralgia very extensively. Now it is in such cases that I recommend quinine, iron, zinc, sulphate of copper, nitrate of silver, united with hop, lettuce, hyoscyamus, conium, and even hydrochlorate of morphia; and am prepared to defend the propriety of doing so.

What conceivable object or warrant there can be for a routine "preliminary course of active purgatives," in cases of neuralgia, or of any other disease, in which, by an accurate, not (as in Dr. Allnatt's case) an erroneous diagnosis, the digestive organs are found to be acting well, and the bowels unembarrassed, exceeds my judgment and apprehension. In cases of neuralgia of pure, morbid, sentient innervation, with no seeming or actual derangement of the digestive organs, I omit, most justly, purgatives, and pass at once to metallic tonics and sedatives, separate or conjoined.

Nor can I see how or why, in cases of neuralgia in which purgatives are really indicated, these should occasion aggravation of the symptoms, as in the case reported by Dr. Allnatt. In cases of neuralgia depending on, or accompanied by, a state of plethora, and in which there is reason to suspect the blood is more than usually loaded with the constituents of uric acid; in other words, in cases of undeveloped arthritic neuralgia, (those in which purgatives are conspicuously indicated;) I have never witnessed, even at the commencement of treatment, the slightest "aggravation" of symptoms; but, on the contrary, early, if not immediate, relief.

It is undeniable, and it would only be necessary to refer to Andral and Barras, if each one's own professional experience did not satisfy him of the fact, that some of the most formidable cases of neuralgia have been due to the debility induced by bloodletting. Now, I ask the profession, wherein essentially differs debility induced by bloodletting from that induced by catharsis? and I therefore further inquire if, seeing the many origins and kinds of neuralgia, a plan of treatment which regards purgation as an indispensable preliminary is judicious, is scientific, is free from hazard?

To maintain that neuralgia can have no origin but from some "aberration of function in the chylopoietic viscera;" that there may not be lesion of cerebrum, spinal cord, or nerve, in the neurilema, or in the nervous substance; in origin of nerve, or in the length of the nerve itself,—to maintain, I repeat, that there can be no lesion of the parts just named, except as a corollary to digestive derangement, appears to the writer as one-sided a theory as perhaps has ever been put forth; only equalled, in that respect, by the treatment proposed to be based on it—to wit, invariable, or almost invariable, preliminary purgation!

On Dr. Allnatt's view, neuralgia is wholly, or nearly, a secondary affection; and idiopathic neuralgia—i. e., a pure case of morbid innervation, a thing rare or unknown! Such are the pathological deductions to which Dr. Allnatt's premises lead, which are (to use his own words) "proposed, I fear, without due consideration."

I have not had the advantage of perusing Dr. Allnatt's work on neuralgia, but if the views above detailed form its substance, all I should say is, that the author has left something for a second edition.

I have commented with more freedom on Dr. Allnatt's views than my natural feelings and my inclinations would have disposed me to, but for the needless tone and spirit of his own paper. He speaks of "routine prescriptions;" "of the gentleman having improved on the practice of his predecessors;" of his "having stepped from the ranks," to assure us, "on his own individual testimony," that that is right, which Dr. Allnatt, on *his* individual testimony, considers wrong. For to what are the individual testimony and opinion of Dr. Dick opposed, but to the individual testimony and opinion of

Dr. Allnatt? The public will decide which are the more valuable; but, at any rate, it becomes not either of the individuals themselves to sneer or gibe at the sincere and scientific reasonings of the other.

I shall report, at a future opportunity, two cases of neuralgia for which I have recently been consulted, neither of which correspond with Dr. Allnatt's views. The one is that of a brother physician (previously unknown to me) in an inland county, a man of intelligence and high respectability; he suffers from severe neuralgia in the stomach. The other is that of a gentleman, aged thirty-eight. His case is that of tic in the second cervical nerve, on the left side.—I am, Sir, your obedient servant,

Bentinck-st. Manchester-sq. March, 1847. ROBERT DICK.

## MR. PHILSON'S CIRCULAR TO CUSTOMERS.

*To the Editor of* THE LANCET.

SIR,—Although I must think you have handled me very roughly in your remarks in the last number of THE LANCET, still as you have published the document which has offended the delicate sensibilities of some of my fellow-townsmen, I do not complain, as every one can, by a perusal, form his own judgment of the justice of your comments. My object in writing is to contradict that part of the statement which charges me with distributing my circular amongst the patients of the other medical men in the neighbourhood.

I know not, Sir, who are the parties you refer to as having furnished this piece of information; but this I do know, that they have iniquitously misrepresented my conduct, and I challenge them openly to prove their assertion. The names of the persons to whom the circulars were addressed were taken by me from the ledger, and I do not pretend to say but that they were sent to families where another medical man was occasionally consulted by some of their members.—I remain, your obedient servant, W. PHILSON.

Hitchin, March 25th, 1847.

## THE FATAL ADMINISTRATION OF ETHER TO MRS. PARKINSON.

*To the Editor of* THE LANCET.

SIR,—It would have been a great advantage to the profession and the public generally, in the case of Mrs. Parkinson, who is said to have died from the effects of ether inhaled by her during an operation, if we had been furnished with a detailed report of the evidence, especially that of the medical gentleman. If some such information as the following had been given, the profession and the public would have been in some degree enabled to form a correct opinion.

1. What apparatus was used; whether the patient breathed into and out of the same vessel?
2. How often had the person administered the vapour before, and in what cases; the size and nature of the vessel in which the vapour was generated?
3. The size or bore of the tube; the quantity and quality of the ether—if washed or unwashed?
4. The specific gravity of the ether?
5. If the apparatus was placed in hot or warm water—and if so, the temperature?
6. The temperature of the room in which the operation was performed?
7. Was the apparatus placed above or below the mouth of the person inhaling the ether?
8. If the pupils retained their contractility?
9. Was the mucous membrane of the nostrils still sensible?
10. If the mouth and nostrils were perfectly closed?
11. The state of the pulse before, during, and after the operation?
12. The breathing—if slow, laborious, or natural?
13. The appearance of the face, head, and lips—if congested, pale, or livid?

As a member of the profession, I feel deeply interested in the subject; and if by any means the information here suggested could be supplied, we should then be in a much better position than at present to form a judgment.—I remain, Sir, your obedient servant,

ALEX. FAIRBROTHER,
Senior Physician to the Bristol General Hospital.

Bristol, March, 1847.

The following answers have been given to the more important queries proposed by Dr. Fairbrother:—

1. The woman breathed out of, but not into, the vessel.
2. Six or seven times, several cases being extraction of teeth, and one the removal of a portion of a toe.
3. About an ounce of pure washed ether was prepared for inhaling; but a portion remained after the administration.
4. The specific gravity was 733 to 765.
5. The apparatus was not placed in either hot or cold water.
6. The temperature of the room was moderate.
7. The apparatus was placed below the mouth.
8. The pupils became dilated.
9. The sensibility of the nostrils was not examined; but the conjunctiva was sensible.
10. During the inhalation preceding the operation, the mouth and nostrils were closed; but they were not during the second inhalation, after the operation had commenced, from the difficulty of keeping the head still.
11. The pulse was natural in the morning, being about 76. It rose to 84 previous to the inhalation, (probably from the appearance of the surgeons, and expectation of the operation,) and during the inhalation rapidly increased to 140; but before inhalation ceased, it became small and feeble.
12. The breathing was rapid for a short time, when the effect of the ether was first produced, but then became natural.
13. The face was pallid; the lips natural, but slightly congested.

*** We shall be glad if Dr. Fairbrother will pronounce his opinion upon the case now that the answers to his queries have been obtained. As we do not doubt that in each question he proposed to himself some specific object of inquiry beyond the mere verbal query,—more specific probably than would be attached to them by "the profession and the public,"—his opinions upon the various points raised in his letter would be very desirable, and are, indeed, in a manner called for.—ED. L.

## ON THE USE OF THE LONG FORCEPS, AND ON TURNING THE CHILD WHERE THE PELVIS OF THE MOTHER IS GREATLY DISTORTED.

*To the Editor of* THE LANCET.

SIR,—In the *Edinburgh Monthly Journal of Medical Science* for March, 1847, there is a case related by Dr. Simpson, of great distortion of the pelvis, in which, during the labour, he made the woman inhale ether vapour, and while under its influence, he performed the operation of turning. The pelvis of the woman, it is stated, was greatly contracted in its conjugate diameter, from the projection downwards and forwards of the promontory of the sacrum. It was her second confinement. "Her first labour had been long and difficult: she began to suffer on a Monday, and *after a protracted trial of the long forceps*, was at last delivered by craniotomy, late on the subsequent Thursday night. Even after the cranium had been fully broken down, a considerable time and much traction had been required to drag the diminished and mutilated head of the infant through the contracted brim of the pelvis, and she was long in recovering." From the circumstances thus recorded it is impossible for any one to doubt that the treatment employed during this woman's first labour was highly injudicious, and diametrically opposite to the rules laid down for the employment of the forceps by all the greatest systematic writers on midwifery in this country. It must have been obvious from the first that nothing but mischief could result from the use of the long forceps; and her tedious recovery proves that she was injured by the labour being allowed to continue from the Monday till the Thursday, and the treatment adopted, when it must have been obvious from the first that a living child could not pass, or be dragged with the long forceps, through the pelvis.

On the 19th of January last, this woman was in labour with her second child at the full period, having refused to allow premature labour to be induced. "The pains of her second labour commenced in the forenoon of the 19th. I saw her," says Dr. Simpson, "with Mr. Figg at six o'clock in the afternoon, and again at seven. The os uteri was pretty well dilated; the liquor amnii not evacuated; the presenting head very high, mobile, and difficult to touch; and a pulsating loop of the umbilical cord was felt floating below it in the unruptured bag of membrane. From five to nine o'clock the pains seemed only to push the circle of the os uteri further downwards, without increasing its dilatation, or making the head in any degree enter into the pelvic brim. Assisted by Dr. Zeigler, Dr. Keith, and Mr. Figg, I, shortly after nine o'clock, made the patient inhale the ether vapour. As she afterwards informed us, she almost immediately came under the

anodyne influence of the ether. But in consequence of doubts upon this point, its use was continued for nearly twenty minutes before I proceeded to turn the infant, (as I had previously determined to do.) A knee was easily seized, and the child's extremities and trunk readily drawn down; *but extreme exertion was required in order to extract the head.* At length it passed the contracted brim, with the anterior part of its right parietal bone deeply indented by pressure against the projecting promontory of the sacrum, and the whole cranium flattened and compressed laterally. The infant gasped several times; but full respiration could not be established. The transverse or biparietal measurement of its head, at the side of the indentation, was in its compressed state not more than two inches and a half. Hence we judged the conjugate diameter of the pelvic brim not to exceed this. The infant was large, and rather above the usual size. It weighed eight pounds. On afterwards examining the head, and removing the scalp, no fracture could be found at the seat of the indentation. The thin parietal bone had merely bent inwards. The woman," adds Dr. Simpson, "quickly regained full consciousness, and talked with gratitude and wonderment of her delivery, and her insensibility to the pain of it. Next day I found her very well in all respects. I looked in upon her on the 24th, (the fifth day after her delivery,) and was astonished to find her up and dressed; and she informed me that on the previous day she had walked out of her room to visit her mother. Mr. Figg informs me that her further convalescence has been uninterruptedly good and rapid."

Some particulars of this case were published in the newspapers speedily after its occurrence, and excited the wonderment of thousands who had passed safely through the pains and perils of child-bearing. Some feel disposed to travel four hundred miles for the purpose of escaping from the sorrows denounced in the third chapter of Genesis after the fall. The effects of the curse, they thought, were to be removed by the inhalation of ether vapour at Auld Reekie. A little cool reflection has, however, caused the wonderment to cease, and there are now few medical practitioners in this country who would recommend ether vapour to be inhaled by women during labour, and still fewer respectable females who would consent to be thrown into a state of stupid insensibility, or wild delusion, at the time, for the sake of escaping from the pain necessarily accompanying the healthy process of delivery.

I have performed the operation of turning many times, and think that it is safer when the patients are conscious, than when they are labouring under the insensibility accompanying convulsions, which is not very unlike the stupor produced by the inhalation of ether. But it is not against the inhalation of ether that I now direct my pen, but against the operation of turning in this case of extremely distorted pelvis—an operation which was had recourse to contrary to the established rules of practice, and when it must have been known, from the previous labour, that it was impossible to draw a living child by the feet, at the full period, through a pelvis, the sacro-pubic diameter of which could not exceed two inches and a half. There is little risk of any experienced English accoucheur having recourse to the long forceps, or the operation of turning, under similar circumstances, or to ether vapour; but the young and rash may be tempted to do so by such a bad example.—I am, Sir, your obedient servant,

London, March, 1847. SPECTATOR.

## POST-PARTUM HÆMORRHAGE.—INJECTING OF COLD WATER.

*To the Editor of* THE LANCET.

SIR,—If you conceive the following case and remarks of sufficient practical interest to entitle them to a place in the pages of THE LANCET, your insertion of them will oblige me:—

On the morning of the 2nd instant, I was called to attend the accouchement of Mrs. M——, a healthy woman, and the mother of five children. On arrival, the labour was considerably advanced; the head resting on the perinæum; the parts soft and dilatable; and the pains regular and expulsive. In the course of thirty minutes, she gave birth to a healthy fœtus, and shortly thereafter a gentle uterine contraction expelled the placenta. So far Nature had not deviated from her usual course, and had not flooding to a serious extent occurred at this stage, in two previous confinements, I would have thought her state every way promising. Soon, however, she began to complain of oppression and sickness at stomach, and an inclination to vomit. A stimulant of brandy, with forty minims of the tincture of opium, was administered. The feeling of sickness increased; the breathing became laborious; the pulse imperceptible at the wrist; the countenance anxious, and expressive of imminent hazard. As there was no discharge of blood externally, to account for these symptoms, I attributed them to internal hæmorrhage; and while introducing the hand, the discharge which took place, literally flooding the bed, left no room for doubt. The patient now lay in a state of syncope; the lips bloodless, and the body covered with a cold sweat. The hand in the meantime was kept in the uterus, which was found large and distended with blood; and while pressure was made externally by an assistant, the nurse, by direction, injected cold water in a full stream. The liquid blood in the uterus was immediately coagulated, and in a short time I had the satisfaction to feel a disposition in the organ to contract, which was encouraged by the gradual withdrawal of the hand, and as much of the coagula as it could grasp. The slight reaction, which was now perceptible, was cautiously promoted by internal stimuli, given in small and repeated doses, external heat, and other adjuvants. There was no return of the hæmorrhage, and her recovery, though tedious, was progressive, nothing unusual occurring during her convalescence.

My object, in narrating this case, is to direct attention to the injecting of cold water, as one of the most certain and powerful means of arresting post-partum hæmorrhage. It is recommended by authors, as an ulterior measure, that may be resorted to in desperate cases, but, I believe, seldom practised. During the last ten years, I have employed it in many cases, with the happiest effect, and although, in some of these, other treatment would have succeeded, yet I know of no measure that is so immediate in its effect, or could be so much relied upon. It is certainly far preferable to the clumsy and unpleasant expedient of pouring cold water on the abdomen; and I have had occasion to experience its value, where this and other measures were tried in vain. Generally, the instant the cold water reaches the mucous lining of the uterus, the shock rouses the latent energy of the organ, causing it speedily to contract, and the patient is transferred, as by a charm, from a state of the most pressing danger, to one of comparative safety. I am in the habit of using a common double-valved syringe, with a tube similar to the ensophagous tube of the stomach-pump. This tube is easily introduced, and water may be expeditiously thrown up ad libitum. By allowing the water to escape from the uterus, the hand being kept in utero, (to give the additional stimulus of its presence, and to ascertain that the *fil de l'eau* is well-directed, &c.) it may be made to describe a circle through the uterine cavity, until the desired effect is produced. In cases of placenta prævia, (whatever primary measures are adopted,) laborious instrumental labour, or where we have reason to calculate on retained placenta, or flooding from any cause, I would suggest the propriety of having the syringe at hand, so that, on concluding the labour, it might be readily resorted to if required; for not unfrequently, in these cases, the strength of the patient is so much exhausted, that the loss of a few ounces of blood will seal her fate. In many such cases, I have had occasion to resort to it, and in no instance have I had any reason to regret having done so.—I am, Sir, your most obedient servant,

Bannockburn, March, 1847. ROBERT SELBY, Surgeon.

## A MODE OF RESUSCITATING PATIENTS AFTER INHALING THE VAPOUR OF ETHER.

*To the Editor of* THE LANCET.

SIR,—For the last week I have been using, as a means of resuscitating patients, after inhaling the vapour of ether, pure oxygen gas, with the most perfect success. To-day, I operated in nine cases on the teeth: to each patient I gave a full dose of the ether vapour, and subsequently, a few inhalations of oxygen. In not one case did the patient complain of debility, and all recovered perfectly in less than a minute and a half, timed by the medical men present. I will, by your permission, in a future number of your journal, furnish the details of these and other experiments with oxygen.—I remain, Sir, your obedient Servant,

Gower-street, Bedford-square, March 1847. JAMES ROBINSON.

# Medical News.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination and received certificates to practise on Thursday, March 25th, 1847.—Richard Swan Finch, Salisbury; William Lascelles Norris, Stourbridge; James White,

Chester; Henry Nicholson Settle, Leeds; Thomas Armstrong Cammack, Spalding, Lincolnshire.

Vincent Testimonial.—A general meeting of the subscribers to the testimonial to Mr. Vincent, is to be held in the library of St. Bartholomew's Hospital, this day, at half-past two, to consider on the mode of appropriating the fund which has been collected.

Quack Medicines.—"Continental Sanitary Regulations.—The boasted freedom and independence of this country are not without their attendant disadvantages, and among others may be reckoned that of permitting every self-dubbed practitioner to foist his 'villainous compounds' upon the public, and tamper with the lives of Her Majesty's liege subjects. It would appear that 'they manage these matters much better abroad,' although it may not be equally known that the shoal of quack medicines with which this country is inundated are rigorously prohibited from being sold, or even advertised, on the Continent. So strictly are these regulations enforced, that a short time since two respectable English residents of Brussels were summoned before the *Tribunal de premiere instance*, at the suit of the *Procureur du Roi*, the one for sending an advertisement to the Government Journal, *The Emancipation*, and the other for having sold Keating's Cough Lozenges."

Test of Death.—Respecting the new sign of death, a notice of which appeared in this journal last week, it may be interesting to know, that at a recent meeting of the Paris Academy of Sciences, M. Bouchut made a statement relative to the pretended discovery, asserting that no blister could be raised upon a corpse by the means proposed, he having tried the experiment upon four dead bodies, producing blisters precisely similar to those which would have been raised by the same means upon living subjects. M. Bouchut proposes, as the best means of ascertaining whether life be extinct or not, a prolonged auscultation of the region of the heart; but does not pretend that this alone is conclusive.

Increase of Fever in Ireland.—The rapid spread of fever and dysentery, throughout the town and county of Sligo, is truly alarming; several of the officers of the Union have been carried off by malignant typhus fever. The funds of the St. John's Fever Hospital, in Limerick, are not only exhausted, but the Institution is £300 in debt, while the patients are about double the number they were in February.

M. Magendie.—This distinguished physiologist having had a bribe offered to him, to the amount of 3000 francs, to suppress evidence he was about to give, respecting "gorged leeches," prosecuted the party offering the bribe, who, on being found guilty, was sentenced to pay a fine of 300 francs, to be imprisoned one month, and to forfeit the 3000 francs, for the benefit of the Parisian Hospitals.

Additional Murders by Poison in Norfolk.—We regret very much to find that the dreadful and insidious means of destroying human life by poison has again been resorted to, and the object has been accomplished to a frightful extent, in the county of Norfolk. The news is of so recent a date, and the place where they have occurred (Tibbenham) being fourteen miles from Norwich, a full detail of the particulars cannot be given by this (Monday's) post. Suffice it to say, that on Sunday evening, March 28, Mrs. Pearson, the wife of a farmer of that name, at Tibbenham, invited a Mrs. Everett, the wife of another farmer, in the same village, to take tea with her. She accepted the invitation, and these women and other persons of the family sat down and took tea together. Soon after, each of the women, and several others of the party, were taken ill, and we regret to say, Mrs. Pearson and Mrs. Everett are dead, and others (whose names we are not able to give, nor can we say how many in number) are lying in a very precarious state, and some of those also may be dead by this time. At present we have no knowledge whatever of the means by which the poison (which, we understand, is arsenic) could get into the tea, or by whom it was administered. Mr. Pilgrim, one of the county coroners, will hold inquests upon the bodies of the deceased to-morrow, (Tuesday, March 30,) when, in all probability, further information will be elicited. Tibbenham is a large agricultural parish, with a straggling population of only 709 inhabitants, with 3254 acres of land. It is about three miles and a half east of New Buckenham, and is in the hundred of Depwade.—*Times, Wednesday, March 31st.*

Monument to John Hunter.—One or two meetings have lately been held in the Council-room of the Royal College of Surgeons, (kindly lent for that purpose by the authorities,) attended by most of the surgeons of the metropolitan hospitals, for the purpose of organizing a committee among themselves, in coöperation with the council, for the purpose of raising subscriptions to erect a monument in Westminster Abbey to the memory of John Hunter. The circumstances under which the proposal was made are exceedingly interesting to all parties. It appears, that after the delivery of the late Hunterian Oration, when the council and their distinguished visitors dined together at the Freemasons' Tavern, and the health of Dr. Buckland, the eminent geologist, was drank, the learned prelate, in returning thanks, stated, that soon after his installation to the Deanery of Westminster, whilst walking round that venerable pile with Professor Owen, he expressed his regret to the Hunterian Professor, that the medical profession, of which Hunter was so bright an ornament, had not yet erected any monument to his memory, and suggested the propriety of its being accomplished, promising at the same time to do all in his power to forward the object, and generously offering to forego his fees if a bust could be raised to Hunter in the Abbey, adjoining that erected to the memory of his relative, Dr. Baillie. The wish thus expressed by the great Palæontologist was at once responded to by the council, who have given permission to the committee to avail themselves, whenever they think proper, of the Council-room. The committee, having elected Professor Quain, chairman, and Mr. John Quekett, one of the conservators, as honorary secretary, resolved that a deputation from themselves should wait on the proper authorities, and ascertain the best means for carrying out the objects of the meeting. Some propose a colossal monument in bronze to be erected in Lincoln's-inn-fields, similar to that of Charles James Fox, in Bloomsbury-square, whilst some wish to found a scholarship in addition to a bust in Westminster Abbey, as it is expected an adequate sum will be raised by the subscriptions, which it is proposed to limit to one guinea.

Bill for the Suppression of Prostitution.—The following extract from *The Times* report, will show the correctness of our surmises on the probable fate of this Bill, given in our leading article:—"Mr. Spooner was proceeding to explain the details which justified his motion, when Mr. Craven Berkeley observed, that as it was quite evident *that those details must be unfit for publication*, he must be permitted to remind the Speaker that there were strangers in both galleries. Strangers were in consequence ordered to withdraw, *amid the roars* of the house, and the visible disappointment of Mr. Spooner.

## CORRESPONDENTS.

*Studens* can readily obtain the regulations of the University of London from the University publisher, Taylor, Red Lion Court; and the time must depend, in great measure, on his own energies and ability. There can be no doubt which would be the best degree; but before deciding, Studens should make up his mind whether he desires to qualify as an M.D. or as a general practitioner.

*Dr. J. C. Hall* is thanked. We will shortly attend to the second item of his communication.

*A. B. Z.* writes to inquire how the elaine of olive oil, praised so highly by Dr. Cattell, of Braunston, can be obtained. We have no doubt this gentleman will be happy to publish the requisite information.

*A Constant Reader*, (Leith.)—We believe the diploma only holds good as a legal qualification in Scotland. In most of the colonies, there is little legal distinction between diplomas from different colleges or schools.

*M. C. C.* is enthusiastic, but not more so than the cause requires.

*Mr. Ashby*, as a chemist, should address himself to the *Pharmaceutical Journal*. We should be glad to see the practices he complains of remedied.

*Mr. Garlick.*—The correspondence shall be returned. We are not in the receipt of either of the papers referred to.

*Mr. A. B. Steele*, (Birkenhead.)—We have not yet received the promised communication.

*Dr. Orpen.*—We have been quite unable to decipher our correspondent's handwriting. With a large mass of communications it is impossible to wade through a lengthy document, however interesting, when each word requires a special examination. This remark applies to many other correspondents.

*W. A.* had better wait until a trial, which will shortly take place at Bolton, has been decided.

*** We have received the correspondence between Dr. Gilham and other medical men in Madeira.

We have before us a large number of handbills, &c., and are constantly receiving additions to our collection.

Communications have been received from—Mr. Nathaniel Ward; Mr. H. O. Stephens; Studens; Dr. Dick; Dr. J. C. Hall, (East Retford;) Dr Hamilton, (Edinburgh;) Mr. Unwin; A. B. Z.; An Old Subscriber, (Walworth;) Mr. Todd, (Evenwood;) Dr. Jephson Potter, (Manchester;) A Constant Reader, (Leith;) Mr. John Scott, (Stafford;) Dr. Radford, (Manchester;) Dr. Marshall Hall; Dr. Gardner; M. C. C.; Mr. Ashby, (Cheshunt;) Mr. F. S. Garlick, (Halifax;) Mr. Hairland, (Bridgewater;) Mr. Rogers, (Middlesex Hospital;) Mr. W. H. Hewett.

A MEDICAL MAN, of mature age, and more than qualified, convinced by experience of the great futility of attempts to beat out a respectable Country Practice, offers his services, with those of one of the best and hardiest hackneys in England, to any gentleman having a thoroughly respectable Practice, who may be desirous of being relieved from its more arduous duties, or who may require an efficient Assistant.—Address, E. H., Messrs. Lane and Rathbone, Medical Agents, John-street, Adelphi.

A MEDICAL GENTLEMAN, of independent fortune, and who possesses the highest professional qualifications, with a sound practical knowledge of his profession, is desirous of RENTING a HOUSE, with convenient offices, in some genteel neighbourhood, near a railroad, where there is a good opening for practice. Any person having a house calculated for a medical practitioner, and can give him some interest in the locality, may hear of an excellent tenant; or the advertiser would have no objection of joining as PARTNER some elderly gentleman requiring assistance.—Address, with real name and full particulars, to Alpha, 66, Pulteney-street, Bath.

A MEDICAL MAN in the Country is in want of a VISITING and DISPENSING ASSISTANT immediately. Unexceptionable references will be required.—Address, M.D., Post-office, Maldon, Essex.

TO SURGEONS.

A MARRIED MAN wishes for an out-door Situation, as DISPENSING-ASSISTANT.—Address, prepaid, to O.P.H., Post-office, Beccles, Suffolk.

WANTED, by a fully-qualified Young Man, Twenty-six years of age, a Situation as VISITING-ASSISTANT to a Medical Man of extensive Practice.—Address, S.W., Post-office, Leicester.

A MEDICAL PRACTICE, which has been established upwards of Fifty years, in the Southern part of the metropolis, TO BE DISPOSED OF, with introduction. Average receipts, £1000 per annum.—Apply by letter, post paid, to A. B., 95, Gracechurch-street, City. No agents will be treated with.

TO THE MEDICAL PROFESSION AND OTHERS.

TO BE SOLD OR LET, with Immediate Possession, an extensive Establishment for the reception of Insane Persons, distant about six miles from the city of York, licensed for the reception of Ninety Patients, and now full. The patients consist of various classes, comprising the wealthy and poorer description of persons.

The Premises have been recently rebuilt, and fitted up, regardless of expense, with every comfort and convenience to be found within establishments of a similar description. A purchaser or tenant may be accommodated with any quantity of land, not exceeding seventy acres.

The proprietor has realized an independence, but ill health is the cause of his retiring from business, and the present, therefore, offers an opportunity rarely to be met with, of entering upon an establishment with a certain prospect of securing, within a reasonable period, a handsome competence.

For further particulars, apply to Messrs. RICHARDSON and GUTCH, solicitors, York.

MR. STANILAND, Surgeon, 10, Carnaby-street, Leeds' General, Provincial, Medical, Surgical, Pharmaceutical, and Chemical Agent, for the Purchase and Disposal of Practices and Businesses; for the Provision of Visiting and Dispensing Assistants and Pupils, or Apprentices with Situations; and for supplying Medical Practitioners.

Wanted several Assistants of good character and qualifications; also, well-educated Youths as Pupils.

To be Sold, an extensive wholesale Soda-water and Ginger-beer Establishment.

WESTERN GENERAL DISPENSARY, NEW ROAD.—NOTICE IS HEREBY GIVEN, that a Meeting of the Directors will be held at the Dispensary House, on Tuesday, April 13th, at Half-past Seven o'clock, P.M., when an ASSISTANT HOUSE-SURGEON and APOTHECARY will be appointed to the Institution. Candidates for the office to attend personally, on Tuesday, April 6th, at Half-past Twelve o'clock, P.M., with their Qualifications and Testimonial.—Particulars may be obtained of the Secretary, on application, between the hours of Twelve and Three o'clock daily.

WESTERN GENERAL DISPENSARY, NEW ROAD.—WANTED, a PORTER and LABORATORY MAN—a respectable Single Man, between the age of Twenty-five and Forty years, to reside constantly on the premises.—For particulars, as to duties and salary, apply to the Secretary, as above, between Twelve and Three o'clock daily.

CHELTENHAM GENERAL HOSPITAL AND DISPENSARY.—WANTED, a DISPENSER for this Institution, who will be required to take the whole charge of the Dispensing Department; to perform the minor operations of surgery, and act in every respect as Assistant House Surgeon. Salary £30 per annum, with board and lodging in the Hospital.—Application to be made to David Hartley, Resident Surgeon.

Cheltenham, March 29th, 1847.

THE INDIA AND LONDON LIFE ASSURANCE COMPANY,
17, Cornhill, London.

RICHARD HARTLEY KENNEDY, Esq., Chairman.
GEORGE WILLIAM ANDERSON, Esq., Deputy Chairman.

INVALID *LIVES ASSURED; also Select* Lives, including the Lives of Naval and Military Officers proceeding to, or resident in, India, or other parts of the world.

Indian rates of premium much lower than in any existing Company.

Assurances effected daily on application at the office.

A half-premium (not half credit) table for select lives, whereby half the amount of premium only is required to be paid during the first seven years. The unpaid half-premiums do not constitute a debt, therefore no interest can be charged, or any reduction made, when the policy becomes a claim.

GEORGE N. WRIGHT, M.A., Manager.

## SOVEREIGN LIFE ASSURANCE COMPANY,

No. 5, ST. JAMES'S STREET, LONDON.

TRUSTEES.

| | |
|---|---|
| Sir A. Brydges Henniker, Bart. | Henry Pownall, Esq. |
| B. Bond Cabbell, Esq., M.P. | Claude Edward Scott, Esq. |

Assurances on Lives, and Annuities, both immediate and deferred, granted on favourable terms.

A new plan of Accumulative Assurance, by depositing, instead of paying, Premiums.

H. D. DAVENPORT, Secretary.

## VICTORIA LIFE ASSURANCE COMPANY,

No. 18, KING WILLIAM STREET, MANSION HOUSE.

TRUSTEES.

| | |
|---|---|
| Sir Jas. Duke, Ald., M.P., Chairman | Benj. Hawes, Esq., Deputy Chairman |
| Benjamin Barnard, Esq. | Charles Baldwin, Esq. |

DIVISION OF PROFITS.

At the first Septennial Meeting of this Company, held on the 11th March last, a BONUS, *averaging 23 per cent. on the amount of premiums paid*, was declared on policies entitled to participate in Profits.

*Four-fifths*, or 80 *per cent.* of the *entire* profits of the Company, will at future divisions be appropriated to all assurers entitled to share therein.

*Every advantage is offered by this Company to assurers.*—On policies taken out for the whole term of life, one-half of the Annual Premiums thereon *may remain unpaid for five years.*—Parties assured with the Company are allowed to reside in many of the Colonies *without additional charge*, and the Premium required for the East or West Indies and other extra risks, is more than usually moderate.—Advances continue to be made to assurers on assignable property or income, and also on the guarantee of most undoubted personal sureties.—Detailed prospectuses, and every information, may be obtained by application at the office, or by letter addressed to the Actuary.

WILLIAM RATRAY, Actuary and Secretary.

## SCOTTISH PROVIDENT INSTITUTION,

FOR MUTUAL LIFE ASSURANCE, ANNUITIES, REVERSIONS, &c.

THIS Office was established in 1837, to afford the advantages of *Mutual Assurance at very moderate Premiums.* These will be found, *at early and middle ages, about 20 per cent. below those of most similar offices*, as illustrated by the subjoined comparison of rates:—

| Age. | Annual Premium for £1000. In Scot. Prov. | Annual Premium for £1000. In other Offices. | The higher Premium will at once Assure in the Scot. Prov. | Equal to a present Bonus of |
|---|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| 25 | 19 0 0 | 24 0 10 | 1,265 0 0 | 265 0 0 |
| 30 | 20 15 0 | 26 14 2 | 1,287 0 0 | 287 0 0 |
| 35 | 23 8 4 | 29 18 4 | 1,278 0 0 | 278 0 0 |
| 40 | 27 7 6 | 33 19 2 | 1,240 0 0 | 240 0 0 |

Full tables, Annual Reports, &c., may be had at the London Office, No. 12, Moorgate-street, Bank.

J. R. LEIFCHILD, Secretary.

## UNITED KINGDOM LIFE ASSURANCE COMPANY,

No. 8, WATERLOO-PLACE, PALL-MALL, LONDON.
97, GEORGE-STREET, EDINBURGH.
12, ST. VINCENT-PLACE, GLASGOW.

DIRECTORS.

James Stuart, Esq., Chairman.
Hananel de Castro, Esq., Deputy Chairman.

| | |
|---|---|
| Samuel Anderson, Esq. | Charles Graham, Esq. |
| Hamilton Blair Avarne, Esq. | F. C. Maitland, Esq. |
| E. Lennox Boyd, Esq., Resident. | William Railton, Esq. |
| Charles Downes, Esq. | John Ritchie, Esq. |

F. H. Thomson, Esq.

This Company, established by Act of Parliament in 1834, affords the most perfect security in a large paid-up capital, and in the great success which has attended it since its commencement, ITS ANNUAL INCOME BEING UPWARDS OF **£84,000.**

In 1841 the Company added a bonus of £2 per cent. per annum on the Sum Insured to all Policies of the Participating Class from the time they were effected.

The bonus added to policies from March, 1834, to the 31st of December, 1840, is as follows:—

| *Sum Assured.* | *Time Assured.* | *Sum added to Policy.* |
|---|---|---|
| £5000 | Six years, Ten months. | £683 6s. 8d. |
| 5000 | Six years. | 600 0 0 |
| 5000 | Four years. | 400 0 0 |
| 5000 | Two years. | 200 0 0 |

The premiums, nevertheless, are on the most moderate scale, and ONLY ONE-HALF NEED BE PAID FOR THE FIRST FIVE YEARS, where the Insurance is for life.

Parties wishing to secure the benefit of the next Division of Profits in 1848, should make immediate application.

Loans made on Policies to the extent of half the sum to be assured, on security approved by the Directors of the Company.

No Entrance Money or charge, except the Policy Stamp.

Every information will be afforded on application to the Resident Director, E. LENNOX BOYD, Esq., of No. 8, Waterloo-place, Pall-mall, London.

THE BRITISH JOURNAL OF HOMŒOPATHY.—(Published Quarterly.)—No. XX.—April, 1847.

CONTENTS.

On the High Dilutions.
On Spinal Deformity. By Mr. Engall.
On Puerperal Convulsions. By Dr. Wielobycki.
On Cataract. By Dr. Malan, &c. &c.

London: Arthur Hall, 24, Paternoster-row.

**ESTABLISHED (in Wells-street) A.D. 1820.**

THE PERFECT SUBSTITUTE for SILVER.—The high estimate formed by the public, during the twelve years WILLIAM S. BURTON'S (late RIPPON and BURTON'S) chemically purified material has been before it, (made into every useful and ornamental article usually made in silver, possessing, as it does, the characteristic purity and durability of silver,) has called into existence the deleterious compounds of "Albata Plate," "Berlin Silver," and other so-called substitutes; they are at best but bad imitations of the genuine articles manufactured and sold only by him.

| | Fiddle Pattern. | Threaded Pattern. | King's Pattern. |
|---|---|---|---|
| Table Spoons and Forks, full size, per dozen .. | 12s. 0d. | 28s. 0d. | 30s. 0d. |
| Dessert ditto and ditto, ditto..... | 10s. 0d. | 21s. 0d. | 25s. 0d. |
| Tea ditto and ditto, ditto..... | 8s. 0d. | 11s. 0d. | 12s. 0d. |
| Gravy ditto ..... | 3s. 0d. | 6s. 0d. | 7s. 0d. |

NICKEL-ELECTRO-PLATED.—The REAL NICKEL SILVER, introduced and made only by WILLIAM S. BURTON, (late RIPPON and BURTON,) when plated by the patent process of Messrs. Elkington and Co., is beyond all comparison the very best article, next to sterling silver, that can be employed as such, either usefully or ornamentally. In the lengthened and increasing popularity of the material itself, and the high character of the method of plating, the public have a guarantee that the articles sold by W. S. Burton (and by him only) are, as it regards wear, immeasurably superior to what can be supplied at any other house, while by no possible test can they be distinguished from real silver.

| | Fiddle. | Thread. | King's. |
|---|---|---|---|
| Teaspoons, per dozen..... | 18s. ..... | 32s. ..... | 38s. |
| Dessert Forks ,, ..... | 30s. ..... | 46s. ..... | 58s. |
| Dessert Spoons ,, ..... | 30s. ..... | 52s. ..... | 62s. |
| Table Forks ,, ..... | 40s. ..... | 68s. ..... | 75s. |
| Table Spoons ,, ..... | 40s. ..... | 72s. ..... | 80s. |

Tea and coffee sets, waiters, candlesticks, &c., at proportionate prices. All kinds of re-plating done by the patent process. Detailed catalogues, with engravings, as well as of every ironmongery article, sent (per post) free.

WILLIAM S. BURTON'S (late RIPPON and BURTON'S) Stock of general Furnishing Ironmongery is literally the largest in the world; and as no language can be employed to give a correct idea of its variety and extent, purchasers are invited to call and inspect it.

39, Oxford-street, (corner of Newman-street.)

ARGUS LIFE ASSURANCE COMPANY, 39, Throgmorton-street, Bank.

Empowered by Special Act of Parliament, 5 and 6 William IV., cap. 76.

Thomas Farncomb, Esq., Alderman, Chairman.
William Leaf, Esq., Deputy Chairman.

| | |
|---|---|
| Richard E. Arden, Esq. | Rupert Ingleby, Esq. |
| William Banbury, Esq. | John Humphery, Esq., Alderman, M.P. |
| Edward Bates, Esq. | Thomas Kelly, Esq., Alderman. |
| Thomas Camplin, Esq. | Jeremiah Pilcher, Esq. |
| James Cliff, Esq. | Lewis Pocock, Esq. |

Physician—Dr. Jeaffreson, 2, Finsbury-square.
Surgeon—W. Coulson, Esq., 2, Frederick-place, Old Jewry.
Consulting Actuary—Professor Hall, of King's College.

LOW RATES OF PREMIUM.

Persons assuring in this office have the benefit of the lowest rate of premium which is compatible with the safety of the assured, and which is, in effect, equivalent to an annual bonus; they have likewise the security of a large subscribed capital—an assurance fund of nearly a quarter of a million,—and an annual income of upwards of £60,000, arising from the issue of between 5,000 and 6,000 policies.

Annual Premium to assure £100.

| Age. | For One Year. | For Seven Years. | Whole Term. |
|---|---|---|---|
| | £ s. d. | £ s. d. | £ s. d. |
| 20 | 0 17 3 | 0 19 1 | 1 11 10 |
| 30 | 1 1 3 | 1 2 7 | 2 0 7 |
| 40 | 1 5 0 | 1 6 9 | 2 14 10 |
| 50 | 1 14 1 | 1 19 10 | 4 0 11 |
| 60 | 3 2 4 | 3 7 0 | 6 0 10 |

One-half of the "whole term" premium may remain on credit for seven years, or one-third of the premium may remain for life as a debt upon the policy at five per cent., or may be paid off at any time without notice.

Policies assigned as a security to others, will not be rendered void in consequence of death by suicide, duelling, or the hands of justice. In case of death by the above causes, where the policies are not assigned, the gross amount of premiums received will be returned.

Claims paid in one month after proofs have been furnished.

The Medical Officers attend daily, at a quarter before two o'clock, and Policies issued the same day.

EDWARD BATES, Resident Director.

A liberal Commission to Solicitors and Agents.

**Diseased and Healthy Lives Assured.**

MEDICAL, INVALID and GENERAL LIFE OFFICE, 25, PALL MALL, LONDON; and 22, NASSAU STREET, DUBLIN.

SUBSCRIBED CAPITAL, £500,000.

Nov. 1846.

AT a numerous Meeting of the Proprietors, held at the Company's Offices, 25, Pall Mall, on the 26th inst., it was shown, by the Report of the Auditors and Directors—

That this Company was the first to Assure DISEASED AND INVALID LIVES in a systematic manner, and on the same safe and defined principles as those on which ordinary Offices assure Healthy Lives; and that at the present time it is the only Company furnished with scientific and well constructed Tables showing the duration of life in the different classes and various stages of disease.

That the Public have felt the urgent necessity for a Company established on such principles, was rendered manifest by the fact, that during the period of five years in which the Society had been in business, no less than 2051 *proposals had been made to it, covering Assurances to upwards of One Million of money.* The number of Policies issued far exceeds the average of that of most of the old and successful Offices in a similar period; and the business has been gradually progressive, the number of Policies issued during the last year *being nearly triple* that in the first year of the Society's existence; showing that as the establishment of the Company has become more generally known, the Public has more freely embraced the peculiar advantages which it offers, thus affording every reason to believe that the business of the Company will still go on rapidly increasing.

That the number of deaths that have taken place has been under the number estimated by the Tables of the Society *by nearly ten per cent.*; a strong proof of the safety and correctness of the data and principles on which they are founded; and that these facts conclusively show, that business in INVALID LIVES can be transacted with as much safety as that in HEALTHY LIVES; that the prejudice which once prevailed against this class of business is rapidly disappearing; and that there are few Companies which are not satisfied that this kind of Assurance may be done with security and profit, so much so, that several have now become anxious for it. That it is also gratifying to be able to state, that a very large proportion of old established Offices have latterly co-operated with this Society by sending it a considerable amount of business.

That the Public have derived a great benefit from the establishment of this Company is shown by the fact, that 66 per cent. of the lives assured had been rejected by other offices; thus extending the highly valuable benefits of Life Assurance to a large section of the community not embraced by other companies. This result will be the better understood when it is stated, that in the mature period of life the deaths from one disease only, Consumption, in the principal towns of England, are more than one-third of the total deaths in the same period of life. And if an inquiry be instituted into the prevalence of other diseases also, such as Asthma, Dropsy, Diseases of the Head, Heart, &c. &c. &c., it will be found *that more than one-half of the whole population would*, on medical examination, be refused admission into ordinary assurance offices.

The Diseases here alluded to are such as exist in general in a chronic form, frequently for many years prior to death, but which, on a strict medical examination, would effectually exclude the persons so affected from the benefits of Life Assurance; and since it thus appears that a majority of the population is included in this class, the value and importance of the new feature of this Society cannot fail to be justly appreciated.

That the published document by this Society shows—

In the first place, That the peculiar features of this Society *open a larger field for business* than all other Offices can have unitedly; and,

In the second place, That the risk of Assuring Diseased Lives must, from its own nature, be less, and its *principles be found to rest on a more satisfactory basis*, than those which regulate ordinary assurances.

That premiums have been determined for the assurance of persons at every age, among those afflicted with consumption, asthma, bronchitis, pneumonia, disease of the heart, apoplexy, paralysis, epilepsy, insanity, disease of the liver, dropsy, scrofula, gout, rheumatism, &c.

That in all cases where satisfactory proof is given that the causes for an increased rate of premium have ceased, a reduction in the premium is made.

Increased Annuities are granted on Unsound Lives.

*No extra Premium required on Healthy Lives*, in the Army or Navy, unless in actual service.

HEALTHY LIVES, both at Home and in Foreign Climates, are Assured with as much facility and at lower rates than at most other offices; and a capital of Half-a-Million sterling fully subscribed affords a complete guarantee for the fulfilment of the Company's engagements.

FRANCIS G. P. NEISON, Actuary.

*N.B.—Applications for Agencies to be made to the Actuary.*

MEDICAL, LEGAL, and GENERAL MUTUAL LIFE ASSURANCE SOCIETY, 126, Strand, London.

TRUSTEES.

| | |
|---|---|
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| Vere Fane, Esq. | James Russell, Esq., Q.C. |
| J. Billingsley Parry, Esq., Q.C. | |

DIRECTORS.

JOHN BILLINGSLEY PARRY, Esq., Q.C., Chairman.

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| Geo. Hilaro Barlow, M.D. | John Parrott, Esq. |
| Daniel Cornthwaite, Esq. | Richard Partridge, Esq., F.R.S. |
| Fred. J. Farre, M.D., F.L.S. | Richard Quain, Esq., F.R.S. |
| Thomas Webb Greene, Esq. | Robert Smith, Esq. |
| Richard Jebb, Esq. | Frederick Thos. White, Esq. |
| J. Chas. Weaver Lever, M.D. | J. Hayman Whiteway, Esq. |
| Wm. John Little, M.D. | |

The principle of mutual assurance is the most beneficial to the assured, amongst whom the whole net profits are divisible.

This Society is the only one connected with the medical or legal professions founded on the mutual principle.

The business of this Society embraces assurances, annuities, and endowments of every description.

Prospectuses, forms of proposal, and every further information, will be readily supplied on application, either personally or by letter, to

R. WILSDON MORRIS, Actuary.

*** Agents required where none are appointed.—Application, accompanied by a reference, must be made to the Actuary.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

In connexion with Case 42, occasion was taken to speak of hæmorrhage from the bowels, and other mucous surfaces, in some degree independent of ulceration. Few, however, would be inclined to deny that ulceration is by far the most common cause of intestinal hæmorrhage, which the next ensuing cases are designed to illustrate.

### FEVER; PROFUSE HÆMORRHAGE FROM THE BOWELS; RECOVERY.

Case 49.—Elizabeth G——, aged sixteen; admitted April 17th, 1846; Hope back ward. Thin; face distressed; rather flushed; tongue moist and thinly furred, with permanent papillæ at the sides, a broad, dry, brown streak down the centre; bowels much relaxed; abdomen flat, very tender in the right iliac fossa; pulse 144, small and soft. She has thirst, loss of sleep, anorexia, and debility of three days' duration.

*History.*—A servant; always healthy. Eleven weeks ago, the catamenia were suspended. Seven weeks back, she was taken severely ill, "in some way quite different to this," but it cannot be made out how. She got nearly well, and her appetite had returned, when, three days since, after having got wet, she was delirious that night, and profuse diarrhœa set in. The present symptoms then commenced, and have continued increasing to the present time. Ordered, compound mercury-and-chalk pill, five grains, every night; a saline draught, with camphor mixture, thrice a day.

Fifth day.—No sleep; wandering and restless all night. Tongue fissured, otherwise as yesterday; pulse 120, very small and soft; skin hot and dry, no rash. One loose evacuation from the bowels. Her face is paler, and she complains of feeling cold. Ordered to continue; to take some chalk mixture, should the bowels be relaxed.

Sixth day.—Good sleep; some pain in the head; tongue dry, with a thick, flaky coat; pulse 120, small and soft; bowels much relaxed, the motions watery, but containing healthy, fæcal matter; abdomen tender. Ordered to continue.

Seventh day.—No sleep, rambling all night; she vomited a little this morning; bowels less relaxed, motions as yesterday; urine scanty; skin warm, rather moist; tongue as yesterday, dry; pulse 132, small and soft; she complains of pain in the head, and of feeling chilly. Ordered to take only two grains of compound mercury-and-chalk pill at night; to have her head shaved, and a blister plaster applied to the vertex.

During the two following nights, she slept quietly and well. Her bowels were relaxed, and one evacuation was dark and offensive, and was thought to contain blood; she felt cold; at one time had nausea, but at others expressed a wish for food; her tongue remained dry and brown, with a thick fur at the sides.

On the tenth day, she was drowsy, but had spent the previous night without sleep; the evacuations from the bowels were light-coloured and ochry; pulse 132, very small and soft; she had no pain anywhere, only a feeling of constant chilliness. Ordered, a draught composed of infusion of cascarilla, with half a drachm of tincture of the same, thrice a day, and four ounces of wine daily.

Eleventh day.—She has been suffering much pain in the abdomen preceding each evacuation, most of which are fluid, and of a deep scarlet colour, the last is ochry; her abdomen is very painful on pressure; pulse 132, small and soft; tongue cleaner, rather moist; skin dry and harsh, with a patchy redness on the left forearm, not fading on pressure. Ordered to continue.

Twelfth day.—She lies quietly on her side; skin a little moist, no rash, and less tenderness of the surface of the abdomen; she has passed one fluid evacuation, unmixed with blood; tongue dry, and brown in the centre; pulse 132, small and soft. Ordered to continue; to take two pounds of beef for tea daily.

She was restless during the two next nights; but the history of the case till the fifteenth day presents nothing particular to claim attention beyond the healthy condition of the alvine evacuations, and the distinct reference of the pain in the abdomen, on the fourteenth day, to general tenderness of the surface of the body rather than to abdominal disease.

Fifteenth day.—Slept pretty well; pulse 108, small and soft; skin warm and moist, with an abundant crop of miliary vesicles all over the body; tongue cleaner, and moist; bowels relaxed, three light-coloured fæcal motions; abdomen full. Ordered to continue.

Sixteenth day.—She lies on her back, talking sensibly when addressed, but apparently weak in her intellect; pulse 114, small and soft; tongue clean, and dry in the centre, the edges moist with thick mucous dots; the miliary vesicles are still large, and very abundant; bowels once open, the evacuation free from blood; abdomen soft, still tender on pressure. Continue.

Seventeenth day.—Little sleep; tongue dry, and chapped down the central brown streak, still dotted with thick mucous crusts at the sides; her face is anxious, and a little flushed; her conversation flighty and querulous.

Eighteenth day.—Some good sleep, but was delirious; skin warm and moist, the vesicles still very apparent; pulse 126, very small and soft; tongue moist and clean, all but the mucous crusts, which still adhered to it; bowels once open; abdomen tolerant.

On the nineteenth day her appetite began to return; by the twenty-first day her tongue had become clean and moist, and she might be said to be well, only weak. Her convalescence was rather protracted by the eruption of a number of boils over the surface of the body, with swelling of the left cervical glands. She casually visited the hospital in the following January, having perfectly recovered her health.

An examination of the recorded particulars in this case does not show any symptom from the presence of which it might have been inferred that she was going to suffer hæmorrhage; the evacuations were of the ochry character so generally supposed to indicate the existence of ulcers in the intestines, but nothing gave reason to think that these ulcers were advancing so as to become shortly the seat of the profuse bleeding which took place on the eleventh day. Then, as to the effects of this great loss of blood; immediate, these appear to have been very few; there was no notable exhaustion; her tongue had become moist, and the chilliness, which one would have expected to follow rather than to precede hæmorrhage from such a cause, had passed off. Yet the characters of the blood, the rapidity with which it was discharged, and the scarlet, succeeded by more natural coloured evacuations, forbid us to conclude that the blood had been retained for any long time in the intestines. At a more remote period, a more distinct effect of the hæmorrhage followed in the excitable state in which she lay for a few days, a condition very closely resembling that seen in women after protracted lactation, though not of so long duration. The aphthous state of the tongue was very remarkable; but nothing has been noticed in the cases of fever or of other disease occurring about this time, to enable us to attach any especial meaning to it.

Perhaps this case has been incorrectly assumed to have been one of hæmorrhage dependent on ulceration of the bowels. Independent, however, of the great improbability that the hæmorrhage in this case was in any considerable degree passive, as may best be seen by comparing it with Case 42, there is the evidence, the highest that pathology can usually claim, from the similar cases next subjoined, where the result was less fortunate; a result which, apparently, was closely connected with the hæmorrhage. In an abridged form, the particulars of the following case will not be uninteresting.

### FEVER; HÆMORRHAGE FROM THE BOWELS; DEATH; DISSECTION; SLOUGHING ULCERS OF THE INTESTINES.

Case 50.—George B——, aged twenty-five; admitted June, 1846; Matthew front ward. A fine, strongly made man; has been low and languid for the last three or four months, and about three weeks before his death these symptoms much increased upon him, but as he was supposed to be suffering from syphilis, no great notice was taken of him. However, as he kept getting worse, after a week he was brought to the hospital. There was then nothing to attract particular attention in his symptoms, as he lay drowsily in bed, like most patients with continued fever, during the first week after his admission. The evacuations were generally loose and light-coloured till the end of the second week, when, on two consecutive days, he had profuse discharges of blood from his bowels; subsequently the evacuations were solid.

After this loss of blood he became violently delirious, so that he was obliged to be kept in bed by force. He lay on his back profusely perspiring, his muscles quivering, passing all unconsciously beneath him; his pulse extremely weak;

unable to speak, but apparently sensible. The small quantity of stimulants which he had been taking was now increased with decided benefit, and the improvement continued till about the end of the third week, when he suddenly failed, and sunk rapidly in the course of a few hours. An abundant miliary rash had appeared over his skin during the last few days.

*Body examined, thirteen hours and a half after death.*—June 20th: There was nothing to remark on in the condition of the brain or thoracic viscera in relation to the present subject, only the heart, as is generally found to be the case in delirium from exhaustion, was soft and flabby.

The peritonæum was generally healthy, and there was no effusion into its cavity. The stomach was much congested about the cardiac end. The large intestines, and the small also, down to within thirty inches of the ileo-cæcal valve, were quite healthy. Commencing from this point, there appeared first a grey Peyer's patch, then followed a succession of small ulcers, varying from one to six lines in diameter; about eight or ten of them altogether. Their situation was denoted by a yellow gelatinous deposit, on the removal of which, the mucous and muscular coats seemed to have been completely destroyed to the above extent. The edges were soft but sharp, as if cut with a punch, and of a dirty grey colour. Across the base of the ulcer stretched the serous coat, which appeared sound, but was easily ruptured by the pressure of a stream of water. There was no increased vascularity of the peritonæum itself, but the situation of the ulcer was easily discernible from the outside, by the increased vascularity and opacity of the other coats hereabouts. Generally, throughout the lower part of the ileum, there were traces of increased vascularity. The mesenteric glands were dark, but hardly enlarged.

Fever, not marked at the beginning by any prominent symptoms; hæmorrhage from ulceration of the bowels; extreme exhaustion manifesting itself through the nervous system in delirium and death; and in the intestines, by a rapid and peculiar extension of the ulceration—such is the outline of the above case. Having remarked, on previous occasions, on the other particulars, there remains here only to notice the character of the ulcers, as bearing a close relation to the symptoms observed during life.

The view which limits typhus affections of the bowels to the formation of a new substance beneath the mucous membrane, the separation of which, through a crack in that membrane, forms an ulcer, does not include all the varieties of disease which are found in connexion with typhus in the lower part of the ileum, either in this country or in France. But passing over, for the present, the enumeration of these varieties, it is sufficient to mention that this case presented one of them, inasmuch as there was no regular gradation of lesions on descending the intestines, from the simply thickened to the ulcerated patch; they were few, small, but of the utmost degree of severity, for though so few and small, they were the causes of the patient's death.

It is matter of observation how, in continued fever, accompanied by great exhaustion, not only those parts exposed to pressure, as the nates, but all parts where, from any cause, the circulation is weak,—as, for instance, the skin over a bubo, or, in some terrible cases, the lower extremities,—have a tendency to slough. Here, why hæmorrhage should have taken place cannot be said; that is the first fact in the series. Its effects appear when, instead of ulcerating, the coats of the intestines, now simply softened, not to say sloughed, and the process extending equally in all directions, not along the mucous membrane only, perforated the muscular coat, and was apparently destroying the peritonæal coat also, when it was interrupted by death.

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The next case has been inserted with a view of still further extending these remarks on hæmorrhage from the bowels during fever. It is perhaps necessary to mention, that, as occurring during the present year, it is not included in any general summary of last year's cases.

FEVER WITH BRONCHITIS AND PNEUMONIA; UTERINE HÆMORRHAGE; DEATH; DISSECTION.

Case 51.—Jane W——; aged nineteen; admitted Feb. 3rd, 1847; Faith front ward. Well made; dark complexion; face, dusky, anxious; tongue rather dry; pulse 100, small, soft, sharp; skin hot and moist; has urgent cough and dyspnœa, of about a fortnight's duration.

*History.*—A prostitute; was in the hospital about two years and a half ago for some venereal affection, and immediately afterwards for jaundice; on neither occasion was she treated by mercury. Since that time the catamenia have been very irregular; they occurred last, five months ago, and having had cold water thrown over her at that time, they have not since appeared. A month ago she had severe pains in the limbs, and for the last fortnight she has lain in bed suffering from cough and purging, but chiefly from cough.

*Auscultation.*—Abundant rhonchus and sibilus through both lungs behind, mixed with rather small crepitation. Percussion elicits loud resonance above; below, the resonance is impaired. Ordered to be cupped to six ounces beneath the scapulæ; to take a saline draught, with oxymel of squill, one drachm, and half that quantity of spirits of nitric ether, every six hours.

4th.—She felt no relief from the cupping; she lay quiet, but had no sleep; face dusky; tongue dry in the centre, with furred edges; bowels once open; abdomen slightly tender on the left side; pulse 112, small and weak; there is no rash to be seen on the skin; she is rather deaf.

*Auscultation.*—Crepitation rather larger; she expectorates an abundant puriform mucus. Ordered to continue.

5th.—She slept but little; she lies on her back quite deaf, with a listless expression, in a state of extreme exhaustion, expectorating a copious puriform mucus, streaked with blood. Ordered, wine, six ounces; beef for tea, one pound daily; sesquicarbonate of ammonia, three grains; tincture of squill, twenty minims, every four hours. In the evening, she was raised out of bed, as it was thought, to empty her bowels, but the falling of a heavy body, as it were, when the contents of the vessel were being thrown away in the dark, and her subsequent fainting aroused the nurse's attention, and the next evacuation, which was passed in about twenty minutes, and a third, passed in about an hour, were found, on examination, to be composed of, generally, fluid blood, to the amount of more than a pint each, with some mucus, and a few coagula. She became very faint and cold, and had a severe shivering; but under the influence of some wine, which was immediately prescribed, she rallied, the surface became warm, and she fell asleep. A small quantity of blood flowed afterwards into the bed, apparently not more than one or two ounces.

6th.—She lies on her back, so deaf that nothing can be elicited from her by questions; skin warm and perspiring; tongue clean, dry; pulse 110, extremely weak; bowels not open; abdomen full, tender in the hypogastrium; respirations 44, with troublesome cough. Ordered to continue; to increase the daily amount of wine to ten ounces.

There is little to remark from this period till her death. She always lies on her back, impenetrably deaf, face dusky and exceedingly anxious; bowels requiring purgatives at times; the first evacuation which passed after the great hæmorrhage solid, and quite unmixed with blood; hypogastrium always a little tender; pulse about 112, always extremely weak; tongue dry, the gums crusted with sordes; respirations 56; cough very troublesome, with abundant muco-purulent expectoration, occasionally streaked with blood. The treatment was directed to sustain her, and to relieve her cough, but her weak state forbade any attempt at a complete auscultation. With great difficulty, a blister was raised on her chest, but she seemed to derive no advantage from it. The oppression and anxiety were at their height on Feb. 14th, when she quietly died.

*Body examined, sixty-two hours after death.*—There were many sudamina on the sides of the chest; the limbs were stil rigid but the neck relaxed; the blood firmly coagulated Brain healthy; pleuræ free, except a single old adhesion about the left base; lungs pale, hard, heavy, the tissues generally œdematous, especially on the right side; the bases of the lungs, however, were rather harder, and the fluid exuding from them on pressure more turbid than usually is seen in œdema; in the middle of the right apex was a greyish-red mass, distinct from the neighbouring tissue, sinking in water, in which all the rest of the lungs floated, and giving issue, on pressure, to an opaque grey fluid; this mass was about two inches vertical, by one inch horizontal measurement: besides were several small deposits of a thin, yellow pus, in cells with polished walls, one of which distinctly communicated with an inflamed bronchus, and in other places were concrete yellow bodies, lying in cracks, as it were, in the substance of the organs. The bronchi contained much loose, puriform, frothy mucus; the heart was healthy in all respects, save one small warty growth of fibrin from the edge of the mitral valve, and a little thickening of the aortic corpora Arantii; the pericardium contained about one drachm of fluid; the surface of the right auricle was roughened by loose filaments from old pericarditis.

The stomach was of an enormous size; the mucous membrane decomposed, but apparently healthy; the intestines, ex-

ternally, were healthy, except the ileum, which presented several red patches, corresponding, within, to Peyer's glands, over many of which the mucous membrane had been removed, leaving the muscular layer very distinct, and coated here and there with white flakes; in some places the muscular layer also had been destroyed, only the peritonæum being left; the edges were all raised and somewhat excavated. All these changes were most advanced in the neighbourhood of the ileo-cæcal valve, where small islands of mucous membrane appeared in the middle of wide-spreading ulceration; they did not extend into the cæcum; the mesenteric glands were large and dark; two or three about the caput coli were chalky.

The uterus was hardly larger than ordinary; thirty lines extreme length, by twenty extreme breadth, and the walls nowhere more than five lines thick; its substance was firm; the neck closed by clear mucus; the os natural; the veins in its substance appeared rather dilated; within, the mucous membrane was quite smooth and pale, even when examined by a lens; externally, many loose filaments hung on the peritonæal surface; the Fallopian tubes were obliterated at the fimbriated extremities, which adhered closely to the ovaries; from the right tube hung a few small serous cysts; in the ovaries were a few small cysts; some black specks, one of which contained a little red pultaceous substance, but there was nothing like a *corpus luteum* anywhere. The vagina contained a little sanious matter, but there were no ulcerations nor any visible source of hæmorrhage discernible in it; the mucous membrane of the bladder was healthy. The liver and kidneys were healthy; the spleen presented two or three specks of the so-called capillary phlebitis; it was otherwise healthy.

To enter fully into the interest which the case of this unfornate girl excited, it is necessary to explain that the nurses of the ward represented her as having had a miscarriage, and that all hæmorrhage having ceased by the time they sent for assistance, no examination per vaginam was made in the state of collapse in which the patient then lay: hence the lengthened account of the circumstances under which the blood was passed, and of the appearance of the uterus and its appendages after death; from which it appears certain that the patient did not abort, and probable that the hæmorrhage was not from the uterus at all, but from the ulcers of the intestines.

It appears probable only that the hæmorrhage did not take place from the uterus, but the enlarged veins in that organ, and the state of irritation in which it was likely frequently to have been, judging not merely from the nature of the case, but from the filaments of lymph adherent to the fundus, prevent any certain conclusion being arrived at. It would require very strong evidence to make me believe in an occurrence so rare as flooding of this kind, independent of abortion in continued fever. By way of exclusion, we presume it to have been from the ulcers in the intestines.

In four cases—namely, the three just detailed, and in Case 45, there was more or less abundant discharge of florid blood from the bowels for a limited time, and then it ceased. In three of these cases, death followed at an interval of not less than a week, and dissection showed ulceration of the bowels: the fourth got well. Now, without entering into the reason of the thing, which could only be discussed after a much more minute examination of the parts adjoining the ulcers than was here instituted, we can only state the fact. But, leaning on this, it appears that sudden hæmorrhage occurring during fever, which we have reason to suppose arises from ulceration of the bowels, need not cause any great apprehension beyond the immediate danger of exhaustion. For this appears to have been the cause of death in the two last detailed cases; while in the first, and in Case 45, but for the observation of the blood, there was nothing in the symptoms to lead one to suspect even that hæmorrhage had taken place. A symptom which should cause much more alarm than the discharge of florid blood from the bowels is the appearance of black coffee-ground evacuations, in connexion with its possible causes, as illustrated in Case 42. I think the observations of M. Louis justify this statement. Two marked illustrations of it occurred during the last year, making up, with three cases (45, 49, and 50) already detailed, five of hæmorrhage from the bowels.

But it is not to advocate such notions as that because fever patients may suffer accidents the most alarming, and quite beyond our control, and yet get well either wholly or from the effects of that particular accident, that these remarks are made. Even in this profuse bleeding, which assuredly is the most frightful symptom of fever that can present itself, there is time for treatment. The bleeding will not necessarily recur; it depends probably on ulceration, and the treatment calculated to check the progress of that ulceration is what is to be followed rather than any plan calculated merely to check the bleeding. This is the great indication. Then, keeping in mind the possibility that the hæmorrhage may have arisen from active congestion rather than ulceration, and so be rather a salutary action than otherwise, the subsequent amount of stimulants, and, indeed, the whole subsequent treatment, hangs on the indications of strength given by the pulse. For the case is still one of fever, to be studied day by day in all its particular symptoms as much as if no hæmorrhage had occurred.

## Original Papers.

## ON THE WRITINGS OF SYDENHAM.

By GAVIN MILROY, M.D., &c.

### No. IV.

In my last paper, I gave a succinct history of the successive epidemic constitutions described by Sydenham as having prevailed during a period of twenty-five years, from 1661 to 1685 inclusive; and I now proceed, as I then engaged, to examine the different plans of treatment recommended by him in the various diseases which occurred during these constitutions.

That Sydenham was a humorist of the Hippocratic school is apparent from the very opening sentence of his first work. It stands thus: "A disease (the remark obviously applies more particularly to one of a febrile character) is, in my judgment, nothing else but an effort of Nature to remove, by every means in her power, some morbific matter, and thus serve to promote the recovery of the sick. For as God, the supreme Arbiter and Director of all things, has been pleased to create mankind fitted to receive various impressions from without, they could not fail to be liable to numerous ills and troubles, which arise, in part, from such particles of the air as, having a disagreement with the fluids, insinuate themselves into the body, and, mixing with the blood, contaminate every part of the system; in part, also, from different kinds of fermentations and putrefactions of humours which have been detained too long in the body, for want of its being able first to digest, and then to discharge them, in consequence either of their undue bulk or unsuitable nature." He exemplifies his views by appealing to the instances of the Plague and the Gout. "What is the former," says he, "but a complication of symptoms set up by Nature to shake off the miasmatic particles (taken in with the air we breathe) through the proper emunctories, by the formation of abscesses or other eruptions on the surface? and what is the latter, but the provision of the same power to purify the blood of aged people, and (in the language of Hippocrates) to purge the recesses of the body? The same thing may be said of most other diseases when they are perfectly formed." Diseases are either acute or chronic, according as the process of expelling the peccant matter be performed rapidly or slowly. "For, when a fever is required to loosen the morbid particles from the blood, to promote their separation, and at length discharge them by sweating, diarrhœa, eruptions on the surface, or other mode of evacuation; as the whole process is carried on in the mass of the blood, and that, too, with a violent motion of the parts, it follows that the change must be determined suddenly either to recovery or to death, (according as Nature can overcome the morbific matter by a crisis, or is overpowered by it and gives way,) and also that the accompanying symptoms must be vehement and dangerous. Of this kind are all acute diseases, which come to their status or complete development with force, rapidity, and danger." Acute diseases are either Epidemic—i. e., prevailing extensively over a wide district at the same time, and connected with a secret and inexplicable condition of the atmosphere; or they are Intercurrent or Sporadic, arising generally either from a variation in the sensible qualities of the air, as from heat to cold, dryness to moisture, or *vice versâ;* or, on the other hand, from some irregularity or distemperature (*anomaliâ vel intemperie*) of particular individuals. The former continue only as long as the peculiar occult state of the atmosphere (the epidemic constitution) lasts; the latter occur in all years, and, with many of them, at least, in all seasons of the year. Sydenham's theory of Chronic diseases is well given in the following passage, which has always struck me as being replete with the soundest wisdom in a pathogenic point of view, and suggestive, at the same time, of many useful applications in practice:—

"Though an unwholesome state of the air may greatly con-

tribute to their production, yet they do not so immediately proceed from the air, but generally from the indigestion of the humours, the common origin of all these diseases. For when the stamina of life are much debilitated, and in a manner worn out either by age or by remarkable and continued irregularities in the use of the six non-naturals,* especially with relation to food and drink; or if the secretory vessels be so far weakened as to be no longer able to perform their appointed functions of cleansing the blood, and carrying off its superfluities—in all these cases, a greater quantity of humours being collected than can be digested by the strength of nature; these, by their long continuance in the system, undergo various fermentations and putrefactions, and at length break forth, occasioning different sorts of diseases, according to the variety of the vitiations. And as these depraved juices differ from one another, so they fall upon the particular part that is best fitted to receive them; and there they gradually manifest that long series of symptoms which ordinarily proceed, partly from the nature of such juices, and partly from the abnormal motion (*αραξία*) excited in the parts affected, both which causes, in conjunction, constitute that irregularity (*ανωμαλία*) of nature which is characterized with the name of some one disease or another."

The much greater frequency of Chronic diseases in aged than in young persons, in winter than in summer,—in short, whenever the body is weakened, than in opposite states of the system,—is dwelt upon by Sydenham as affording a strong proof that "indigestion of the humours"—in the language of the present day, it might be termed "irregularity or unhealthiness of the processes of primary and secondary assimilation"—is the cause of most of these diseases.

From what has now been said respecting the origin of Acute and Chronic diseases, the reader will at once perceive the force, as well as the beauty, of the expression, (which occurs in the dissertation upon the small-pox,) that "most of the former have God for their author, while the latter proceed from ourselves."

Every practical physician will admit, I should think, that there is much truth and sound doctrine in the general pathological views of our author. Their chief error consists in being too exclusive; they are chargeable with the sin of omission rather than with that of commission. All, or almost all, diseases seem to be attributed by him to the presence of a peccant or noxious matter, that requires to be eliminated and discharged from the body. That such is not universally and invariably the case, is too obvious to stand in need of any lengthened illustration. There may be diseased action without there being necessarily a morbific material something, that is capable of expulsion. The body consists of solids as well as of fluids; and these solids are endowed with living, moving powers, the due exercise of which is just as essential to health as the normal condition of the fluids, which permeate every part of the frame. Now diseases may arise from some irregularity (*αραξία*)† in the action of the former, as well as from some alteration in the state of the latter. The definition, therefore, given by Sydenham, quoted at the beginning of this paper, is decidedly objectionable from its very incompleteness. Had it stood thus—"A disease is nothing more than an effort of Nature to relieve herself from some offending cause, whether this consists in the presence of a morbific matter to be expelled, or of a disordered action to be rectified"—it would have been alike more comprehensive and more just. An exclusive solidism or humorism is equally to be deprecated; but of the two, the latter is perhaps the least objectionable. In the present day, there is a growing tendency to recognise the great importance of a rational and well-grounded humoral pathology; and well it is that such is the case, for there cannot be a doubt but that a vast deal of serious mischief has been done to the practice of medicine, by the utter neglect into which it had fallen for the last sixty or seventy years. The attention that has been paid of late to the study of animal chemistry, has contributed much to give an impulse in this direction. Thus, the examination of the pathological conditions of the urine has shown most satisfactorily the intimate connexion that subsists between the imperfect or irregular discharge from the system of some of the elements of this depuratory fluid, and the development of various forms of morbid action. In granular Degeneration of the Kidneys, for example, the marked proclivity to the supervention of inflammatory and dropsical disease may be fairly attributed to the acrimonious vitiation of the blood, from the retention or non-elimination of urea and other excrementitious matters which Nature designed should be regularly discharged by the renal emunctories. And is it not most reasonable to believe that many of the most serious and unmanageable symptoms of Fevers—the stupor and delirium, the palpitation and dyspnœa, the vomiting and diarrhœa, not to mention any visceral lesions or other structural degenerations—are all, more or less directly, owing to a similar cause? The recent introduction of the epithet "zymotic" in the nosological classification of diseases, affords, too, a striking instance of the disposition, now-a-days, to recognise the probable existence of a leaven or ferment (*ζυμη*) within the body as the primary cause of the pyrexiæ. No one can well dispute its strict applicability to the family of the exanthemata, at least. Sydenham himself alludes to this point: "That the febrile commotion of the blood is raised by Nature in order to separate an heterogeneous and noxious matter, appears from eruptive fevers, in which a vitiated excrementitious matter, that lay concealed in the blood, is, by means of the ebullition, thrown out upon the skin."

We have seen that Sydenham regarded Gout as a humoral disease. Is there not much in the history of acute Rheumatism also, and of its sequelæ, to lead us to view it in nearly the same light? Much might be said on this subject if space permitted. I shall only now observe, that it has long been my assured conviction that there is always a morbid alteration of the blood previous to, and, indeed, causal of, the outbreak of the characteristic symptoms of this very common disease.

Again: in what other manner shall we be able to give a rational interpretation of the development of most of the Cachexiæ, save in that very way in which our author has pointed out—viz., by referring them to an "indigestion of the humours;" in other words, to a mal-assimilation of the molecular particles destined for the process of nutrition. It would be easy to illustrate this position by tracing the history of scrofulous and tubercular disorders; and the illustrations might extend to very many chronic diseases of the skin. But at present I can do no more than merely hint at the subject. It will always be difficult, if, indeed, it be ever possible, to demonstrate, either with the microscope or with the test-tube, the real nature of the changes in the blood and other fluids that are believed to be connected with the production of various diseases; but if a belief in this doctrine is found to lead—as I feel assured that it does—to the most rational and successful mode of treatment, this circumstance alone may fairly be adduced as a strong argument in its favour.

Before entering upon the details of the treatment of Continued Fever recommended by Sydenham, it may not be amiss to remind the reader, that of the five species or forms described by him as having prevailed in successive epidemic constitutions during the fifteen years, from 1661 to 1675 inclusive, and which I characterized by the epithets synochoid, pestilential, variolous, dysenteric, and comatose or cerebral,* the first mentioned is that which he considered to be the true type of the genus, the principal and primary fever of Nature, as he called it, that which he designated by the term "depuratory," and to which, in his opinion, the aphorisms of Hippocrates and other ancient physicians are especially, if not alone, applicable. The ordinary symptoms of it have already been given. Its regular period of continuance is stated to be fourteen days; but, in unfavourable or mismanaged cases, the resolution of the febrile action may not occur until the twenty-first day. Its *ratio symptomatum* is thus attempted to be explained:—

"In the first place, I would remark that the inordinate

* By this strange term our forefathers designated the atmosphere we breathe, our food and drink, motion and rest, sleeping and waking, the emotions of the mind, and lastly the excretions and retentions; because, when any of them were in excess, a tendency to disease was thereby occasioned.

† The last paragraph in the extract, quoted above, in reference to the producing causes of chronic diseases, is one of the very few passages in Sydenham's writings where even so much as an allusion is made to the influence of the solids of the body in the production of morbid phenomena. His prevailing doctrine, at least with respect to Fevers, is, that the morbid process takes place almost altogether in the fluids; for we find him (in a passage already quoted) saying, "in sanguinis massâ res omnis peragitur;" although he immediately adds, "idque motu partium violentiore."

* It is to these successive fevers that our author applies the term "stationary"—i. e., persisting during the continuance of the individual epidemic constitution, and ceasing with its cessation, in contradistinction to the term "intercurrent," which he uses to designate such as may appear in any or in all seasons indifferently, and are quite independent of that occult condition of the atmosphere with which epidemic diseases are believed to be associated, but certainly not of the vicissitudes in its sensible and more obvious properties, as from heat to cold, dryness to moisture, or *vice versâ*. There may be an opportunity hereafter of examining how far the views of Sydenham on these matters are in accordance with strict experience. This only I may say at present, that we shall find that some of his "intercurrent" diseases are quite as much entitled to the appellation of epidemic as any of those to which he has limited it.

commotion of the blood, whether it is to be regarded as the cause or the mere concomitant of the disease, is excited by Nature in order either to separate a certain heterogeneous matter contained therein, and prejudicial to it, or else to change the blood itself into a new state or diathesis. The term 'commotion' is certainly to be preferred to that of 'fermentation' or 'ebullition,' as its adoption will serve to prevent all fruitless disputes about words that might arise from the use of the latter, which, although they seem harsh and inappropriate to some, are yet capable of a commodious interpretation." Sydenham, indeed, repeatedly makes use of these phrases in the course of his writings, and on more than one occasion attempts to point out some rather fanciful analogies between the processes so designated and the phenomena of febrile diseases. It is obvious, however, that he was quite well aware of the evils that might arise from an incautious employment of the terms in question; and he expressly tells us that it was only in consequence of their very general adoption in the medical writings of his age that he made use of them to express his meaning. Yet so strong is the misleading influence of a mere word, when we attempt to explain things which we do not understand, that even our judicious author is sometimes drawn away from the observance of those very precepts which he so often and so emphatically enjoins upon his readers, and thus allows his practice to be deduced not so much from the results of actual experience, as from the suggestions of a crude and fanciful hypothesis. As a general remark, however, it may be fairly asserted of him as a medical writer, that he seems rather to have built his theory upon his practice than to have derived his practice from his theory; but on some occasions, I fear, this can scarcely be predicated of him. It may be worth while here to state that the favourite and prevailing system of treatment in fevers generally, at the commencement of Sydenham's career, was the almost uniform exhibition of heating, cordial, and alexipharmic medicines, with the view of promoting as speedily as possible the expulsion of the morbific matter that was believed to be the producing cause of the disease. Let us now see what course he has recommended:

"The true indications in the treatment of this [the depuratory] fever are to keep the commotion of the blood within such bounds as suit the design of Nature; so as, on the one hand, to prevent its rising too high, whence dangerous symptoms might ensue; or, on the other hand, sinking too low, whereby either the exclusion of the morbific matter might be hindered, or the efforts of the system to effect an altered condition of the blood be frustrated. And hence, whether the fever be owing to the irritation of any heterogeneous matter, or to the blood's attempting a change, the curative indication in either case is the same."

*Bloodletting.*—When the patient is young and plethoric, and the febrile excitement is strong, it will be prudent to draw blood from the arm, to guard against the phrenitis, pleurisy, or other inflammatory mischief that is apt to supervene in consequence of "the excessive ebullition of the blood," as well as to relieve the plethoric fulness of the vessels, which is often present. The amount of blood drawn should not be more than merely to avert the consequences now mentioned. It may, indeed, be necessary to repeat venesection in young patients of a very sanguine disposition, or who have inflamed their blood with wine; but this is rarely necessary. When the system is weak, and the powers of life are not robust, general bloodletting should not be resorted to; "otherwise the blood might prove absolutely unequal to the business of despumation, whence the whole mass might become corrupted, and death speedily ensue."

*Emetics.*—After bloodletting, (should this be deemed necessary,) an emetic is the remedy to be next thought of. Whenever there has been any nausea at the commencement of the fever, the neglect of cleansing out the *primæ viæ* too often lays the foundation of much future trouble to the physician, and, it may be, of no inconsiderable danger to the patient. One of the most frequent and principal consequences of this omission is the occurrence of a diarrhœa upon the subsidence of the febrile commotion; "for in the progress of the fever, when Nature has in some degree subdued the noxious humour in the stomach, and sent it into the intestinal canal, it is so apt, by its acrimony, to irritate and corrode the bowels, that a looseness must necessarily be induced."* This is always an unpleasant symptom in the decline of a fever; for at this period the system requires a certain degree of energy to complete "the process of despumation" that is going on in the blood.

Our author emphatically remarks,—1st, That diarrhœa seldom occurs, except in those cases where the use of emetics has been neglected at first; and 2ndly, That this symptom will often yield to an emetic, (provided the patient be strong enough to bear the remedy,) when all sorts of astringents have utterly failed, and although there be no nausea nor tendency to retching present at the time.

The benefits derivable from emetics can by no means be estimated by the quantity, or offensiveness in the condition, of the matters rejected from the stomach. Even when there is nothing remarkable in these *egesta*, yet the relief to the nausea, the anxiety, the restlessness and deep-sighing, the black state of the tongue, &c., is often very marked. After the action of the remedy had entirely ceased for some hours, Sydenham was in the habit of prescribing a mild soporific, with the view of quieting the agitation, and of procuring sleep.

It is rarely necessary to employ any artificial means for this effect, as there is almost always a natural tendency to sleep after vomiting, if the patient be left quiet and undisturbed in bed.

*Enemata.*—When the febrile excitement still remains considerable after the use of bleeding and an emetic, the administration of emollient aperient injections will tend to cool the blood and allay its effervescence. The enema may be repeated daily, or every second day, if the excitement of the system continues, until about the tenth, or even the twelfth, day of the fever, especially when bleeding has not been used at its commencement. Enemata are generally much more useful in young than in aged patients, in whom "the effervescence of the blood" is apt to be so languid as to be insufficient for Nature's purposes in the preparation and expulsion of the morbid matter. When the disease has begun to decline, the use of aperient remedies should be discontinued altogether, otherwise the febrile matter will not proceed so mildly and favourably to "concoction."

Theory, I fear, has more to do with this advice than the simple observation of Nature. Without making any reference to the condition of the intestinal contents, whether they be acrimonious and offensive or not, as a guide for the physician, our author makes use of a very forced analogy to explain the grounds of his practice: "to use enemata in the decline of the disease would be as absurd as to open a large vent-hole in a cask of fermenting beer; by so doing, Nature is hindered in her endeavour to throw off the morbific matter."

A little later in the disease, about the fifteenth day or so, when the process of concoction has been completed, as will appear by the laudable separation in the urine, and the manifest abatement of all the symptoms, the exhibition of an aperient is said to be useful in carrying off the sediment deposited in different parts of the body by the preceding fermentation. For, "unless this be done in due time, the sediment might return into the mass of blood, and occasion a relapse of the fever, or, by its continuance in the parts where it lodged, produce obstinate disorders in the body." The use of aperients is declared to be much more necessary after autumnal than after vernal disorders generally, their omission in the decline of the former being a very frequent cause of numerous maladies.

*Cordials.*—The premature use of these remedies, before the requisite employment of depletory means, is a frequent cause of phrenitis or pleurisy, in consequence of the "crude matter" falling upon the membranes of the brain, or on the pleura. It is only when the system is weakened by evacuations, or when the patient is in the decline of life, that cordials of any sort should be given at an early period of the disease. About the twelfth day, however, when the business of depuration or secretion is at hand, the employment of warmer medicines will often do much service; "for the more that the blood is heated, the more will the process of concoction be accelerated." On the other hand, the exhibition of refrigerants and evacuants, at this period, will only serve to retard the effects of Nature; and the re-solution of the fever, instead of taking place on the fourteenth day, according to its natural period, may be delayed till the twenty-first, or even later.

The cordials used by Sydenham were, most of them, of the

* Sydenham evidently considered the lodgment of acrid offensive matters in the stomach and bowels to be a frequent cause of the vitiation of the blood that supervenes so often in the course of a fever. Speaking of the importance of administering an emetic at its outset, he very justly remarks, that by this simple remedy "we shall sometimes succeed in crushing, in its very cradle, the disease which would otherwise prove both obstinate and dangerous; being nourished by those humours (in the *primæ viæ*) which, entering into the recesses of the body, mix with the mass of the blood, or becoming, by their detention, more and more corrupt, communicate a noxious quality (*auram malignam*) to the blood distributed upon the alimentary canal." Do we not daily witness the practical wisdom of these remarks in clinical experience? The source of contamination here alluded to has been far too much overlooked by most writers in the present day.

very simplest and least injurious description; the milder ones consisting of the distilled waters of borage, citron, scordium, strawberries, &c., with some lemon-juice, or syrup of balm, or cloves; and the stronger being composed of the compound chalk powder, bezoar, confection of hyacinth, the *theriaca Andromachi*, and other things of a like sort. But a far better remedy, on the whole, than any of these, is that mentioned in the following passage; one that has been always admired, for its packing a great deal of matter in few words, and which gives an excellent summary of our author's general mode of practice:—

"I should not omit, that frequently, when I was called to persons of low circumstances, I ordered them to do nothing else, after bleeding and vomiting when required, but to keep in bed during the whole course of the distemper, and to sup only water-gruel, barley-gruel, and the like; to drink moderately of warm *small beer*, to quench their thirst, and to take a glyster of milk-and-sugar every day, or every other day, till the tenth or eleventh day of the distemper; but, towards the end of the fever, when the separation was begun and proceeded slowly, to promote it, I allowed them now and then a little stronger malt liquor, instead of cordials. And thus, without anything further, except a gentle purge at the end of the distemper, they generally did well."

The *diet*, during the continuance of the febrile action, should consist almost entirely of oatmeal, or barley-gruel; of panada, made of bread, the yolk of an egg, water and sugar; of thin chicken broth; small beer, to which, when the fever is high, a little orange-juice may be added, and which should then be heated over the fire, to take off the rawness; and such like simple things. "To forbid the use of small beer, in moderation, is a very needless severity, nay, is often positively hurtful."

Before closing our remarks, there are two or three memoranda respecting the treatment of particular symptoms, which call for notice. When there is *delirium* present, whether this has arisen from the premature exhibition of cordials, or from the natural severity of the febrile excitement, blood must be drawn more freely from the arm, and enemata and cooling medicines be administered more frequently, than under other circumstances. If the symptom occurs in the decline of the fever, an opiate will often act most beneficially. The following passage will best explain our author's opinions upon this very important point of medical practice:—

"This I can affirm from numerous observations, that laudanum, or any other narcotic, used to take off this symptom, whether in the beginning, increase, or height of this fever, was either ineffectual or prejudicial; whereas, a moderate dose in its decline often proved successful. I once ordered a narcotic upon the twelfth day of the disease, with success, but never knew it given sooner, with advantage; and if it be deferred till the fourteenth day, when the separation (of the morbific matter) is more perfect, it will prove still more beneficial. For I have frequently observed that the delirium, however frightful this symptom may appear to the attendants, may be disregarded, till it is proper to give an opiate, provided the disorder be not increased by the use of cordials and heating medicines, whereby the death of the patient may be suddenly produced."

The exhibition of an aperient, before the opiate is given, will generally be found to be very useful. The *wakefulness* that sometimes continues after all the symptoms of a fever have subsided, will often be better relieved by the mere application of a piece of linen rag, dipped in cold rose-water, to the forehead and temples, than by any kind of narcotic.

*(To be continued.)*

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OBSERVATIONS ON A

## CASE OF STRANGULATED FEMORAL HERNIA, WITH OPERATION.

By EDWIN CANTON, Esq., F.R.C.S.

DEMONSTRATOR OF ANATOMY AT THE CHARING-CROSS HOSPITAL MEDICAL SCHOOL.

Mrs. J——, aged fifty-four, had been ruptured for twenty years on the right side, but never having experienced any inconvenience, had neglected to wear a truss during that period. Her bowels were always moved with regularity. In the afternoon of the 3rd of February she suffered from pain at the pit of the stomach, which pain continued to increase in severity during the night; the bowels at the time were confined. On the 4th she was attacked with vomiting, and in the evening with hiccough, which during the day had troubled her occasionally, but now became more frequent; the bowels were still unrelieved. The next day (5th) the symptoms continued, but with a general aggravation of them. On the evening of the 6th, Mr. Echlin was called in to see her, and found an irreducible femoral hernia in the right groin. The persistence of the above-mentioned symptoms, in a still worse degree, induced him to have recourse to a remedy which, even in such an advanced stage of the complaint, he informs me, he has known to succeed—namely, a turpentine enema; its employment, however, in the present instance, was unavailing. On examining the condition of the patient and tumour, I advised that the operation should not be delayed, and at half-past one A.M., of the 7th inst., I relieved the strangulation by the ordinary procedure. The gut was found closely embraced by a portion of omentum, which firmly adhered to it; it was much engorged from blood effused between the tunics, but the polish was unimpaired, though at one part a patch of lymph was seen; the stricture was very tight. The patient was put to bed, and hot fomentations, to be constantly applied to the abdomen, were directed. These were continued afterwards, at intervals, during the day; warm drinks were allowed occasionally, and purgative medicines refrained from. A sensation of "working" was soon felt in the bowels, accompanied by a "rumbling" noise; but the pain had gradually subsided since the intestine was freed, the sickness had ceased, and, in short, all unpleasant symptoms speedily disappeared. In this state she remained until ten o'clock of the 9th inst., when a gentle aperient was administered, which in the course of the morning operated thrice.

Day by day she improved; the bowels being relieved once or twice with regularity during the twenty-four hours, occasionally under the influence of mild aperients, sometimes without their assistance, and a perfect recovery was the issue of the operation.

*Observations.*—In the sketch which I have given of the above case, it will be found, that after the operation no purgative medicines were given for many hours, and the omission was intentional, inasmuch as I believe I have had in several instances the opportunity of witnessing their injurious effects, when administered, as they most commonly are, as early as the third, fourth, or fifth hour after the bowel has been liberated. It not unfrequently happens, as with Mrs. J——, that shortly after the gut is replaced, a rumbling noise is heard within the abdomen, and the patient feels, in proportion as this increases, that there is a desire to have the bowels moved, but the feeling is far from an urgent one, and shows that the movements of the intestines are taking place which would lead to the ordinary propulsion of their contents, but for the inactivity of that portion of the gut which has been injured by pressure, and thus for awhile rendered incapable of continuing its function. It has been hurt, and requires rest; it has been forcibly impeded in performing its office, and cannot at once resume the duty; its sluggishness points out the mischief induced, which calls for quietude, but may resent interference. Were its want of action, with continued constipation, producing symptoms of a grave character, then indeed purgative measures should be put in requisition to subdue the cause, but such is not the case; the patient's condition is most materially amended, and the remaining inconvenience has for its origin the constriction of the gut on the one hand, and the shock of the operation on the other. Even the supervention of peritonitis, with a still confined state of the bowels, brings forcibly to mind the great injury a serous membrane has sustained, but not that the evil is due to the constipation.

If we take into consideration the state into which the part is thrown, consequent upon the passage through it of purgative medicine, it will be found to be quite incompatible with the fulfilment of the due indication of treatment. Such so-called remedy gives rise to a temporary state of excitement in the gut, evidenced by its increase of temperature, vascularity, augmented secretion, and peristaltic movement; whereas, after an operation, in the majority of cases, we require that vascular turgescence should be diminished, that any stimulus to secretion, under a state of congestion, be withheld, and that the wonted movements of the part be kept in check, or at all events not urged on, until the bowel has had time to recover its normal condition, and thus the muscular fibre be in a fit state to act without becoming by its movements an additional source of irritation to the adjacent tunics. I am happy to be enabled to quote the excellent authority of Mr. Arnott on this subject (The Lancet, June, 1842)—"The bowel, then, having been returned, how was its recovery, its restoration to a healthy state, best to be promoted? Certainly not by exhibiting purgative medicines. It is in the condition of a part which has sustained a physical injury; and as you would not expect a

person with a bruised, swollen, and inflamed leg, hand, or arm, to be benefited by exercising the part, so also, in the case of a portion of bowel similarly circumstanced, rest and quiet would seem to be most appropriate."

In canvassing the question of advisability in the administration of purgatives after the operation, we should bear in mind, that though a mechanical obstruction, in the first place, formed the impediment, it has by its continuance, in the second place, given rise to that condition of the strangulated gut, incompatible, for a time, after its liberation, to the onward progress of the intestinal matters. The surgical means employed overcame that upon which the constipation and the concomitant symptoms first depended—the mechanical barrier, and in so far afforded the bowel the opportunity of pursuing its functions; but the consequences of its constriction, that state of gut necessarily induced, has, in the second place, yet to be relieved, and if adequate time be afforded, purgative medicines withheld, and a soothing plan adopted, Nature will, I believe, the while, be as gradually aiding to perfect the cure, as when rest and fomentation simply accomplish the recovery from a sprained ankle.

How often does it happen that the patient, after the return of the bowel by operation, expresses his great relief from all the more urgent symptoms; and we see, indeed, full evidence of the fact in the return of a placid expression of countenance, the comparative freedom from pain, the cessation of vomiting, the condition of the skin, pulse, &c.; and when such general amelioration ensues, we know that the gut must very greatly participate in it, and should reasonably expect, that in proportion as the surface of the body continues to become more natural, the circulation more equable, the pain abated, the general suffering lessened, &c., so, in the same ratio, the effects of the constriction are diminishing—the state of the gut improving. It was with a view to free the intestine from a slight embrace, to prevent its impending death, to ward off peritonitis, or to guard against the fatal shock which, in certain constitutions, a hernia strangulated produces, that the operation was performed, but not to relieve a constipation; and in very many cases, this latter forms now the remaining prominent symptom—it may be the only one; and we must take into consideration, that though quick relief has been afforded to the cause of it, still the effect must be more tardily overcome, inasmuch as the condition into which the gut has passed by the constriction will initiate strongly against its capability, for a time, of resuming its office of propulsion. I would say, consequently, that the longer the period that strangulation had occupied, the less should be the urgency for administration of purgative medicine, after its freedom being established by operation.

A mode of practice not unfrequently adopted before the knife of the surgeon interferes, is the exhibition of a purgative with a view to excite the movements of the bowel, and so induce a liberation by its own efforts, which failing to effect, and the stricture having, after all, to be divided, fresh purgatives are given, without reference to that or those previously taken, whereby such an uncontrollable action is set up in the intestines, that the patient sinks exhausted from a diarrhœa which we are unable to abate. The "habit of body," too, is not unfrequently overlooked or neglected, especially in women, who are often accustomed to allow the bowels to be confined for two or more days; and in that case, if a hernia become quickly strangulated, and require a speedy operation, as in the femoral variety it may, surely purgatives are, in such an instance, not called for with that promptitude with which they are too often exhibited. The hand of the surgeon is employed to overcome the constriction, and not the constipation. His adjuvantia should now, for a time, be rest, quietude, fomentation, a mild, spare, and warm diet; and perhaps a few leeches at the site of the disease may be necessary.

Again, purgatives may act injuriously thus: peritonæal inflammation, after them, setting in, they may by their operation so add to the mischief as to render the employment of remedies ineffectual; or they may be the cause of the disease, if given quickly and freely, as they occasionally are, so constituting the origin of the malady, and the material opponent to a favourable issue.

The advice of Mr. Lawrence is much at variance with what I have advanced, who says, in his "Treatise on Ruptures," p. 325—"Sometimes inflammatory symptoms characterize the strangulation from the beginning, and lead us to operate early. Inflammation of the abdomen exists at the time, and sometimes after the operation. Active antiphlogistic treatment is necessary. The use of aperients is not to be neglected; they will produce copious evacuations, although we cannot suppose that there is much fæcal accumulation. Our efforts, in such cases, are sometimes ineffectual; the inflammatory disorder proceeds unchecked, and its nature is clearly evinced in examinations after death."

In a case I operated upon some months since, I believe that I had reason to congratulate myself that I did not follow the above instructions. The patient was a woman, aged sixty, who had had a femoral rupture twenty-two years, and had worn a truss for sixteen. Her symptoms, at the time of seeing her, being urgent, I relieved them, at three in the afternoon, by the usual operation, in which I was kindly assisted by Mr. Hancock. No medicine was afterwards given; but on the following and two subsequent days I had to treat her actively for an attack of peritonitis, neglecting the use of aperients, being unwilling to run the risk of copious evacuations following. A gentle dose of castor oil, after the abatement of inflammation, produced six motions; and from that period, with an occasional resort to the above remedy, the bowels continued to be relieved, and the patient speedily recovered. If aperients had been given at the onset, or under the inflammatory condition, I believe that the result of such treatment would have been most unfavourable.

The question concerning the call for purgatives in peritonæal inflammation is one which would be differently answered by different medical men, some laying great stress upon the necessity for their exhibition, whilst others warily object to their employment—at all events, until the more formidable symptoms have been subdued. Dr. Watson thus expresses himself, in his Lectures, upon the subject:—"I do not think that the good which they are calculated to do as antiphlogistic remedies can be at all put in competition with the harm that I am persuaded they may produce, by increasing the peristaltic action of the intestines, and so causing additional friction and tension of the inflamed membrane."

We must now consider—Is there any circumstance, in reference to the occurrence of peritonitis, after an operation for hernia, which renders its nature dissimilar to the disease originating in cold, for example, applied to the abdomen, a blow received upon it, &c.? I know of none; for the same symptoms characterize the progress of the affection in both cases; a post-mortem examination points out no distinctive differences; or the same plan of treatment in both may be the preservation of life. If, after the relief afforded by the surgeon, we could think that the supervening mischief arose from an accumulation of intestinal matters, then I would say that their extrusion, as the origin of the disease, should be gently solicited, whilst other measures attack the effects produced; but where the complaint so obviously arises from the "physical injury" done to the part, where the very presence of the inflammation is an additional cause of the bowels being unmoved, and where inflammation of a part should warn us not to interfere with and irritate its immediate connexions, then I would deem it injurious to exhibit medicines to overcome the constipation.

On referring to Mr. Lawrence's justly esteemed work, I find the following instructions respecting the exhibition of medicine after operation, p. 323:—"If, therefore, the bowels should not have been relieved in three or four hours, a few grains of calomel may be given in a pill; or two grains may be administered, consisting of calomel and compound extract of colocynth, in equal parts. The sulphate of magnesia may be given afterwards, in the dose of two drachms or of one drachm, in the infusion of roses, or in a mixture of mint-water and common water; and this should be repeated every three or four hours, until the bowels are freely relieved. If this desirable result should not occur after the second dose, a large common injection should be thrown up, with the addition of four or six ounces of castor oil. We must repeat these or similar means, and persist in their employment, until the canal is completely unloaded." The precepts here inculcated, without any reservation as to the state the reduced gut was found to be in, are much opposed to the safe and successful treatment employed in the case I referred to at the commencement of these observations, in which I find that the operation was performed on the evening after the 17th of March; and on its completion, "strict injunctions were given that no aperient should be exhibited; indeed, the first appeal to the bowels was made by an enema of gruel, not before five o'clock on the afternoon of the 20th instant, and the previous plan of treatment had been "slop-diet," fomentation, and the abstraction of sixteen ounces of blood, which was not buffed. We thus learn, that at least forty hours were here allowed to elapse before it was deemed advisable to administer an enema, and the favourable issue of the case will speak for the judicious treatment.

The tenour of the subjoined directions, from the able pen

of Mr. Guthrie, is, I believe, much in accordance with what I have advanced:—"In recent hernia which have been operated upon, none but the most gentle aperients should be given; the object being to persuade the bowels to act, and not to force them by irritation. They have been, if they are not actually, in a state of inflammation, and an irritating purgative may induce its return, and counteract the effect for which it has been given. If, on the contrary, it acts violently, the intestine, weakened by the congestion and inflammation which it has suffered, may not be able to sustain this superadded irritation." Here we find, that the use of none but the most gentle aperients is enjoined, and when the condition of the gut will, in all probability, at the time of operation, be of the character described, it is reasonable to presume that the medicine spoken of would not be administered until a much longer time is allowed for recovery to a natural state than that ordinarily given, when the bowels, if now requiring it, may be persuaded to act, and only that necessary amount of irritation be induced which their more healthy condition will enable them to respond to with readiness, and thus, the medicine performs its office efficiently, but not injuriously.

In conclusion, I am glad of the opportunity of recording the corroborative sentiments expressed in the following note:—

"My dear Canton,—In compliance with your request that I would give you my opinion as to the propriety of administering purgative medicines soon after the operation for strangulated hernia, I have no hesitation in stating, that I consider such treatment injurious to the patient in most instances. Unfortunately, the operation is too commonly delayed until the gut is in a state of inflammation, sometimes of gangrene; and nothing has appeared to me more injudicious, than irritating intestines in such a condition by purgatives. If the bowels do not act when the constriction is freed, what does this arise from? from loss of power (temporary or permanent, as the case may be,) to carry on their natural functions, resulting from the violence to which the gut has been subject by that constriction. If the gut has not become inflamed from the constriction, then there will be no danger in waiting a reasonable time, to allow the patient to recover from the shock of the operation, and the impression made upon his nervous system, arising from the strangulation of the hernia; and I have always observed, that the bowels, in such cases, act spontaneously, and consequently, purgatives are uncalled for. If, on the contrary, the gut has become inflamed, why should the case, after the operation, be treated differently to any other case of interitis,—why, in addition to that operation and strangulation, which all know of themselves, produce such a shock to the patient's nervous system, should he be subjected to the additional shock of unavailing, irritating purgatives. It is said, they cause the bowels to act; I doubt that very much. I have always considered the activity of the bowels a sign, and a most satisfactory sign, of the subsidence of inflammation, and I believe that this happy effect is much more surely and safely brought about by opiates, local or general bleeding, if necessary, and other methods which reduce the inflammatory symptoms. I have seen cases where the bowels did not act for two days after the operation; one of these was operated upon by yourself, where the gut was in the highest degree of inflammation, and I have no hesitation in saying, I consider that the patient owes his life to your judicious treatment. If you were called to a person who had hung himself, and you found him insensible, from the effects thereof, would you endeavour to restore his volition by hanging him a little longer?—Ever yours truly,

"St. Martin's-lane, April, 1847." Henry Hancock.

## ON CELL-DEVELOPMENT, OR CYTOGENESIS,

AS DEMONSTRATING THE TRUE STRUCTURE OF GLANDS, AND THE FUNCTION OF SECRETION.

By JOHN COVENTRY, Esq., Surgeon, Essex.

Amongst the dense and ever-augmenting throng of subjects continually passing before an editorial eye, more especially a medical editorial, no wonder that valuable material may at times escape notice.

The Lancet's amply proved readiness to acknowledge merit where it really exists causes the present introduction to its columns of two signally original, experimental, and important contributions to the physiology and pathology of the glands as based upon microscopic anatomy.

The allusion is to "The Pathology of Cells," *Guy's Hospital Reports*, 1843, ("Ueber die Pathologie der Zellen, Berlin,") and "The Physiology of Cells," *Guy's Hospital Reports*, 1846, both by Dr. Thomas Williams, (late tutor of microscopic anatomy, Guy's Hospital)—essays which, under the humble designation, "Hospital Reports," are worthy association with the labours of Purkinje, Bowman, and Goodsir.

The day has undisputably arrived when within the joint compass of microscopic anatomy and vital chemistry philosophers seek the clue to the labyrinthine mechanism and functions of organization. By no means the least prominent feature in the present rapid progression of medicine and collateral sciences is our widely extended insight of the construction of glands and the process of secretion; in other words, the light thrown by chemistry and the microscope upon adenology.

Viewing the present standard of adenological knowledge, who would fancy that last century only the glands were deemed the waste-butt of the nervous system, whilst Wharton gravely asks,—"An lingua, sit viscus, glandula, vel musculus?"

Malpighi's unshaken position—the non-continuity of the capillary bloodvessels and secreting tubules—is all that remains to us of the views of a bygone physiology. His far-famed "acini," with the supposed anastomoses of Ruysch, have long since chased each other into the limbo of desuetude. Kiernan's incomparable dissections, after all, fall short of establishing a philosophical theory of secretion; he has merely traced to its ultimate recesses the system of mechanical conveyance, the anatomical disposition, the pipes and conduits of the glandular system. His labours, however, throw little or no light either upon the actual secreting structures, or the cause of the separation of the blood-elements to form a secretion; much less upon the abstruser question—the nature of the vital and chemical changes occurring in and by means of the structural elements of a gland.

Grainger, too, states the possession of an excretory duct as essential to the constitution of a gland; whilst Bichât and Meckel attributed a secreting property to the ducts of glands. Muller, so distinguished in the pathology of glands, has given a most elaborate classification, founded on anatomical characters.

To quote our author, the above physiologists "attach too much importance to the numerous distinctions of figure and form," amalgamating mere channels of, and provisions for, mechanical conveyance with the essential structural components of a secreting organ.

Purkinje led the way to a correct view of the process of secretion. "He systematically expressed the great, though simple idea, that glandular action consists essentially in the agency of the epithelial cells lining the mucous surface of the terminal ducts."—(Author, "Physiology of Cells," p. 2.)

Dr. Williams terms the essential parts of a gland three. "A basement or limitary membrane, interposed between the active cell and the channel of supply—the bloodvessel; a capillary bloodvessel disposed on the parenchymal side; and an active secerning [nucleated] cell on the free external [epithelial] surface of the hyaline or basement membrane."

As wherever these three parts concur glandular secretion occurs, Mr. Goodsir's theory—the limitation of the function to the terminal extreme of the gland-tube—is deemed unsubstantiated. "However scrutinizing and careful the investigation, nothing peculiar and distinctive can be discovered in the parietes at the end of these biliary follicles, (the biliary tube or follicle of the shrimp is delineated for illustration)—no condensation of structure, no granulation. The extremities of these tubes are not always fusiform or tapering, as represented in the plates of this distinguished observer. On the contrary, it may be alleged as a rule, in reference to their conformation, that the diameter is throughout uniform. Proceeding to the examination of the interior cells and cytoblast, observation will prove that it is impossible to admit, with Mr. Goodsir, that the remotest end of the tubulus is always the scene of undeveloped cells, granular material, &c. In many instances, the dissolution of the cells from mechanical injury will create this granular aspect in the contents; but when the utmost delicacy is observed in bringing the cæcal end of the follicle into the field, expedients having been adopted to prevent destruction from the weight of the piece of glass, large nucleated cells, identical in figure and size with those observed at the proximal portions, may be remarked in this situation." * * * "Addressing ourselves to the consideration of the question rationally, it at once occurs as contradictory to the multiple principle which obtains universally in glandular organizations. If the object be to ensure an extension of the operative superficies by the duplication and reduplication of the basic element of the

membrane, the concentration of the nutritive or glandular forces to one spot, at the extreme end of the follicle, would only prove these elaborate foldings of structure to be superfluous. All the other parts of these long and highly organized tubes being thus nothing else but an excretory channel, such inferences, *prima facie*, are stamped with improbability. Each point of the follicular parietes to which a compound glandular cell is affixed constitutes a focus of energy which is in reality multiplied by the number of cells occupying the tubular walls. On this simple law an hepatic follicle becomes a compound organ, composed of as many foci of action as there are cells attached to the internal parietes." — (Physiology of Cells," pp. 39, 40.)

The allusion in this citation to the diffusiveness of the glandular elements and induplication of the limitary membrane leads at once to the medulla of the essay. Mr. Goodsir arranges glands into those terminating in follicles and those whose termination is a vesicle. Having stated that a follicle and a vesicle differ only in degree—the former possessing greater extent of surface—Dr. Williams proceeds to prove, (by diagram from dissection,) that in the lowest invertebrated animals the biliary system is not follicular, but consists of a series of nucleated cells lodged in the plaitings or foldings of the stomach membrane, (admirably shown in actinian polype.) In actinia, however, we have nucleated cells and epithelium—where is the limitary membrane, our author's grand requisite to the constitution of a gland? "In polyps and actinia, groupings of free, naked, granular cells, constitute the total provision for glandular actions; here the involucrum, or cell-wall, is the lugaline element." (p. 49.)

The actinia is also characterized by possessing cilia or motor fibrils to its nutritive cells—as opposed to Mr. Bowman's proposition, that "cilia are not found on glandular cells; also, acicular, or caudate cells—ingeniously compared to the spicula composing the dermo-skeleton of porifera—and viewed as one of the simplest forms under which a skin-skeleton exists.

By a minute anatomical detail of the glandular organs of radiaria, the author conducts us to the annelidous, commencing with the earthworm, whose elongated liver corresponds in form with the intestine into which it opens by the pedunclesof the crypt-form bodies composing thisanimal's biliary organ. The limitary membrane is stated to be very distinct in the earthworm, protecting the biliary system against the animal's constant friction and muscular movements. In the leech, follicles of a more decompounded, simple structure than those of the earthworm, are shown to occupy both the sacculated intestine and its cæcal prolongations.

In insects the hepatic economy consists of tubules varying in number, moniliform or beaded, or of uniform calibre. These tubules enclose primary cells, secondary cells, and granular matter. The author considers the secondary cells the true secreting apparatus; the primary cell is nucleated.

The secondary cells contain biliary molecules and fat; the former, it is suggested, eliminated from the blastema (or liquor sanguinis) of the intermediate spaces of these cells, the blastema itself being elaborated from the blood by the basement membrane of the primary cell. Subsidiarily noticed is the termination of the tracheal branches of insects in flask-shaped, fat bladders, the fat being placed there as fuel for the action of oxygen, to support respiration and animal heat.

Progressing to crustacea, the follicular arrangement of biliary organs is shown to prevail; fat globules are abundant, and "two layers of hyaline membrane are interposed between the active interior of the cells and the blood on the exterior of the follicle, so that vital selection and percolation are rendered complete." (p. 41.)

The three inferior families of mollusca—cirrhopoda, tunicata, and brachiopoda—present examples of retrogradation, in the plan of the hepatic organs, to the type of the lower annellida. A more singular law, perhaps, than that of retrograde metamorphosis exists not in the economy of organic nature: in plants, the changing of stamens into petals, of petals into sepals, of sepals into bracts; in animals, the active locomotive endowments of the young sponge and barnacle, contrasted with the immobility of their mature age; may be cited as apt examples.

The conchifera (example, oyster) possess a liver terminating in flask-shaped vesicles, each vesicle containing a nucleus, hepatic granules, and fat particles, (the latter scanty,) the vesicles being most easy of deliscence. The gasteropodous bile organ secretes bile from arterial blood; it terminates in flask-shaped vesicles.

In cephalopods the liver is very large,—connected by racemose terminations with a common duct,—containing abundance of oil-globules.

The constant presence of amorphous granules in the biliary cells of articulata and mollusca leads the author to assert, that a fourth anatomical constituent is requisite to form a gland—"the presence of amorphous granules."

The grand distinction in the biliary mechanism and production, between invertebrata and vertebrata, is, that in the latter bile is always secreted from two sources, the hepatic artery and vena portæ.

In fishes, the liver is large—ducts end in simple cæcal tubules, secretion joins the alimentary canal at the pyloric end of the stomach; in flat fish, the fat particles are scanty; in other fishes, very abundant, (example, in whiting, cod, salmon, pike; much reduced in perch, reverting to the arrangement of pleuronectydæ. In reptiles, the adipose element almost ceases; in birds, the fat cells are very meagre, although the respiratory function is so active; in mammalia, fat globules reappear—"the liver reverting to the type of the fish, the oleaginous particles, though in limited measure, again constituting a part of the cell-product." (p. 55.)

Thus, in a most fragmentary and morbidly epitomized form, are given the outlines of the philosophical observations composing the physiology of cells. The physiology will now be glanced at.

The essential structural elements of the human liver are, a capillary vessel, an interposed basement membrane, a nucleated cell, its nucleolus, amorphous (fat) granules. Each of these complex vital molecules constitutes an organismus in itself; and the liver, with other glandular structures, consists of an infinity of such.

Now, four phenomena may characterize the separation of the blood-plasma from its containing vessel and entrance into new combinations:—

1. It may become part of the organized substance of an organ, (nutrition.)

2. It may be merely exuded from the surface of an organized tissue, (mode of growth of cuticle and all structureless parts.)

3. Separation of the liquor sanguinis may occur into an analogous and a heterologous product—a particle of the parenchyma of the secreting gland, and a particle of the secretion itself.

4. A cell of the liquor sanguinis may be vitiated *ab origine*, or sustain a perversion of growth, in which case a deposit will occur heteromorphous to all the structures of the body, (cancer.)

Morbid cell-generation being here under review, cancer will form a commencement. "Morbid growth of an organ is the formation of a deposit, the structural characters of which are essentially and wholly unlike every form of tissue natural to the body,—heterologous (unlike the part it is formed on, but having its counterpart in the body; for example, growth of bone upon the coat of an artery) and heteromorphous," (having no counterpart in the organism:) thus establishing for malignant disease a subjectivity—"organismus in organismo,"—an unamenableness to the laws of normal growth and non-malignant diseases. On this basis, Müller has founded three varieties of carcinoma—the encephaloid, scirrhoid, and colloid. All contain much albumen, some gelatine, no fat. The varieties of cancer are contra-distinguished by microscopic differences in the shape, number, and intimate structure of their component nucleated cells. (Pathology of Cells, pp. 33—36.)

The simplest form of morbid cell is the "exudation-corpuscle," Dr. Williams applying the term to the stage immediately following inflammation; that is, commencing with the passage of the diseased (inflamed) blood out of the capillary vessel; pus-globules follow, characterized by their orbicular shape and granulated margin, with or without nuclei; one nucleus constituting laudable pus; two nuclei, phlegmonous; absence of nuclei indicating an ill-conditioned sore. The last variety approximates to the mucus-globule. (For accurate delineations, vide p. 12—16.)

The pus-globule, according to Dr. Williams' views, is a highly suspicious member of the pathological corps, being formed, after the passage of the blood from the capillary vessel, of structure perfectly abnormal or heterologous, (heteromorphous? if so, bordering on malignant,) and most inferiorly organized; the pus globule is rich in albumen—in fibrine, deficient.

*Liver cells healthy and diseased.*—In the essential biliary apparatus, adipose particles form a uniform constituent. In pulmonary phthisis, the ultimate gland-cells of the liver become loaded with fat, in consequence of the impeded respiration and maloxidation of the blood. Under this condition, the cell is arrested in its development, or atrophies, the nucleus shrivels, and the fat particles become lords paramount of the

machinery; or, according to Dr. Williams, the older nuclei burst, and the younger are restrained in their growth. Excess of fat in the liver causes an accumulation of carbon in the blood.

In jaundice, the gland-cells quite disappear, the fat particles and nucleated corpuscles (primitive molecules) being set free. Directly opposite to the cell-phenomena of phthisis are those of fever, where rapid oxidation (arterialization) of the blood occurs, and not only is the liver freed from its decarbonizing function, but its fat all absorbed as fuel for the consuming oxygen. Wherever respiration is sluggish, decarbonization is active, the liver large, and abounding in fat particles—*ex gr.*, fishes, molluscs; where decarbonization is at its minimum, the liver is fatless and small—for example, birds, insects. (p. 26.)

*Granular liver.*—Yellow bile-colour absent; primary molecules, few; adipose particles, normal; "leading to the suspicion," says the author, "that originally, in the chamber of the primitive cell, the adipose is formed independently of the other principles of the bile, though they are subsequently admingled." (p. 28.)

Thus, then, most briefly have been stated the leading facts of cell generation, as elucidating the anatomy, physiology, and pathology of the glands. To be appreciated, the essays in question must be read; they bear convincing testimony to the author's industry and talent—his close, accurate observation, and originality of thought and expression.

King's Hatfield, Essex, March, 1847.

## ON OBSCURE STRANGULATIONS OF THE INTESTINES.

By JAMES MILMAN COLEY, M.D.,
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(*Read before the Westminster Medical Society, April 3rd, 1847.*)

An interesting discussion on this subject having taken place at one of the meetings of this Society at an early part of the present session, I am induced to bring before the notice of the members a case which occurred in my practice at the Western Dispensary, and which appears to me to present some important matter for consideration, and to support the views of those who have ventured to propose, as a last resource, to explore the cavity of the abdomen in the living subject. In inviting discussion, on the present occasion, I am not only desirous of obtaining the opinions of those surgeons, and other practitioners of distinguished talent and extensive experience, who are in the habit of favouring us with their valuable remarks at our meetings, but I wish also to promote that investigation which is requisite to enable us to arrive at a sound judgment, and to afford to the enterprising members of the profession that support and confidence in the exercise of their skill in this obscure and difficult part of surgery, in which, for the sake of science and humanity, it is most desirable that a proper understanding and proper rules of practice should be established. The primary symptoms of strangulated intestine are so well known, that I need not dwell upon them further than to observe that they essentially consist of remitting pain in the abdomen, accompanied with vomiting and constipation, resisting and rendering inefficacious all internal remedies. The symptoms which generally follow, when surgical assistance is omitted, or too long delayed, are those denoting peritonitis—as tenderness of the abdomen, a quick, rapid pulse, and disturbance in the functions of the sensorium, all which are characteristic marks of inflammation of the peritonæum, from whatever cause it may arise, and are therefore not peculiar to strangulation. Our diagnosis may be still further simplified by a careful attention to the special circumstances of the case—as, for instance, when the obstruction in the alimentary canal arises from a long-standing accumulation of solid fæces in the colon, or simple or specific contraction of any portion of the rectum, or of the sigmoid flexure of the former intestine, tenesmus, with or without prolapsus ani, will be present, to which symptoms may be added a distended or tympanitic condition of the large intestines, denoted externally by an obvious prominence of the abdomen preceding the attack. These latter cases may also be frequently distinguished by the great length of time during which the patient may live, when suffering only from obstruction unconnected with strangulation. One of my patients lived under these circumstances thirty-one days, without any discharge from the bowels, and ultimately died with an enormous tympanitic distention of the abdominal parietes, accompanied with hiccough and vomiting of stercoraceous matter.

It being my object to confine my remarks to what is commonly called strangulation of the intestines, I wish it to be understood that I intend to include only such cases as arise from an accidental confinement of a fold, or a small portion of an intestine. I am induced to draw a line of distinction between those diseases which consist of a mechanical obstruction in the alimentary canal, and those which consist of strangulation, as such distinction will be found of much practical importance to the surgeon. In the former, the recovery of the patient commences as soon as the obstruction is removed either by art or nature; in the latter, no extent of evacuation of the intestinal canal can be relied upon for the restoration or safety of the patient, so long as the smallest portion of that tube is allowed to remain in a state of strangulation. This important fact has been repeatedly illustrated by the fatal results which have occasionally followed the application of ligatures, including and strangulating a portion of the rectum, for the cure of hæmorrhoids, the passage through the tube remaining pervious, and permitting the free evacuation of its contents; and I apprehend the Society will admit that it is more especially established by the case I am about to describe:—

Case.—Jan. 18th, 1847. A woman, sixty-five years of age, was admitted a patient of the Western Dispensary, under my care, with violent pain above the umbilicus, which returned at short intervals, and was accompanied with vomiting of a dark-green fluid, an intermitting pulse, cold skin, and other symptoms of collapse. The bowels had been confined three days. Suspecting the existence of strangulated hernia, I examined the abdomen, and discovered a small soft tumour in the right inguinal region, which was moveable, and admitted the fingers and thumb to pass under it. This tumour was free from pain and tenderness, and appeared to consist of condensed cellular membrane or enlarged lymphatic glands, and afforded to the touch no resemblance to hernia; and on pressure being made upon it in different directions, in the manner in which the taxis is commonly applied, no uneasy sensation was experienced, and no advantage obtained. The patient stated that the swelling proceeded, many years ago, from an accident, and that it never receded in any position of the body. It extended about two inches in length, projected half an inch, and was half an inch in diameter; and although viewed at a distance, it presented a resemblance to inguinal hernia, yet on examination, its contents evidently appeared to have no connexion with those of the abdomen.

I prescribed three grains of opium, and ten of chloride of mercury, and afterwards, once in three hours, carbonate and sulphate of magnesia, with infusion of senna.

On the 19th, I found the pain was removed, but the vomiting continued; and as no tenderness nor pain were complained of in the tumour, I concluded the vomiting was prolonged by the opium, and therefore directed the patient to take an ounce of castor oil, and to repeat it, if needful, in the morning.

20th.—Vomiting relieved, and no return of pain; but the bowels continued in a state of constipation.

21st.—The bowels were still unrelieved, and the pain and vomiting returned. I now prescribed two drops of croton oil, to be repeated three times, at intervals of four hours; and as no good effects resulted, I directed a large quantity of gruel to be injected by means of the enema apparatus once in two or three hours, and ten grains of compound extract of colocynth to be taken once in four hours.

From the commencement of the attack to this time the pulse remained at the natural standard, and there was neither tenderness nor distention of the abdomen present; but hiccough commenced to-day, and the patient expressed apprehensions respecting her recovery, and manifested increasing debility after every attack of pain and vomiting. As purgative remedies now afforded no prospect of success, it occurred to me that it would be desirable to explore by dissection the state of the parts beneath the tumour, and therefore I requested the attendance of Mr. Storks, surgeon to the institution, who being engaged in the evening when my messenger reached his house, and being informed by me that the state of the pulse, and the absence of tenderness and tension of the abdomen, indicated no peritonæal inflammation, saw the patient at my request, in company with me, the following morning, when we found her rapidly sinking with fatal collapse, notwithstanding we had the most satisfactory evidence that the bowels had been copiously and properly evacuated by the use of the injections. Mr. Storks, as well as myself, examined the tumour, and we were satisfied that it did not present any obvious marks of hernia; but we were both of opinion, that had the patient not fallen into sudden

and irrecoverable collapse, and had not the obstruction in the bowels been satisfactorily removed, we should have been justified in exploring the tumour, in the hope of discovering and relieving some latent strangulation—a proceeding which ought in all cases to be adopted when a tumour is found in the ordinary situation of a hernia, with symptoms of strangulation, resisting other remedies.

On examining the right inguinal region the day after the death of the patient, which took place a few hours after we had met in consultation, we found the tumour consisted of two enlarged glands, which were of a dark-red colour; and on carefully exploring the upper orifice of the inguinal canal, over which one of them was seated, we discovered the cause of all the symptoms—namely, the incarceration of a very small portion of the circumference of a part of the sigmoid flexure of the colon, which had just entered the canal, leaving the diameter of the intestine but little contracted, and affording sufficient space for the injections and the contents of the colon to pass without any impediment. On viewing the strangulation externally, after the uppermost gland and other superincumbent parts were removed, it appeared like a dark-purple, nipple-shaped tumour, and on inspecting the parts internally, the strangulation was found to consist of the small portion of the intestine to which I have just alluded. The vessels of the strangulated part were much congested, but there was scarcely any vascularity of the peritonæum, and no decided inflammation in any part of that membrane; and so slight was the strangulation, and so entirely free from adhesions, that a very little extension of the intestine made within the abdomen, after the parts had been skilfully exposed by Mr. Storks, enabled me to withdraw the incarcerated portion.

From the opportunities I have had of observing the invariable recovery of patients who have suffered several weeks from mechanical obstructions in the bowels, as from strictures, which have admitted of ultimate recovery, even after extreme tympany, vomiting, and hiccough, have been present, I am inclined to believe that most if not all those cases which occur in persons advanced in life, who, after exhibiting for some days the usual symptoms of strangulated intestine, are relieved by the use of enemata, or other means which only overcome the obstruction, are cases of internal and undiscovered strangulation; as in all such instances as the latter, although the bowels may be completely evacuated, and the urgent symptoms removed, unless the strangulation is discovered, and the incarcerated part liberated by an operation, the patient uniformly dies.

On the 25th of June, 1835, I was requested to visit a gentleman in the country, seventy-two years of age, who was labouring under constipation, pain in the bowels, and vomiting. There were in this patient no external appearances of hernia, and the pulse was slow and intermitting. The disease resisted the internal use of chloride of mercury, colocynth, salts and senna, croton oil, &c., and continued with little variation until the 28th, when hiccough commenced, and the pulse rose to 114, and coma, alternating with confusion of mind, occurred. In this extremity Read's enema apparatus was used repeatedly, and with so much success, that the bowels were plentifully evacuated, and most of the symptoms relieved. The pain, vomiting, and tension of the abdomen, were removed, but the hiccough continued, and on the twenty-second day after the attack the patient died. I could not obtain permission to examine the body.

In the former of these cases, it seems obvious, that had the strangulation been detected and removed by an operation in due time, the life of the patient might have been saved; and in the latter, it appears to me that if the body had been examined after death, some internal strangulation of the intestines would have been found, to account for the fatal collapse which terminated the patient's life, notwithstanding the obstruction in the intestines was removed. The relief afforded by the free discharge from the bowels was in both cases delusive, although, in the present state of our knowledge, I think no practitioner would have been justified in advising or performing gastrotomy, without positive external evidence of strangulation, after a copious evacuation of the bowels, and relief of the principal symptoms, had occurred.

Although most patients afflicted with strangulated hernia, when not operated upon, die from peritonitis, yet when the strangulation is internal, and not obvious, death sometimes seems to be the result of collapse, arising from innervation in the abdominal ganglionic system, rather than from inflammation. In 1805, during my attendance at St. Bartholomew's Hospital, a tall man, about fifty years of age, was admitted an in-patient, with all the usual symptoms of strangulated intestine, but no external appearance of such disease was discoverable. Medicine was of no avail, and after the first three or four days the pain subsided, and the pulse became slow and intermitting; the abdomen was soft and free from tenderness, and the surface of the body was colder than natural, and the extremities presented a blue appearance. This state of collapse continued a fortnight, when the patient died. The primary cause of these extraordinary symptoms was ascertained, after death, to consist of a strangulation of a very small portion of the ileum, occasioned by a false membrane proceeding from the mesentery. The incarcerated part of the intestines was dark-coloured, from extreme congestion of the vessels, but no marks of inflammation in the peritonæum were present.

Internal strangulations, partial or complete, of the intestines, occasioned by bands of organized lymph, are by no means uncommon, and may be suspected to exist when the patient has recently had peritonæal inflammation from any cause. In the *Boston Medical and Surgical Journal* for July 23rd, 1845, Dr. Manlove has recorded a case of this description:—The patient was a boy of colour, seventeen years of age, who had suffered with constipation about twelve days, attended with pain in the abdomen, and fever. The intestinal strangulation resisted all the remedies employed, including the use of enemata, and the disease had advanced so far, that the patient began to experience difficulty of breathing, attended with cold extremities, quick, feeble pulse, anxious countenance, and extreme distention of the abdomen. In consultation, it was decided that gastrotomy offered the only chance of recovery. An incision was accordingly made in the median line, through the parietes of the abdomen, to the extent of four or five inches, beginning about two inches below the umbilicus. The peritonæum was found, at the lower half of the incision, to have formed an adhesion with the intestines, in consequence of previous inflammation, produced by an accident, and in dividing the former, the operator made a small opening, through which the contents of the bowels made their escape. Several other adhesions were felt by the finger, and divided, and the wound was afterwards united by sutures and adhesive plaster, except the portion which communicated with the intestinal aperture, and which was left, for the purpose of establishing a temporary artificial anus. Amendment in all the symptoms soon followed the operation; the artificial opening was nearly closed on the seventeenth day; and the boy ultimately recovered, and discharged the contents of the bowels in the natural manner.

In the same journal a similar case and operation are recorded. The patient was a man of colour, who was supposed to be affiicted with intus-susception, which had defied all remedies. Gastrotomy being decided upon as the last resource, Dr. Wilson, after incising the abdomen, withdrew the intestines until he met with the point of obstruction, which he found to consist of an adhering invagination of one portion of the ileum within another. The adhesions being separated, the intestines were carefully replaced, after which the natural discharges from the alimentary canal took place and the patient rapidly recovered.

In the detail of these cases we are unfortunately not presented with any account of the state of the peritonæum, but I presume that little, if any, inflammation was present. The existence of peritonitis, denoted by a pulse above 100, and tenderness of the abdomen, would, in my opinion, be a decided objection to the operation of opening the abdomen. Otherwise, in the absence of peritonæal inflammation, provided due precaution with respect to temperature and after-treatment is observed, there appears to me to be little or no danger in making a large abdominal incision, nor in exposing and carefully handling the intestines for any necessary purpose. The safety of abdominal incisions has been satisfactorily proved by the great success which has attended the Cæsarian operation on the Continent, where, instead of waiting till symptoms of inflammation or collapse commence, obstetric practitioners, after properly preparing the patient, proceed at once to operate. The same success was found to follow the operation performed by Mr. Knowles, at Birmingham, who, instead of waiting for inflammation or exhaustion, to satisfy the prejudices prevailing in this country, having obtained the consent of the patient, and prepared her for the abdominal section, had the satisfaction of saving the life both of the child and mother; and the safety of large incisions through the peritonæum, when suitable precautions are used, has been amply confirmed by the experience of those who have repeatedly operated for the cure of diseased ovarium. When the operation is undertaken, while the patient is free from peritonitis, there is little danger of that disease resulting; but if it is postponed, as a last resource, and not undertaken until peritonæal

inflammation or collapse has commenced, the patient will be exposed to the risk of incurring a form of inflammation, hepatization, or apoplexy of the lungs, almost peculiar to the shock occasioned by all serious operations performed on those whose vital energies have been previously impaired by severe injury or exhaustion. The incision required for the exploration of the abdomen, in cases of obscure strangulation, need not extend above the umbilicus, and are most safely and conveniently performed in the median line; and I can say, from my own experience, that there is no danger of hæmorrhage from such incision, nor of exciting peritonæal inflammation from a careful exposure and handling of the intestines; as in one instance in which I performed the operation of gastrotomy as a last resource, the patient lived eight days afterwards, and I could discover no trace of inflammation after death in any part of the serous membrane of the abdomen, although the intestines were unavoidably exposed to considerable manipulation.

Chester-square, April, 1847.

## A FEW REMARKS ON THE INHALATION OF ETHER DURING LABOUR.

By THOMAS RADFORD, M.D., Manchester.

The pains of labour in the human subject are considered by some as a penalty inevitably inflicted on woman for transgressing the law of obedience to her Maker, and thereby departing from the state of perfection which she originally inherited; others think her endurance of a greater share of pain during this process than the females of the lower animals suffer, is the consequence of her form and position,—her high prerogative in this respect, "vultus erectus ad sidua;" others again attribute her suffering during parturition as the effect of change from a state of nature to an artificial mode of living.

Whatever is the cause of the anguish which woman bears in discharging her share of the duty imposed on her by the Divine mandate to "increase and multiply," I shall not now attempt to discuss; but in the abstract, I am free to confess, that if parturient pain can be safely and effectually removed, it is a boon of no ordinary value to suffering humanity; and no doubt can exist that it is the duty, and also the object, of every respectable member of our profession, exercising on all occasions, in a high degree, charity and compassion, to seize every opportunity and means which promise to ameliorate or prevent pain.

The pains of childbirth vary in their character and intensity in different women, and also during the several stages of the same labour. The duration of parturition is not equal in all, nor is it alike in the same woman in successive labours. These varieties depend on a number of contingent circumstances which I shall not now consider. The object of etherization is no doubt to lessen the sensibility to pain, and when administered before or during a surgical operation, this question is simple; but when we think of its application in labour, we have a more complicated question to solve. It may be proper to inquire, to which division of labour is this remedy most appropriately applicable? Professor Dubois answers this question, and tells us it is only in the last stage. (THE LANCET, No. 10, March 6th, 1847.) Dr. Simpson says that it will be necessary to determine whether its administration ought ever to be omitted to assuage the agonies "which accompany the termination of natural parturition." (*Monthly Journal of Medical Science*, No. 74.) Are we, then, to understand that the pains of the expulsatory stage of labour are solely to engage or monopolize the anxious attention of the obstetrician, by means, said to be equal, to cancel them or reduce them below zero in the scale of corporal suffering or mental appreciation? and are we thus to allow the first stage to be endured without making a single attempt to assuage the intensity of suffering? Is not the aggregate of pain during the first stage as great as that which occurs in the second? Is there not here more depression, more anxiety and moral anguish? Do we not behold an immediate change in the mind when bearing-pains begin? Hope takes the place of Despair, and then temporary duration of the intervallic pain is immediately followed by a feeling of delight in the prospect of a speedy termination. If these statements are true, why are we directed to confine etherization to the expulsatory stage? Professor Dubois says, that "inhalation of ether can never produce a painless labour from beginning to end; it is to be doubted whether insensibility could be made to last long enough for such a result; and it is more doubtful still whether such a thing could be tried without running positive danger, and without being liable to the charge of guilty temerity." The editor says, "Dr. Simpson states that he had up to that date (March 22) used etherization some forty or fifty times with the most perfect safety and success. We understand that he has kept it up for hours—in one woman four, in another six hours—without the fœtal heart varying more than ten or twelve beats during the whole time, the mothers in both cases recovering perfectly." (*British and Foreign Review*, No. 46, April, 1847.) But labours do not usually terminate in four or six hours, but last from ten to forty hours and upwards. Natural labour has been defined to occupy from twelve to twenty-four hours. Then it is quite obvious that this remedy can never be safely applied throughout the whole course of it. Is labour a natural process? and is it compatible with moral and scientific principles to interfere with the performance of normal functions? Is parturient pain a normal or anormal effect? If the former, why are we to attempt its removal? for it must be intended to answer some good purpose. Dr. Tyler Smith, in his most valuable lecture on this subject, (reported in THE LANCET, No. 13, March 27, 1847,) says that it does so in the latter stage of labour by making a diversion of action, and thereby lessening the hazards of laceration and rupture.

The pain of a surgical operation and that of labour produces very different effects on the system; and indeed no comparison can be made between the two; one is comparatively an abstract question, whilst the other is complex. For a true consideration of the muscular actions, reflex and voluntary, which take place during the entire parturient process, I refer the reader to Dr. Tyler Smith's lecture already cited. The susceptibility of the mind is changed by pregnancy, and on the approach of labour, gloomy forebodings and an anticipation of evil take place; it becomes suspicious of the result, and the woman has frequently an unfavourable opinion of what is done for her relief. So it must be when etherization is proposed, for its expected good cannot be stated to be unaccompanied or unalloyed with probable evil. The moral feelings, already disposed to fear, are likely to be further acted upon by the existing emotion.

We also find the organic system altered by pregnancy and labour: the cerebral, spinal, and ganglionic nervous functions are relatively changed; the vascular system alters; and the natural and animal functions are differently performed. Do we not find in practice that these conditions lead to congestions, effusions, lacerations, convulsions, floodings, and fatal syncope? Have we not frequently to combat serious puerperal diseases, as fevers, effects of loss of blood, inflammations, intestinal irritation, puerperal mania, and paralysis? and are we certain that etherization will not aggravate and even create some of these serious evils? Then, if we cannot altogether subdue parturient pain, and as labour is a natural process, and as we cannot disprove that its attendant pains are not for good, and further, as we know the great dangers which frequently happen both immediately and remotely, I think it the wiser and safer course to endeavour to check a rash attempt to adopt a practice which is attended with so much risk.

Having thus far spoken upon the hazards and irrational use of the inhalation of ether in normal parturition only, I shall now endeavour to show the uncertainty, and indeed also the dangers, of its application in anormal labours.

Our attention shall be first directed to cases in which the forceps are necessary. The assistance of these instruments is required when very different relative circumstances exist. I shall briefly enumerate them: first, when there is a want of power in the uterus; secondly, when the maternal pelvic cavity is lessened by either disease of the bones or the soft parts, or when the head of the child is enlarged, either by excess of development or disease; thirdly, when some serious accident has happened to the mother, such as convulsions, hæmorrhage, rupture of the uterus or vagina, &c.

When the forceps are required in labours now protracted from want of uterine power, we usually find that the first stage has been long and tedious, and the pains extremely harassing to the mind of the woman. A state of irritability and susceptibility of the nervous system is induced, which renders her more subject to all causes which produce anormal effects, either directly during the labour, or remotely in the puerperal state. In the kind of labour now under consideration, one of the effects is obvious enough on the uterus itself —atony; there is little pain, and what does exist is frequently spasmodic; and do we not know that convulsions may occur, and are we not certain that violent and sometimes fatal post-partum hæmorrhages happen—also hour-glass contraction of the uterus? Then, in these cases of tedious labour, what benefit

accrues to the patient by etherization? It is said that it diminishes sensibility and suspends consciousness, from which expression, I infer, is meant a freedom from pain during the introduction of the instruments, which advantage the patient ought to have, without having recourse to this means, as I am convinced, from a long and extensive experience, that the forceps, when judiciously applied, produce little or no pain during their introduction. But I would now pause to inquire whether the etherial insensibility to pain during this operation has not its attendant structural dangers, or, in other words, the woman having the power to feel the infliction of pain, is not a safeguard to her structures. It has fallen to my lot to witness the mischievous consequences after instrumental delivery, such as contusions, lacerations, and perforations of the vagina, os, and cervix uteri. I have known the os and lower part of the cervix uteri untraced along with the head of the child, in the grasp of the forceps. Every practitioner does not possess equal moral and physical qualifications to safely undertake instrumental labour. A question arises, whether etherization, if admitted as an obstetric agent, will not lead to an incautious and premature use of instruments. Do we not know of examples of this kind?

During our instrumental deliveries, we should invariably and unceasingly watch every change that may occur in the condition of our patients, to decide whether we can safely persevere with the operation. How then can we pretend to judge, when the nervous and vascular systems are so decidedly altered by the action of the agent. It is invariably admitted by surgeons, that the inhalation of ether ought not to be had recourse to when cerebral, pulmonary, or cardiac disease exist; and is it not true that these organs are frequently, one or other, from protracted labour, in such a condition as to make it imperative on the obstetrician to exclude its application?

Some further observations on the inhalation of ether in other cases of protracted and impracticable labours, and in those which require the operation of turning, were prepared to appear at this time; but it was afterwards considered better to postpone them. If, however, circumstances occur which demand them, they shall be brought before the profession.

Manchester, April, 1847.

## Reviews.

*Practical Observations on some of the Diseases of the Stomach and Alimentary Canal.* By James Alderson, M.D., F.R.S. London: Longman and Co., 1847. Pp. 208, with coloured engravings.

This work is the production of a mature physician, who, after many years of provincial practice, makes his debut in London, as an aspirant for metropolitan professional fame, the present volume being one of the means chosen for introducing himself to the medical profession. In our comments upon it, we shall be anxious to give a view, as well as a review, of its contents.

While we would not withhold praise where it is due, we must commence with something like censure, as our author's opening sentences seem to us very objectionable, and, indeed, altogether incorrect. He says:—

"It is curious to observe that, at the present time, when scientific pursuits in general are valued only according to the measure of their practical utility, in the study of medicine alone there appears a disposition to theorize. While philosophers are absorbed in the most abstruse inquiries and minute investigations, still the progress of medical science, as regards knowledge of disease, seems scarcely traceable; and though the profession is at present happily adorned by men whose eminent success has been earned by high attainments both in learning and skill, we have, notwithstanding, to regret the infrequency of contributions to that store of observations on the nature and progress of disease, which can alone form the basis of any enlightened system, whether of remedial or palliative treatment."—pp. 1, 2.

The volume consists of two portions, one of which is chiefly occupied with the subject of carcinoma of the stomach, and its appendages; the other, with dyspeptic derangements of this organ: of these, the first is by far the most important. With respect to our objection to Dr. Alderson's commencement, we would deny, in toto, that the present age of medical or surgical investigation is open to the charge of being theoretical. The present generation is rather matter of fact than theoretical. The majority of our writers collect facts as eagerly and blindly as a numismatist collects his medals, or a bibliopole his books. Not that we wish to say a word against fact collectors, but we wish to contend for the due union of fact and theory. A true theory is nothing more or less than a true explication of facts or bodies of facts; theory it is which makes isolated or aggregated facts scientific. A fact by itself is a fact, and nothing more, a very respectable entity, if properly observed and detailed, but when the theory of the fact has been inducted, it becomes of far greater value than when it stood alone. Every fact passing daily before our eyes has its theory, hidden or unfolded; its meaning, in other words its science, and in the advance of knowledge, unexplained facts are constantly being garnered into the store of explained or theorized facts. Theorization is to facts what fertilization is to seeds; or what the architectural design is to the stones which compose an edifice. What was vaccination, but a fact impregnated by a theory? and yet, to say a man is a theorist is sufficient to condemn him; the practical fussily opposes itself to the theoretical, as though theory exerted but a very poor or a very baleful influence upon science. The truth is, hypothesis and speculations have been miscalled theories, and thus, the word and the thing have been brought into disfavour, though they belong to the very highest department of human knowledge. It is generally found, that men who are inclined to be hypothetical and speculative, inveigh most loudly against theory; while none are so theoretical, in the bad or hypothetical sense of the word, as your mere matter-of-fact man, who would be made up of fact, and nothing but fact, and would glorify himself upon his limitation to the a, b, c, of investigation. Dr. Alderson himself, with all his horror of what he terms theory, is constantly disposed to hypothecize upon facts, and that not always in a very excellent fashion, as a few quotations will show.

Dr. Alderson has been detailing a case of what he terms areolar carcinoma of the œsophagus, in which coughing and hasty inspiration had been present, and in which a post-mortem examination showed that the carcinomatous ulceration had extended to the trachea. In his elucidatory remarks, he ventures upon several hypotheses, to explain the mode and intention of the quickened inspiration; and also why the patient died before the fat of the body was exhausted, all of which hypotheses may or may not be true.

"On reviewing the inspection in this case, we can understand why the inspiration was so hurried: it might be a voluntary effort to shorten the period of pain which accompanied the act of inspiration; or it might be that, by passing the air more rapidly by the spot in the trachea where the fissures existed, the air was in some degree preserved from the contamination which it would have suffered by longer contact with the fœtid secretion.

"The communication with the trachea by fissures, and the escape of secretion into the windpipe, fully account for the spasmodic cough with which he was tormented. From the large amount of fat in the body, it would seem as if death had taken place in this case earlier than might have been expected, had some organ less vital than the trachea been encroached upon."—p. 43.

In a case of dysphagia, resembling, in some respects, the difficulty of swallowing in carcinomatous disease of the œsophagus, and which was brought on by swallowing an angular peppermint drop, instant relief was afforded, after a fortnight's illness, by passing a bougie down the œsophagus; Dr. Alderson indulges in the following train of speculation:—

"Can we suppose in this case that the lining membrane of the œsophagus was cut or lacerated by the angular bon-bon, and thus a spasm of the muscular coat of the tube induced, which, until artificially overcome by the introduction of the bougie, the patient had not power to relax? or are we to believe that the difficulty of swallowing was of a purely nervous character altogether, akin to what, for want of a better or more expressive term, is called hysteria. It was quite evident that the obstruction or opposition to swallowing

was not of a structural character. There was no emaciation, and the disease had, according to her own account, apparently run its course, to total obliteration of the passage, in the short space of a fortnight."—pp. 47, 48.

Treating of carcinoma of the pylorus, our author attempts an explanatory hypothesis of the occasional absence of pain and vomiting:—

"These two characteristic symptoms, pain and vomiting, are sometimes, though rarely, wanting. It is difficult to account for the absence of the pain. I can myself find no other probable explanation than the following—viz., that cancerous deposit, without ulceration, has been made in the course of nervous communication between the ulcerated part and the brain: the opposite exemplification of this is apparent when cancer has its seat amongst nervous matter and is ulcerated: here intense pain is the result.

"The absence of vomiting, which is rare in this seat of the disease, admits of the same explanation as I have offered when the curvatures are the seat of carcinoma. The more extensive the disease becomes, the more likely is the act of vomiting to be superseded by mere regurgitation."—pp. 76, 77.

In a subsequent page, a case of cancer without is detailed, in which no such reason as that given above could be entertained. Here Dr. Alderson advances another theory of insensibility.

"The late period of life at which the disease was developed might have some influence in modifying the symptoms; the very small amount of pain was remarkable, and difficult to account for, except from his great age, (seventy-eight.)"—p. 82.

We conclude our remarks of this kind by Dr. Alderson's idea of a speculative diagnosis; if *convictions springing up* could be rested upon, exact symptomatology would soon decline to a very low ebb. The writer is speaking of carcinomatous disease of the abdomen external to the stomach.

"I wish most earnestly that my contribution to the clear history of this disease were more commensurate with the obscurity which envelopes, or the interest which appertains to it. Perhaps it has been felt by other physicians, that, in examining a patient, a conviction respecting the nature of the case springs up in one's own mind which can hardly be imparted to another, as it is not based on any deliberative process of reasoning. In this instance the conviction possibly arises more from knowing what the disease cannot be than from any tangible evidence of what it is."—p. 96.

Before passing to the more grateful part of our task, we must observe on the perfect propriety of attempting deductions from, and speculations upon, matters of fact; it would be next to impossible to write without them; but what we condemn is, the incongruity of abusing speculation, and of then forthwith indulging in it.

The following quotation contains some interesting points: it relates to a case of carcinoma of the cardiac orifice:—

"In this case it is to be observed from the drawing, that the disease is bounded by a distinct line in the œsophagus; and although there may be no great practical utility in determining the precise limit in this direction, since all parts of the œsophagus are obnoxious to carcinoma, still it may be interesting to consider whether alteration of structure at this part may not have determined the boundary to the disease, and placed a check to its progress up the œsophagus. The supposition of disease being bounded by difference in structure, is exemplified in the case of osteosarcoma, which, when it has passed the fibrous periosteum, changes its character, and becomes medullary sarcoma.

"The usual extension of cardiac disease, as far as my own observation goes, is always into the cardiac extremity of the stomach."—pp. 29, 30.

Fifteen cases of carcinoma are detailed with considerable minuteness, and the most important points upon which Dr. Alderson has come to a decision, relate to the secondary appearance of carcinoma, and the spread of the disease from one organ to another. According to his experience, the liver is *never affected* in cardiac disease, while it is *never free* in the pyloric specimens. But we give these matters in the author's own words, as they are well worthy of consideration, and are a fair indication of the style of the work.

"But there is yet another observation which suggests itself in reviewing the foregoing cases of cardiac and œsophageal disease, the truth of which is borne out by all other cases of the kind which I have had to treat—viz., that the liver has never been the subject of secondary deposit of encephaloid matter. This deposit is, on the other hand, found in cases of ulcerated carcinoma of the pylorus, and of the larger curvature of the stomach, as well as in cases of carcinomatous deposit beneath the serous covering of the stomach, and in the pancreas. In all these situations the disease is identical; but when it is found in some particular situations, other organs of the body are affected with secondary deposit of medullary matter; and when it is found in certain other situations, there is no such secondary deposit.

"The disease is undoubtedly constitutional, but it requires time before it can be developed secondarily in other viscera. When passages so absolutely and immediately essential to the support of life as the œsophagus and the cardiac orifice of the stomach are first affected, life cannot be sustained long enough to allow the other organs to become morbidly tainted.

"Another explanation of the fact may be suggested in the case of simple carcinoma with stricture of these parts. When the disease is thus situated, emaciation takes place to a great extent, and very rapidly; and the activity of the absorbents must, during this process, be greatly increased, since the whole, or nearly the whole, supply for the sustenance of life is to be derived from the resources of the body itself: everything which can serve as an element of respiration is therefore removed to compensate for the want of a due supply of nutriment. This state would counteract the deposit of the morbid material."—pp. 50, 51.

In carcinomatous disease of the larger curvature of the stomach, Dr. Alderson has found that "there is always deposit of encephaloid tubercle in the liver."

In another passage the same observation is applied to carcinoma of the pylorus. The observation respecting the state of the gall-bladder cannot fail to strike the reader.

"Ulcerated carcinoma of the pylorus is, as far as my observation goes, always accompanied by encephaloid deposit in the liver. The liver increases in size in consequence of the deposit which takes place in the form of patches or of tubera, varying from the size of a pin's head to that of the doubled fist: the proper structure of the liver between the tubera appears in most cases natural.

"In the later stages of the complaint, tubera, if projecting above the surface of the liver, can be detected by careful examination through the parietes. Pain is not a symptom which guides us in this examination: when the tubera do not project, the liver can often be examined without pain being experienced. Jaundice sometimes accompanies this situation of carcinoma. It arises as a consequence of the extension of irritation along the duodenum to the outlets of the gall-ducts.

"The conjunctiva, which is usually in carcinomatous disease of a pearly whiteness, is the first to mark the presence of bile in the blood, and itching of the skin is often a troublesome attendant; the urine at the same time is charged with bile.

"The gall-bladder is almost always found to contain gall-stones; and I have remarked, that patients who have been the subject of cancer of the pylorus have previously suffered from attacks of gall-stone. The gall-stone generally consists almost wholly of cholesterine.

"The secretion from the kidneys is often clear, and copious, and natural, until the later stages."—pp. 78, 79.

These points are still further drawn out in the chapter on secondary deposit of encephaloid matter in the liver,—

"The gall-bladder is almost always full, and most frequently contains a large gall-stone: the full gall-bladder and presence of gall-stones are chiefly the attendants of the disease in the pylorus. As a consequence of the deposit of tubera, the blood returning through the liver is obstructed, and ascites takes place: this, however, is a very rare occurrence.

"That the liver should be infected with secondary deposit by means of blood returning directly from the stomach, through the portal system, seems a most plausible supposition; but I do not see sufficient grounds for excluding the mode of propagation observed in external cancer when the extension of the disease along the absorbents can be traced.

"There is an apparent objection to the theory of a direct communication through the blood in the following fact—viz.,

that though the cardiac and pyloric orifices are supplied with blood by the same set of vessels, and the return of blood from both is equally by the vena porta, yet I have never seen a case of carcinoma of the cardiac orifice of the stomach, in which encephaloid deposit in the liver has been found.

"It might be urged that there exists a greater similarity of function, a closer physiological union, between the pylorus and the liver; but carcinoma in the larger curvature is accompanied by secondary deposit, which can claim no closer union with the liver than can the cardiac orifice.

"This objection may be met by considering the short period to which life is prolonged, in cases where the disease is primarily set up in the cardiac orifice of the stomach—a period short of that at which secondary deposit takes place.

"The absence of medullary tubera in the liver, in cases of carcinoma of the œsophagus, is also to be referred to the same rapidity of the destructive process, which does not allow time for the secondary deposit. It remains to be taken into consideration, that the great activity of the absorbents, as evidenced by the emaciation, prevents the deposit of foreign matter. The body is thrown on its own resources for nutriment, supply from without being either wholly or in part cut off; every substance, therefore, which is capable of being absorbed, is taken up, in order to prolong existence.

"In regard to the hypothesis of infection by contact, I would refer to case No. 7, in which tubera were developed in the diaphragm corresponding to similar tubera in the liver, the tubera having been vascular, and elevated above the surface, causing considerable friction of the serous membrane. I must, however, observe on this subject, that I have also memoranda and drawings of a case of encephaloid tubera in the lungs, in which the tubera projected half an inch above the surface of the pulmonary pleura, where a considerable amount of friction must have taken place, and yet where no development of tubera occurred in the costal pleura.

"However much we may admit these several modes of propagation of the disease from any particular part, when it is already in an advanced state, it is impossible to lose sight of the fact before stated, that the disease is constitutional, and that, after being primarily set up in the stomach, deposit of carcinomatous matter takes place in the other viscera, in succeeding periods, according as the life of the patient is or is not sufficiently prolonged."—pp. 123—126.

We have so extended our quotations, as to be unable to enter with any fulness upon the consideration of that part of the volume which relates to function. This is the less to be regretted, because it treats of a subject which has again and again, as dyspepsia, been copiously discussed by other writers, while the part of the volume to which we have given our critical attention is less hacknied, and, at the same time, of great pathological practical interest. We could almost wish, indeed, that our author had still further developed the subject of cancer, instead of passing to the functional disorders of the digestive organs. The lengthened quotations we have given will show that we do not appreciate Dr. Alderson's publication the less, on account of our remarks at the head of the present review. We conclude with (morally speaking) an interesting case, in which, from mere whim, caprice, and indulgence in "the luxury of woe," the physician was kept in mere dalliance upon a common ailment for a long series of years, until the scenes of trifling, self-deception, and petting, ended in sombre tragedy.

"On my first residing in the district whence I have lately removed, one of my first patients was a married lady, who had long been a confirmed invalid. I am not in possession of the exact history of her first illness; but it began very shortly after her marriage, and more than ten years before I first attended her. She had at first consulted many practitioners, and been treated for various disorders, especially for structural disease of the stomach and bowels; she had, however, for many years previous to my seeing her, abandoned experiments, and had subsided into the state in which I found her. She remained nearly always in a recumbent position, and was unable to walk or even to hold herself quite upright. It gave her pain to attempt to straighten the limbs, and therefore her sofa was contrived so as to support her with the knees partly drawn up. She was very pallid and thin, and complained of great pain at the pit of the stomach after taking food, in consequence of which she had gradually reduced the quantity until her habitual support consisted in a very small daily portion of light pudding or milk-and-water with a rusk soaked in it. Her bowels were always extremely confined. She suffered very frequently from the pouring off of clear acid water in large quantities from the mouth without vomiting. She also suffered occasionally from very severe pain in the lower part of the abdomen. She had quite made up her mind that she understood the pathology of her own case, and explained it in her own phraseology. She said that there was a small hole between the stomach and the large bowel, through which she felt all her food squeeze gradually, or trickle down into the bowel; the acid water in her mouth she called secretion from her glands, and the pain in her abdomen, cramp in her bladder; she was quite certain that any active aperient would cause her instant death; and she would never venture on more than a single grain of calomel now and then, or a teaspoonful of manufactured Cheltenham salts. On examination there was always a large accumulation to be felt in the colon, and although I was satisfied of the state of that organ being the cause of her derangement, and tried to explain my views to her, I could neither succeed in changing the course of her belief, nor in persuading her to submit to any treatment likely to relieve her. A very small blister at the pit of the stomach, and a round of very trivial remedies, were the utmost she would allow me to prescribe. It is, perhaps, the most remarkable part of this story, that for ten years she continued to send for me at very short intervals, although I was never permitted to afford her any effectual relief, and always steadily risked the loss of her confidence, rather than indulge her own notion of her formidable state of disease. She was carried, during the whole time, from her bed to her sofa in her bent position; and on very fine, sunshiny summer days, took a short drive, the carriage filled with cushions, and going at a gentle pace, and only on the smoothest roads. At length, on one occasion, when her pain was more severe than usual, approaching to an accession of colic, I succeeded in persuading her to let me order her a lavement; having obtained this unusual concession, I took care to order it stimulating and large in quantity: the result proved that the accumulation in the colon had been enormous; after this relief, she improved so much as to be able to walk about her room; but she was still averse to follow up any reasonable plan of treatment. The evidence of one experiment could not upset the fixed idea of twenty years. She knew it was of no use, nor, in one sense, might a restoration to health have added to her happiness. She had called herself a wonder, and her sofa was always the centre of attraction for admiring friends, who regarded her as a model of suffering resignation. She had a kind, gentle word and look for everybody, and would have met with many trials in exchanging these quiet amiable consolations for active duties. At any rate she resumed her sofa and her invalid habits until she was attacked, about a year afterwards, by peritonæal inflammation, the result of accidental exposure to cold. She now resisted all remedial treatment more strongly than ever, being certain that her suffering was only the sequel to her old complaint; a few leeches were all that she would submit to, and she died within the week. A careful examination was made by Mr. R. Craven in my presence, according to the desire which she had frequently expressed. There was no evidence of structural disease in any of the viscera, nor lesion of any kind of long standing. There was evidence of acute peritonæal inflammation, slight effusion in the cavity of the peritonæum, and recent lymph adhering to the convolutions of the intestines. The colon contained a very large quantity of fæculent matter, and was greatly distended. I do not detail this case as anything wonderful or unusual. It is, in fact, the history of hundreds, and owes the chief of its interest to the *dénouement* in the form of a post-mortem examination, which is not often afforded in such cases. There is also a singularly appropriate moral, in that, after having imagined herself to have been so long kept alive by medical treatment, she died at last from the absence of the commonest assistance, which was offered to her, but which she had not faith enough to accept."—pp. 186—191.

What case could tell more effectively than this against popular physic, which tends to make every conceited patient a judge of his or her own case, and opposes the skill of the physician at every step by wilful obstinacy and stupidity? It becomes an ethical question, whether a professional man is justified in continuing in attendance under circumstances such as the above?—whether, when the resources of his Art are thus rejected, it would not be both right and becoming to the dignity of the profession to retire altogether?

# Medical Societies.

## MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 29, 1847.—MR. DENDY, PRESIDENT.

MR. BISHOP, in allusion to the discussion at the last meeting, said, that Trousseau and Baudeloque, in their work on Diseases of the Larynx, recommended the practice of passing a catheter into the larynx, through the glottis, as had been practised by Desault, in cases of œdema glottidis. Relief was sometimes afforded by this proceeding, from pressure, as was supposed, on the soft parts, making the aperture patent; by this means, respiration was enabled to be carried on, and the necessity for tracheotomy was dispensed with.

### ETHER AS A REMEDY IN SPASMODIC DISEASES.

Mr. HEADLAND inquired whether, in cases of obstinate and prolonged laryngismus stridulus, when all the usual means of treatment failed to afford relief, and when it was obvious, that unless some amendment took place the patient must inevitably sink, any benefit was likely to ensue from the inhalation of ether. He threw out this question more as a suggestive hint, than to recommend the treatment, and with the view of hearing the opinions of members on an agent of great power, and one which appeared likely might be of service in spasmodic diseases. In the case to which he had alluded, the little patient was seven months old, the child of parents in the higher station, and in an atmosphere which could not, by possibility, have an effect in prolonging or aggravating the complaint. There was no condition of gums to warrant the opinion that teeth had any influence on the disease, and the secretions were healthy. If the child presented any peculiar aspect, it was that of constitutional debility, a deficiency of power preventing the development of the teeth. The treatment pursued had been of the ordinary character in these cases, attention to the secretions, strict rules regarding diet, (the child being brought up by hand,) and the avoidance of all excitement. The disease, however, had continued to increase in severity, and the little patient had now as many as eight or nine attacks in a day. The nurse was warned of the approach of the convulsion, by an attack of crying. Now, what would be the effect of allowing the child to inhale the vapour of ether, by sprinkling a little of that agent on a towel or handkerchief, and holding it to the mouth and nose? He knew that ether had failed in trismus and tetanus, but he threw out this question for the purpose of eliciting discussion.

Dr. CHOWNE inquired if, in the case related, the convulsion arose from spasm of the glottis, producing difficulty of breathing, or from some other cause. When it arose from such a spasm in the air-passage, the difficulty to the admission of air would bring on convulsion, and, under these circumstances, the administration of the ether would only make the quantity of air inspired less. If, however, the ether acted as an antispasmodic, then the glottis would be opened by its agency, and afford the patient time to respire. It had been found, that in cases of irritable larynx and trachea, there was a difficulty in administering ether. We required further experience to determine the effects of ether generally, but more particularly on infants. He should be fearful of applying it in cases similar to the one detailed.

Mr. HEADLAND said that in his case the convulsions evidently arose from spasm of the muscles of the larynx. What was to arrest that? It was evidently referrible to some disturbance of the pneumogastric nerve; and in this extreme case, all antispasmodics and other remedies had failed of affording relief. He was fully alive to the necessity for caution in such a proceeding, and stated his conviction that ether was at the present time too indiscriminately employed.

Dr. CHOWNE believed that ether did not necessarily produce congestion of the brain; a state of collapse certainly sometimes followed its use, but he had neither observed stertorous breathing nor dilated pupil, though he had heard of the presence of such effects in some cases. In one instance, a man certainly did appear to suffer from fulness of blood in the head after inhaling ether.

Dr. RISDON BENNETT had seen little of ether, but from what he had observed at St. Thomas's Hospital, it would appear, in some cases at least, to resemble in its effects the nitrous oxide, at first producing excitement, followed, as was usual with these agents, by a state of collapse. We were too ignorant, he thought, of the operation of ether at present, to employ it in convulsive diseases. Could we, or could we not, with safety try its effects in convulsive diseases, knowing its tendency occasionally to produce convulsions? It was an important subject, and deserved the attention of the profession.

Dr. CHOWNE had recommended the inhalation of ether in a case of hooping cough, as it had been stated that it had in some instances cut short the disease. It had been inhaled by holding to the nostrils a handkerchief sprinkled with ether.

Dr. BENNETT said that it would be more likely to be useful in hooping cough than in laryngismus stridulus.

Dr. GARROD said that ether might be so exhibited as always to produce excitement. If inhaled from a bag into which ether had been put, it usually produced that state, followed soon by narcotism. Judging from the effects of alcohol on the young of animals, he thought that ether must be used to children with caution.

Mr. BISHOP said that the question before the Society was one of importance. It was difficult to say in the present case what was the source of the irritation which, acting on the pneumogastric nerve, produced the convulsions. Any particles in the atmosphere which might irritate the superior laryngeal nerve were sufficient to produce the effect. Change of air had occasionally been of benefit in these cases; and a warm moist atmosphere was undoubtedly likely to be of service from its preventing anything irritating the mucous membrane of the larynx.

Dr. CLUTTERBUCK considered that one of the greatest advantages which we should derive from the use of ether would be the power we should possess of bringing our remedies more directly to the organs of respiration when in a state of disease than now. Twenty years ago there was a great disposition in the profession to the administration of remedies by inhalation. Dr. Beddoes had found great advantage from the use of carbonic acid and other agents in this way. The plan had been since neglected, though it was undoubtedly the readiest, of carrying our remedies directly to the seat of disease without first sending them through the course of the circulation. He considered that great advantage would arise from the employment of the inhalation of ether and other vapours in affections of the air-passages. He related the case of a lady who had been for years the subject of a distressing catarrhal affection, which was much influenced by weather and other causes, and the attacks of which were often obstinate and difficult of relief. He thought this might be a case in which the inhalation of ether might be of service, and he accordingly directed her to inhale it in the simplest manner, by holding a bottle of ether to the nose, smelling it strongly, and drawing deep inspirations, until she found it affected her. She was usually under its influence in about five or ten minutes. She had pursued this treatment for several days with the greatest advantage. It acted by diminishing the sensibility of the mucous membrane.

### INTERMITTENT FEVER.

Dr. RISDON BENNETT had seen of late more intermittent fever than he had done for twelve years previously. Periodic neuralgia was also very prevalent.

Dr. CHOWNE attributed this to the prevalence lately of easterly winds.

## WESTMINSTER MEDICAL SOCIETY.

APRIL 3, 1847.—JOHN WEBSTER, M.D., F.R.S., PRESIDENT.

### ETHER INHALATION.

Dr. SNOW laid before the Society a small and very neat apparatus for the inhalation of ether. He said, that in consequence of remarks made by some of the members when his late paper was discussed, he had been induced to try to modify his inhaler so that it could be carried in the pocket. By dispensing with the metal pipe that surrounds the larger apparatus, and by substituting flat for spherical valves, he had been able to get this to pack into a round leather case, such as is commonly used for holding cupping glasses. It was made of brass, tinned inside, and was three inches in diameter, and two and a half inches deep. The top unscrewed, and in the interior, and soldered to the top, there was a convoluted tin plate, as in the other inhaler. It was provided with an elastic tube, and with two valves, one balanced with a weight to admit air into the inhaler, and another just behind the mouth-piece, for the exit of the expired air. Instead of the two-way stopcock, there was a ferule to admit external air into the tube, near the mouth-piece, when required. This inhaler was to

be placed in a basin of water like the larger one. He did not intend it to supersede the latter, which was better adapted for exact observations; but, practically, it would answer as well, and had the advantage of great portability. It was made by Mr. Ferguson. The elastic tube and the valves were five-eighths of an inch in internal diameter. He considered it of great importance that all the passages through an inhaler should be at least as wide as the human trachea. Some writers had recommended three-eighths as sufficient. Now, the area of a tube of three-eighths of an inch was to one of five-eighths only as nine is to twenty-five. Many ether inhalers were very faulty, from the deficient size of tubes and apertures, and from offering obstructions by sponges, and if used even without ether, would put a patient in danger from obstructed respiration. In saying this he did not mean to blame any one, for the subject of inhaling with the mouth and nostrils closed was perfectly new. He did not believe that ether would produce illness that would end fatally after two days; and if the fatal case or two related had really resulted from the inhalation, it must have been from deficiency of air, and not from the ether.

### STRANGULATION OF INTESTINE.

Dr. Coley read a paper, which will be found in another column.

In the discussion which ensued, two points mainly occupied the attention of the members: one was, the safety, or otherwise, with which the peritonæal cavity might be opened, and the means we at present possessed of diagnosticating the seat and nature of such obstructions as might appear to call for the knife of the surgeon. It was generally thought that we had had too much dread of opening the abdominal cavity, and that recent operations had undoubtedly given an evidence of this; for, with proper precautions, and under proper circumstances, the operation of ovariotomy had been found no more fatal than the ordinary capital operations of surgery. With respect to our diagnosis of cases of obstruction in the intestinal tube, it was quite clear that we did not at present possess such definite and unequivocal means of knowing the nature of the obstruction as would warrant the surgeon resorting to operation until all the usual means of relief had been employed.

## THE LONDON HOSPITAL MEDICAL SOCIETY.

February 12, 1847.—Mr. Luke in the Chair.

Mr. Brushfield read a case of

### RUPTURE OF THE TENDON OF THE RECTUS FEMORIS, CLOSE TO THE PATELLA.

William ——, aged thirty-seven, a labourer, was admitted an out-patient, under Mr. Curling, on December 16th, 1846.

About four months ago, he fell from a loft to a depth of about fifteen feet, in which fall his left foot first struck the ground, the leg being at the time semiflexed; he immediately felt a severe tensive pain in the left leg, and on closer inquiry, he stated that he also had a slight pain and numbness above the left knee, of which he took but little notice at the time. Notwithstanding the pain, he felt no difficulty in walking; but a short time after the accident, on stepping across a ditch about two feet wide, he felt a very acute pain above the left knee, the leg at the same time "giving way under him," and it was then with very great difficulty that he succeeded in reaching home, "having," he says, "to drag his leg after him." On arriving home, finding the left knee extremely painful, he examined it, and it then appeared very much swelled and inflamed, particularly at the upper part, in which part, however, notwithstanding the swelling, there was a deep transverse indentation; he then went to bed, and the knee soon turned of a dark, livid colour. A medical man was sent for, who applied a long, straight splint to the posterior part of the joint, by means of a bandage, which was ordered to be kept constantly wet with a cold lotion; and, as far as I could learn, an occasional purgative, and the re-adjustment of the splint two or three times, was the treatment adopted. In attempting to walk down stairs, ten days after the accident, he found that he could not rest on the left leg, in consequence of its "giving way under him," although at the time the splint was still retained in its place by the bandage.

After being confined to the house about six weeks, he left off wearing the splint, and then observed a considerable swelling above the indentation, which, however, has decreased in size very much, and also soon afterwards found that if he attempted to flex the limb above a certain angle, he felt a considerable pain on either side of the joint. As soon as he was able to get about, he had made for him a kind of leather pad, placed over the anterior surface of the knee, and attached by straps above and below the joint, by the aid of which he was able to stand and walk about much better. Notwithstanding this, the knee was "constantly giving way," causing him to fall down, and then, to use his own phrase, "it pains him horribly."

On examination, the whole of the left knee, when compared with the right, was very much swelled. The patella was situated much lower than in the natural state; its surface was excessively flat, and appeared to be nearly half as large again as its fellow on the opposite side; the depression nearly always seen on either side of the patella was entirely obliterated. About an inch above the patella, there was a very deep transverse indentation, nearly reaching across the anterior surface of the thigh in that part, appearing much more evident when the limb was extended; and immediately above this, there was a tumour, which had a flattened appearance, and was about the size of the patella itself: he stated, however, that it was not so large as it had been. Flexion and extension were very limited, partly on account of the pain experienced at the time on either side of the joint, the patella during either act being immoveable.

The joint was supported with strips of plaster, and he was then informed, in consequence of the length of time that had elapsed since he had received the injury, it was doubtful whether much could be done to restore the limb to its proper functions. He has not appeared at the hospital since.

To show the comparative rarity of rupture of the rectus, Mr. South, in his Translation of Chelius's Surgery, says, "I have seen one instance of that very rare accident." It seems that in this case the muscle was ruptured an inch or two above the patella, and the upper part of the muscle contracted very much. The treatment consisted in bandaging the upper portion of the thigh, and in the course of a few days, the spasm of the muscle relaxed, and it then united with the lower portion. The patient was well in six weeks.

In the twenty-eighth volume of the *Medical Gazette*, Mr. Grantham relates a case (quoted by South in Chelius's Surgery) where, at the end of six weeks, there was "a very large swelling," in consequence of the rectus femoris being drawn one-third up the thigh. The divided ends of the muscle could not be made to unite.

In the twenty-ninth volume of the *Medical Gazette*, also, Mr. Jones mentions a case, where, on examination, the tendon of the rectus femoris was found ruptured close to the patella. It was treated in the same manner as a fractured patella, and the patient recovered the use of the limb.

Mr. Liston, in one of his lectures, in the first volume of The Lancet, for 1844, says, "I have seen the quadriceps femoris torn across. An old man was carrying a bottle of wine in each hand down to the cellar; both his feet slipped at the same time, and in his efforts to save himself, both the tendons were torn across, close to the insertion of the extensor muscles of the leg. It is seldom that the tendon of the patella is torn."

Dr. Little then read a case of

### INTESTINAL OBSTRUCTION CAUSED BY UNNATURAL ADHESION OF THE APPENDIX CÆCI, AND ITS CONVERSION INTO A SPECIES OF RING, THROUGH WHICH THE ILEUM HAD BECOME INCARCERATED.

I was requested, on the 23rd Jan., to see John E——, aged seventeen, of muscular, well-developed frame, who had passed seven days without evacuation from the bowels. He had of late enjoyed good health, although when thirteen years of age subject to attacks of vertigo, often succeeded by syncope of several minutes' duration. The patient stated, his bowels had been regularly relieved up to the 17th inst.; that on the 18th and 19th he felt very ill, vomited, and had several paroxysms of abdominal pain, for which he took stimulants, anti-spasmodics, and purgatives. On the third day he was bled to sixteen ounces, with temporary relief, but the pains soon returned, compelling him to resort to the prone position, and to apply forcible compression to the abdomen; he then took calomel and opium. During the fifth and sixth days the belly swelled and became exquisitely tender, and he vomited frequently, the paroxysmal pains not having subsided. On the seventh day, the countenance anxious; tongue dry and coated; pulse 100, firm; tensive pains and vomiting as before; urine scanty, high-coloured. Ordered, eighteen leeches to the abdomen; to be followed by a large blister; the blistered surface to be dressed with mercurial ointment, which was rubbed also into

the thighs and arms; calomel, two grains; opium powder, a quarter of a grain, every two hours; warm bath, and to take no more than one or two teaspoonfuls of cold fluid nourishment at a time.

24th.—Relieved in every respect; slept during the night; paroxysms fewer; less tension of the abdomen; sickness better. Repeat leeches, pills, and bath. In the course of the evening he was removed into the hospital, where a similar plan of treatment was adopted.

On the 25th, he presented the following symptoms:—Position supine; knees drawn up; countenance shrunken, collapsed, and expressive of extreme prostration; severe pain in the abdomen, which was greatly distended and tympanitic, the slightest pressure in any part causing increase of suffering; constant vomiting of highly offensive matter resembling liquid fæces in odour and colour; respiration thoracic; tongue brown, dry; pulse small, weak, and frequent. Warm water enemata brought away a small quantity of fæculent matter, resembling but far less offensive than that vomited.

26th.—Pain on pressure and tension of abdomen much less; vomiting continues; pulse small, rapid, intermittent; extremities cold.

27th.—Hiccough; skin bedewed with cold, clammy sweat; extremities cold; pulse scarcely perceptible. Death.

*Post-mortem examination.*—Body well formed; not wasted; abdomen tympanitic; no peritonæal effusion; stomach and intestines distended with gas; duodenum and upper part of jejunum highly congested; lower part of small intestine much darker; the ileum, especially towards its termination, almost black. On the right side, inferiorly, the omentum adhered to the lower part of the ileum, and the adhesion involved the appendix cæci, which encircled and constricted the termination of the ileum, and a fold of the same intestine. The adherent part of the appendix was the point corresponding to the junction of its middle and inferior third. A circular ring, about an inch in diameter was thus formed, and which embraced the above-mentioned parts of the ileum. This portion of ileum was highly inflamed, non-adherent; the stricture, although tight, permitted an additional portion of intestine being drawn through the accidental ring. At the point of connexion of the appendix vermiformis with the omentum and ileum, an abscess of the size of a small walnut existed, the parietes of the abscess, consisting partly of omentum and partly of the proximate portion of the strangulated intestine, and partly by the large intestine, so that it was easy to perceive that had life been longer protracted, suppuration and ulceration might have formed a route for the passage of the contents of the intestine, and a spontaneous cure might have been effected with the sacrifice of the intermediate portion of the tube. The terminal third of the appendix largely distended with puriform fluid, and partly detached by ulceration; the remaining organs perfectly healthy. The diseased parts were exhibited to the Society, and have since been deposited in the museum of the hospital.

Dr. Little remarked that this case exemplified the too common course of intestinal obstruction depending upon incarceration of the gut by abnormal bands of mesentery, or other sources of stricture. The symptoms being at the onset similar to those of colic, inflammation supervening, the contents and secretions of the upper part of the alimentary canal, and of the liver and pancreas, being rejected by the mouth, formation of gas, speedily amounting to tympanitis, these acute symptoms lasting eight or ten days, followed by collapse of twenty-four or thirty-six hours, and death. He thought the case of peculiar interest, as the abscess and ulceration in immediate connexion with the strangulated parts, indicated the mode in which spontaneous cure might sometimes be effected—namely, by the formation of a communication between the parts of the alimentary canal situated above and below the incarceration. Practical observers have long noticed that the most desperate cases of intestinal obstruction, apparently correctly diagnosed to depend upon internal strangulation, do occasionally, to the surprise of the medical attendant, recover, leaving him enabled merely to guess at the mode of resolution. In this particular case recovery might also have ensued by another process. It was remarked at the autopsy, that the stricturing part of the appendix vermiformis was not adherent to the incarcerated intestine, it was even possible to draw out the latter from beyond and beneath the stricturing appendix vermiform. It was also observed that above the point where the appendix was united to omentum and intestine, it was nearly severed by ulceration, rendering a spontaneous separation of the stricture imminent; and as the subjacent fold of ileum was non-adherent, it was evident, that had the cleft in the appendix been complete, the intestine would have been liberated, and might have resumed its functions. The case, he thought, suggested matter for reflection, as to the injury that may possibly result in similar cases from too energetic reduction of inflammation by abstraction of blood and mercurial affection of the system. He admitted the necessity of combatting the inflammation in such cases by usual antiphlogistics; but believed, that if a correct diagnosis of the precise nature of such a stricture could be ascertained, it would be better to refer the patient to the chance of a favourable natural issue by ulceration, and restoration of a passage through the tube. He (Dr. Little) had been unable to trace the previous existence of any peritonitis from which the adhesion of omentum, appendix cæci, and intestine, had resulted. It appeared almost certain, from examination of the diseased parts, that the terminal part of the ileum had long passed through the unnatural ring, and that the additional convolution found incarcerated had passed through the ring at a later period. Even this convolution bore evidence in a considerable narrowing of the gut immediately beneath the stricture, that it was not a stranger in the situation when discovered. The case also afforded an additional illustration of the futility of administering drastic purgatives in cases of obstinate obstipation, with colicky pains, which do not yield to moderate use of purgatives. Reliance should then be placed upon soothing, anodyne, and sedative remedies.

Mr. Adams considered it probable that in this and similar cases the incarcerated intestine had been accustomed to its evil position, but that danger to life only resulted when an accidental change in the state of contents of intestine, ingestion of improper food, or some otherwise trifling derangement of function of the tube, precipitated the fatal disturbance.

Dr. Little afterwards related a case of strangulation of small intestine through abnormal opening in mesentery in a young child, in which the child played as usual, apparently in perfect health, the day before its death. The child, who was an inmate of the Infant Orphan Asylum at Wanstead, attended by Mr. Toulmin, of Hackney, and himself, awoke in pain during the night, speedily collapsed, and sank within seven hours of the apparent time of seizure. He was not aware of any case upon record of death succeeding with so great rapidity to intestinal strangulation.

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Mr. Debert Howell read a

CASE IN WHICH DEATH WAS CAUSED BY EATING RAW RICE.

Maria W——, a servant, aged twenty-two, previously in moderate health, but pale and anæmic, was taken suddenly ill with pain in the chest, while walking out in the evening of December 17th, 1846. At half-past seven, half an hour from the attack, she was suffering severe pain in the left hypochondriac region, attended by great restlessness. Percussion over the region of the stomach was not unusually loud. On inquiry, it proved that she had eaten in the afternoon, before her tea, a tumblerful of raw rice, mixed with milk, which she had been in the habit of eating, as well as arrow-root, sago, &c., in a raw state. The pain evidently arising from distention, caused by swelling of the rice in contact with the tea, and aided by the heat of the body, half a drachm of sulphate of zinc was administered as an emetic, which failing to act, was repeated after twenty minutes. The stomach was then relieved, first of what appeared to be tea and wash, and afterwards, at intervals, of a large quantity of half-swollen rice, equal in bulk to an ordinary dinner-plate, piled; and she felt considerable relief from pain. The stomach-pump was not employed in this case, because it did not appear calculated to relieve the stomach of its half solid contents; in similar cases, however, it might prove useful by favouring the escape of gas. At eleven the following morning the pain increased suddenly, violently, with cold extremities, small feeble pulse, great abdominal tenderness; and she died at four P.M. On examination of the body, extensive peritonæal inflammation presented itself, with deposition of lymph agglutinating the intestines, and a copious effusion of turbid serum into the cavity of the abdomen. The stomach and duodenum were empty, with the exception of a few grains of raw rice at the pylorus, and perfectly free from inflammation. The small intestines were gorged throughout with a quantity of the same raw material that she had been in the habit of eating, apparently rice, arrow-root, &c., some raw and hard, and in parts so distending the intestine as to give the sensation to the fingers of feeling a bag of marbles, and some in a half digested state. The large intestines were loaded with fæces. The heart was small, the lungs healthy. It is remarkable that the stomach was perfectly free from inflammation.

# THE LANCET.

LONDON, SATURDAY, APRIL 10, 1847.


Had we the arms and heads of Briareus, and to each a pen and tongue of power, they would find work enough in denouncing the evils of Quackery—the immorality and crime of the thing itself, and the mischiefs it heaps upon the profession. But being merely mortal, and having but a single pen to wield against this hydra, we are obliged to leave the part of Briareus to our correspondents and the profession. And we are bound to say that this part is well borne by our medical brethren. We are not likely to be "gravelled for lack of matter;" in fact, we are almost overwhelmed with the mass of descriptive details, criminalities, and ill consequences, of quackery, and the misdoings of quacks, which are forwarded to us. So numerous are the tempting points of attack, that oftentimes we are doubtful where to give our hostile preference. It may be useful if, on the present occasion, we present our readers with some slight sketch of the present state of the anti-quackery campaign, as tending to elicit from our friends and correspondents information and support in the right direction.

We believe we may say we have almost destroyed the system of giving testimonials to quack and semi-quack medicines and nostrums, which had been incautiously or improperly practised by medical men—by some thoughtlessly, and by others, from a mere craving after notoriety. We think, too, we have proved that there must be an element of meanness—a want of all nice sense of professional honour—in the medical man who permits his name to be taken falsely for purposes of advertisement by dishonest quacks, thus suffering the public to be duped to its injury, without his interference, and allowing his profession to be stabbed through himself, without raising a hand in its defence. Medical testimonials of recent date are, we fancy, getting uncommon. Many other matters have been accomplished; but above all, we prize the different state of the public medical mind, which has begun to look upon quackery such as it really is,—the great bane of the profession,—to see its ramifications, in things and in acts which passed unnoticed before, and to exhibit men who were formerly torpid and indifferent, as guardians of the honour of the profession. We may point to our pages in proof of this, and we may adduce particular instances. Some of our readers will remember, and no doubt contrast, the different spirit evinced in the valedictory addresses of 1846 and 1847, at the Royal Medical and Chirurgical Society. In the one, the distinguished President fell into the error or forgetfulness of describing a medical sceptic and a mere experimenter on the materia medica and the health of his patients, without comment or censure; but in the other, a less marked offence against medical ethics met with well-merited condemnation. At the London Medical Society, the late session commenced with the reading of a sceptical paper, improper, as we conceive, in its tendency and aims, on a vaunted "New Era in Therapeutics," after the manner of "Young Physic;" but it closed with the able anti-quackery oration of Dr. Golding Bird. In Edinburgh, too, if we have had to denounce the backsliding of Professors Henderson and Gregory, the one to homœopathy, and the other to mesmerism, we have had the satisfaction of observing, that in the recent address of Dr. Hamilton, the President of the Medico-Chirurgical Society of Edinburgh, the most orthodox condemnation of quackery in every shape was made and received with the greatest enthusiasm. Everywhere there is the sign of an *active*, and not, as formerly, a merely *passive*, warfare between the mass of professional men and the various forms of intra and extra professional quackery. The very enormities of quackery itself have ripened the medical mind to the urgent necessity which exists for its suppression. Many years ago, that able physician, Dr. Cowan, of Reading, made a vigorous onslaught on Quackery; but his weapon fell without much effect upon the hide of the monster—a result which presents a marked contrast with the present alertness and response of the profession to our appeals. Not the less, however, are credit and honour justly due to this physician for the attempt he then made; it was sufficient to give him the honourable place of herald and precursor to the sound anti-quackery sentiment which begins to animate all the best men in the profession, and which cannot but end in the elevation of medicine above the dross which has so long clung about her.

We have already commenced the exposure of the system of obtaining practice, or at least publicity, by unprofessional cards, handbills, circulars, puffs, and advertisements, which are degrading to the profession, and which should be left to the quack and to the pretender. Nothing but exposure can reach this evil; and though we regret it, and are willing to believe that it would hardly exist but for the impoverished state of the profession, plundered as it is on all sides; yet as one means of removing this very impoverishment and discredit, we must lay an ungentle hand upon all such productions. We need not say that we mean nothing whatever of a personal kind by this procedure. Those who are exposed must not accuse us of any particular hostility; we aim at the system, not at individuals; and while we strike, we regret the necessity which exists for striking at all. Offenders shall see that we deal our blows high and low, far and near; as much against the more imposing quackery connected with book advertisements, quackish paragraphs, and notices to correspondents, in the daily and weekly newspapers; as against the less pretending, but synonymous, cards and handbills of the letter-box and the kitchen area. There is the same spirit in both, the same craving for notoriety, the same attempt, on the part of audacity and unscrupulousness, to take the place of real merit and professional modesty.

Another important subject, for which we hope soon to find space and time, is a thorough dissection of the whole tissue of Popular Medicine, and popular medical writing. All that is popularity-hunting in medicine tends, by a straight path, to inevitable quackery, and to the degradation of the profession. This idea we shall pursue, in its evil tendencies, from "Paris on Diet," and "Combe on Health," down to the Morisonian system of physic as adapted for popular reading. "Every man his own Esculapius" should be the motto of all the followers of popular medicine; and that it is a most mischievous one we need hardly attempt to prove. If there were not physicians and surgeons who, in their writings, attempt to bring down professional matters to the level of the vulgar comprehension, there would not be that self-sufficient judgment on

medical matters which is so rife among the laity, and which is the pabulum from which every system of quackery finds support. The public is so intimately indoctrinated with popular physic, that every third man is, in his own conceit, quite able to give an opinion upon an abstract point in scientific medicine or surgery. This is one great source of the little respect borne by the public towards the profession. The beginnings and the ends of popular physic are bad; and we shall trace them in their bad features and ill consequences from their fountains with those medical men who pander to the popular taste, down to the broad stream of popular scepticism, disrespect, and assurance in medical matters, which is everywhere met with. We shall show that, as if by a kind of fatality, medical scepticism invades both the teachers and the pupils; the practitioners who minister to, and the mob who delight in, this vicious appetite.

We must also enter more thoroughly than we have yet done into the question of quack and patent medicines. Here there are most important subjects for discussion; questions which must be thoroughly probed before professional ethics can be settled on a proper and wholesome basis. We shall have to treat of the evils which ensue, if medical men testimonialize quack medicines; if they sell quack medicines; if they prescribe quack medicines; or if they become proprietors of quack medicines! On each one of these heads we could adduce offenders against the plainest requirements of professional morals. Many qualified men have testimonialized, or sold, or prescribed, and some have even degraded themselves so far as to be the actual originators and proprietors of quack and patent medicines. Of the simple and honourable duty of qualified medical men upon these points there will not be much difference of opinion. We are fain to hope that the whole system of patent nostrums will be severed from medicine; but the first step to the legal abolition of patent medicines must be the purification of the medical mind on these points. We believe the time will come when it will be deemed almost impossible that the educated medical man could ever have had any connexion with quack medicines, whether as testimonialist, prescriber, salesmen, originator, or proprietor. That he has, and that, too, in no few instances, erred after these fashions, has enormously strengthened the roots of quackery, and rendered its overturn a task of the utmost difficulty.

On both of these questions, popular medicine and patent medicines, the conduct of chemists and druggists, must also be discussed; but we cannot touch them while our own hands are impure. It is well known that the principal druggists, as Savory, Dinneford, Rees, and others, are the authors of treatises on Domestic Medicine. The ethics of such a state of things must be considered, and it will also be for the profession to decide whether druggists ought, with professional tolerance and consent, ever to take out patents for medicinal preparations. The form the question takes is, whether druggists should obtain patents for pharmaceutical elegancies or improvements, most of which originate with the prescriptions of medical men, as their rewards; or whether they should depend for remuneration upon the spontaneous patronage of the profession. Those who look into the future may possibly see that at this very time the profession is, without suspicion, under the names of Jeremie, Battley, Bullock, Squires, and others, fostering a race of patent medicines for a future age in the seemingly scientific solutions, salts, extracts, and preparations, which sound so respectable and orthodox in the ears of the present generation.

Such are some of the points we propose to argue, but they are but a fragmentary portion of the task we see before us. There is the obscene quackery and the swindling quack firms, a monstrous brood, some of whom are wholly unqualified, some of them licentiates of the Apothecaries' Society, some of them members of the College of Surgeons of England, and some of them even members of the London College of Physicians, the last the worst and vilest; there is the battle with the public press respecting the morality of inserting for gain, obscene and notoriously lying advertisements; there is the quackery involved in the public alliance of a medical name with any particular medicament; (matico and Jeffreys, ox-gall and Clay, patent poultices and Markwick, will rise to the recollection of our readers;) the evils of indulging in medical writings, partaking of that mixed cynicism and scepticism which some affect for the sake of popularity or notoriety; the open quackeries and their supporters, hydropathy, homœopathy, and mesmerism; the laxity of medical booksellers in publishing filthy or grossly quack books side by side with standard professional works; the quackeries of specialism, aurists, oculists, and orthopœdists, &c.; the necessity of a power in the different colleges, and the will to exercise it, of expelling gross quacks from these bodies; the discussion of the morality which permits a man to avow himself as a medical sceptic and disbeliever, and yet permits him to prescribe and to take fees;—these and many other important topics crowd the vista before us, and they are each and all intimately connected with the elevation of the profession to its proper rank and dignity. A life, a generation, can hardly hope to see the end and complete success of the sacred cause we are engaged in; but we must labour on, confident in the power of truth and right, well assured that the object is too germane to the honour and interests of the profession ever to be allowed to flag, now that the subject has once been thoroughly begun. We are constantly receiving enthusiastic testimony of a good beginning, and there is the trite but true proverb, "Well begun is half ended."

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The silence of the Hospital Surgeons of London generally, relative to the effects of ether-vapour, has excited much astonishment throughout the profession. The newly-applied agent has now been used in *many hundreds* of cases, in the public institutions of the metropolis, yet no minutely detailed analytical account of the results has yet appeared, for the information and guidance of the profession, from surgeons belonging to the London Hospitals. This is an extraordinary fact. But why such a fact exists, is a problem of difficult solution. The attention which the subject has attracted is one of intense interest. And it is a somewhat remarkable circumstance to notice, that while many operators remain so profoundly and obdurately silent respecting their proceedings with the new therapeutic agent, the number of surgical operations in some of our hospitals has more than *doubled* since the introduction into practice of the use of Ether-Vapour. It is therefore high time that the profession should be put in possession of authentic information relative to the action of a remedy which has already produced such an unparalleled

influence on the practice of surgery in this country. Mr. Brookes, one of the Surgeons of the Cheltenham General Hospital, has, with laudable zeal, published an account of a number of cases which had appeared in the medical periodicals. But the value of the report made by Mr. Brookes is much lessened by the omission of a statement of those *details*, which alone could enable the profession to form an accurate, and therefore a satisfactory, judgment on the whole question. The most full and ample particulars are required for such a purpose. This is no case for ignorant prejudice, wild speculation, or baseless hypothesis. It is a subject in which *experience* will correctly guide the judgment to a true and faithful decision. The bearings of the question must be settled by facts, and not by idle doubts and surmises. If the Ether-Vapour can be safely used for the prevention of pain when the knife of the surgeon is necessarily at work in the human body, such a great scientific fact cannot be too quickly established on evidence which shall defy both doubt and disputation. On the other hand, if the newly employed agent be one of a dangerous character, or if the results of the use of it be unsatisfactory, why should the truth be concealed? It is due to the feelings of the unhappy persons who have to submit to the hard doom of becoming the subjects of surgical operations that no information regarding the effects of such a medicine as Ether-Vapour should be any longer withheld. The time has indeed arrived when "the whole truth, and nothing but the truth," must be known. With a view to the accomplishment of such an important object, Mr. Wakley, jun., one of the surgeons of the Royal Free Hospital, has addressed the following note and blank form to the surgeons of all the metropolitan and country hospitals. That gentleman has also expressed a hope to us that every surgeon, whether he be engaged in public or private practice, who has operated on patients under the influence of ether-vapour, or who has even been present at such operations, and is acquainted with the results of the cases, will consider that the blank form is addressed to *him*. Mr. Wakley, jun., states that it is his earnest desire to obtain the fullest and most accurate information on the subject, and to submit it without delay to the judgment of his professional brethren. It is quite right that this labour should be undertaken by a junior member of the profession, who has time and energy at his command.

(*Circular Note.*)

Sir,—As I am very desirous of obtaining strictly accurate evidence respecting the employment of Ether-Vapour in the practice of Surgery, I venture to trespass on your attention, with the request that you will supply, in the accompanying form, such information as you may possess on the subject, and return your report to me at your earliest convenience. If you should be disinclined to have your name published, be kind enough to notify the objection on the face of your report. Trusting that you will pardon the liberty I have thus taken, I have the honour to be, Sir, your very obedient servant,

Thomas Wakley, Jun.
One of the Surgeons of the Royal Free Hospital, London.

Bedford-street, Strand, London, April 30th, 1847.

P.S.—I shall, with great pleasure, forward the blank form to all medical practitioners who may so far approve of my object as to apply for it.

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Reports of Operations in Surgery performed under the influence of Ether-Vapour.

*By ..... Surgeon, residing at ..... one of the Surgeons of the .....*

1. Name and description of patient.
2. Sex.
3. Age and occupation.
4. Nature of case.
5. Duration of operation.
6. Apparatus employed.*
7. Kind of ether, and its specific gravity.
8. Temperature of body and room.
9. How soon effects were manifested.
10. First effects noticed.†
11. Order of succession of effects.
12. State of pulse.
13. Colour of complexion, and loss of blood.
14. State of pupils.
15. Return of consciousness or other suspended powers.
16. Remarks of patient during and after operation.
17. After symptoms and progress.
18. Result.
19. Remarks.

* Be kind enough to note, under the above heads,—the diameter of the air-passages of the instrument, particularly of the valves. By what means the nostrils were closed. Was air admitted after the vapour had passed the reservoir?

† Loss of sensibility to pain; of voluntary motion; of mental consciousness.

N.B.—When notes of cases have not been kept, it is hoped that surgeons will state the *number* of times they have operated, and the *results;* and also any other particulars they may remember.

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## AN APPEAL
TO THE
## MEDICAL PROFESSION ON BEHALF OF THE "GENERAL MEDICAL ANNUITY FUND."

Gentlemen,—The project for establishing a "General Medical Annuity Fund," for disabled members of the profession, and for widows and orphans, has now been nearly two years before the public. It is true, that in the first instance it was designed to form an integral part of the affairs of the "Provincial Medical and Surgical Association," but the meeting at Norwich having decided that it should stand alone, a separate and distinct institution from that body, it now becomes necessary to reorganize it, and give its independent existence that permanence and stability which its value and importance demands.

The unexpected decision of the Norwich meeting somewhat staggered me, for I had previously felt I was acting under the auspices of the Provincial Association, and that many members of that important body had not only lent their powerful names to the institution, but had aided its advancement by donations and subscriptions. Still, though I was staggered, I was not paralyzed in my energies, nor disheartened as to the final accomplishment of the project, even though it stood alone; for that which possesses in itself an intrinsic virtue, seldom requires foreign aid to sustain it. The human heart, although corrupted by selfishness, and deadened by apathy, has many soft and gentle impulses, which need but the right stimulus to excite into activity, and when excited, a freshness and beauty is given to character, superior to renovated bodily vigour, after the wastings of disease; for "true philanthropy is health of soul."

Although the motives which have impelled me in all I have done in this matter are open to God, and, I trust, unimpeached by man, I have, nevertheless, felt a delicacy in obtruding myself,—an unwillingness to seem too prominent,—a desire that that which was of general interest to the profession should find amongst its ranks others who would step forward, and bear with me the heat and the toil. I thought, if the project was worthy of support, the acknowledged talent of an enlightened profession like ours would be employed in its behalf, and expected, ere this, to have found many advocates; nor have I been altogether disappointed. Mr. Kelson, of Sevenoaks, Kent, has furnished to the *Provincial Journal* a letter, which evinces an enthusiasm worthy his benevolent spirit, and an activity, in a pecuniary point of view, which is an unequivocal earnest of his sincerity. If every county in the kingdom would produce a spirit like his, the prosperity of the institution could not be problematical. My thanks are likewise due to those gentlemen who honoured me with an answer to a circular, published a few weeks back. They have with much kindness encouraged my efforts,—expressed a confidence which is cheering, and, moreover, have promised active coöperation, so soon as they shall be put into a position to become active. This latter promise is more congenial and satisfactory to my mind than all the compliments they have been good enough to pay me, for I feel that counsel and help

are essential. It is a gigantic establishment which is contemplated,—a vast Institution, comprehending in its grasp a huge tract of territory, and having for its object a diffusive spirit of benevolence. I therefore trust that many of these gentlemen will give to us their personal presence, at the forthcoming meeting at Northampton; it is worth while, in such a cause, to make some sacrifice. I am informed, both by the public press and by private letters, that the "General Medical Annuity Fund" has many well-wishers, who are at present unknown as its supporters. These gentlemen are in abeyance, waiting the further development of the scheme, and its final establishment, ere they give to it their countenance and support. To such I would remark, "If you think well of the scheme, why hesitate to support it? Your help is most needed *now*, in the early stages of its establishment, when your opinions and your counsel might lead to valuable results. The growth of a tree depends upon the planting: if the labourers fail to loosen the earth, to arrange the fibres, to seek congenial soil and proper locality,—if they neglect to watch and water it, to shelter it from the rude blast, and sustain its delicate and yielding form from the rough winds which blow upon it, the chances are that it perishes; but if, on the contrary, they combine their powers and unite their skill, in all that may be necessary for its sustenance, then shall it take deep root in the earth, rear its majestic form, thicken its bole, and spread around its branches, while its impervious foliage shall shelter from heat and storm, and beneath which they may repose in calm security.

To advance the interests of medical science is a duty we all owe both to the public and ourselves. To watch over the political movements which bear upon our profession, more particularly at a time like the present, so rife with such movements, is equally important. But let not the claims of philanthropy and benevolence be lost in the struggle. Let their still small voice be heard; they speak to the heart, and it should feel it. In this age of general improvement, when the spirit of amelioration is abroad, and societies are established to meet the contingencies of disease and death, and the calamities which accompany such visitations—when the artisan, the mechanic, nay, the agricultural labourer, have combined to furnish help to their distressed brother, and to the bereaved families of their departed fellow-workmen,—can it be endured that we, who claim for ourselves the advantages of education, the privilege of expanded minds, the influence of moral and religious feelings, and in some measure the pride of clanship—can it be endured, that in pure benevolence and nobleness of spirit we should be outdone by these? Does the cause of the widow and orphan require either eloquence or talent to plead with enlightened men? Is not the certainty of their fallen condition, when shrouded with poverty and neglect—oftentimes their utter helplessness, their agony, their privations—eloquence itself? Cannot imagination picture how forlorn and miserable must be that object who, having once enjoyed ease, comfort, and competency, is, from no fault of her own, but from the dispensations of Heaven, thrust from her home and her pleasures to toil for bread, to sink into dependence, or to have her weekly dole from the hands of a parish functionary? It is rank hypocrisy to put a prayer to Almighty God in the venerable ritual of our church, asking Him "to defend the fatherless children and widows," while we refuse a small mite from our resources to make the prayer effectual, as far as human means can make it.

The difficulties under which many worthy and intelligent practitioners labour, in a pecuniary point of view, render assurance upon their lives often impossible; but admit that a prudent and careful man has paid from his yearly income sufficient to guarantee to his widow a thousand pounds. Now, what is the interest she will receive from this amount? Unless she adopts some speculative mode of investment, (which is always dangerous,) or to obtain large interest, gets security, uncertain as to punctuality of payment, her income from the ordinary funds of the country will scarcely afford a very humble maintenance for herself; but if she have a family, it is obvious she must herself labour to obtain any respectable position, and it may be she is utterly unqualified for such labour. The capital must not be touched, for that capital is designed for ulterior purposes, to place her children in suitable situations, and to enable them in the end to embark in business on their own account. Now, to meet such cases is the great object and design of the directors of the "General Medical Annuity Fund." An annuity, accruing from such a coöperative institution, would place the widow in a position of comparative independence; but when the average calculation of mortality amongst medical men, as proved by statistical returns, is compared with other professions, the lowest on the scale, the inference is fair that many die before they can have had time to make provision of any kind.

Take the following fact as an example:—"A young physician, respected for his general demeanour, and honoured for his talents, possessing public appointments, with every prospect of obtaining extensive practice, died, after a short illness, (a few minutes only,) at the early age of thirty-six, leaving a widow and five children totally unprovided for." I quote this passage from my esteemed correspondent, to show that I have not drawn my pictures from imagination, but trusted the detail of facts.

The proposition for a "General Medical Annuity Fund" has occupied the consideration of wiser heads than mine. Dr. Percival, in his "Medical Ethics," more than forty years ago, threw out the suggestion, but no one appeared to act upon it. I have quoted the passage in former communications to medical periodicals, but it will bear reiteration:—"In the county of Norfolk, and in the city of London, benevolent institutions have been lately formed for providing funds to relieve the widows and children of apothecaries, and occasionally also members of the profession who become indigent. Such schemes merit the sanction and encouragement of every liberal physician and surgeon, and were they extended, their usefulness would be greatly increased, and their permanency almost with certainty secured. Medical subscribers from every part of Great Britain should be admitted if they offer satisfactory testimonials of their qualifications. One comprehensive establishment seems to be more eligible than many on a smaller scale, for it would be conducted with superior dignity, regularity, and efficiency; with fewer obstacles from interest, prejudice, or rivalship; with considerable saving in the aggregate of time, trouble, and expense; with more accuracy in the calculations relative to its fund; and, consequently, with the utmost practicable extension of its dividends."*

Some gentlemen have thought a guinea a year subscription would be inadequate to accomplish the object we design. It is scarcely necessary to enter again into this question, for I have met it on many occasions. A guinea a year subscription *will* enable us to fulfil the engagements to which we pledged ourselves;† and should the institution meet with the patronage it deserves, it will do much more, because the liberal and the kind-hearted of the profession will not confine themselves in their philanthropy—we have already had examples of this fact; nor will the public, when it is properly represented to them, withhold their assistance in furthering so exemplary an object. If our anticipations in these particulars be realized, we may fairly hold out the prospect of better annuities.

It has been stated, too, publicly, that there is an objection in sending money to Northampton, and that making application for annuities there would be inconvenient; but what is the consequence of locality to a "General Medical Annuity Fund," provided the parties who controlled it are men of integrity and honour, and provided the representative system was fully carried out? It will be our great aim to neutralize all objections of this nature. When the project was first mooted, it was done at the annual meeting of the Provincial Association, held at Sheffield; it was received there without a dissenting voice, and a committee for carrying out the scheme was appointed upon the spot. The retiring president of that Association, Dr. Robertson, of Northampton, kindly accepted the office of treasurer, while the directors were all gentlemen chosen for their high standing in the profession, and their known integrity. For my own part, I took the office of honorary managing director, only as an earnest of my zeal, devoting to the cause my time and the small measure of ability I might possess—being, in short, willing to "spend and be spent" in the noble undertaking. But the institution is now a citizen of the empire, and is ready to take up its abode where it has the best chance of support. I am willing at any moment to yield the feeble protection I have given it to any more efficient guardianship; nor do I believe an objection would be raised by my colleagues to placing it in a position of greater advantage than we may possess. Our object is the final establishment of the "Fund," and we care not who are the parties who shall develop its energies, and spread abroad its usefulness.

The medical profession throughout the kingdom are especially invited to the consideration of this subject. Honorary local secretaries are required in the different counties and districts for furthering the scheme, and we shall esteem it an especial favour if gentlemen will accept the office voluntarily,—that is, will offer their services, rather than wait for an ap-

* Medical Ethics, p. 359. Edition 1827.

† See A ss, &c., published by Churchill, p. 9.

plication. Oh! let them remember the greatness of the cause, and the glory of its achievement, and methinks they will not lack in their zeal.

In the early part of the spring, a meeting of the subscribers will be held at Northampton, of which due notice will be given by advertisement in this journal. In these times of rapid travelling, when railway communications puts distance at defiance, we earnestly hope that many gentlemen will sacrifice to us their time and services on this interesting occasion. A noble superstructure is about to be raised, the foundations of which are love, in its best and purest acceptation, while its hallowed cement is cöoperative philanthropy, upon which the blessing of God shall rest, for God will not withhold his blessing when men "hear the cry of the orphan, and wipe tears from the widow's eyes."

Gentlemen who are desirous to be present at this meeting will confer a favour if they will apprize either Dr. Robertson or myself of their intention.—I have the honour to be, Gentlemen, your obedient servant,

EDWARD DANIELL, Managing Director.

Newport Pagnell, Bucks, March, 1847.

## Correspondence.

### REMARKS ON THE LATE CASE OF CÆSARIAN OPERATION, PERFORMED AT ST. BARTHOLOMEW'S HOSPITAL.

*To the Editor of* THE LANCET.

SIR,—There are no cases of difficult parturition the treatment of which has been more clearly defined by the systematic writers of this country, than those in which the pelvis is distorted. In cases of pregnancy with extreme distention, where it is impossible for a child of seven months to pass through the pelvis, or be dragged, with safety to the mother, with the crotchet, after the perforator has been employed, it is now almost universally admitted by English accoucheurs that it is justifiable to induce abortion, or premature labour, in the fifth month, or even at an earlier period of a first pregnancy. Where the pelvis is distorted in a slighter degree, and there is the smallest hope of a living child passing at the seventh month, it is LOW the general rule of practice established in this country, to induce premature labour at the end of the seventh month, or a little later, and not to allow the gestation to proceed to the full period, when the child's life would certainly be forfeited, and the structures of the mother exposed to the risk of contusion by the operation of craniotomy.

In the last number of your journal, I pointed out the great impropriety of the practice adopted by Dr. Simpson at Edinburgh, in a case of extreme distortion of the pelvis, the long forceps having been employed in the woman's first labour; and in the second, the operation of turning, after she had been stupified and rendered insensible by the inhalation of ether-vapour. A departure from the established rules of practice, in cases of labour with great distortion of the pelvis, was also exhibited in the late fatal Cæsarian operation performed by Mr. Skey, which, it appears to me, requires, equally with the case at Edinburgh, to be pointed out to the profession, and condemned.

The case is thus related in THE LANCET of Feb. 6th, 1847:—"The patient, Sarah B——, first consulted Mr. Jolin, surgeon, of Coppice-row, Clerkenwell, on the 3rd of October. She was much deformed, being four feet one inch in height only, and in her thirty-eighth year. Mr. Jolin promptly detected pregnancy, and became alive to the whole extent of her calamitous situation. It was plain that no child could be propelled through the pelvis, the antero-posterior diameter being only one inch and one-third, and evident that no resource remained but the Cæsarian section. Mr. Jolin lost no time in holding a consultation with Mr. Skey, and the patient was admitted into St. Bartholomew's Hospital, under the care of the latter gentleman. Here, Dr. Rigby, Dr. Protheroe Smith, and Dr. Ferguson, saw the patient, and confirmed the views of Mr. Jolin in every particular."

After remaining two months in the hospital, the operation was performed, and she died thirty-six hours after. The history of the patient before entering the hospital is thus narrated:—"It will be interesting to give some particulars respecting the patient before she was admitted into the hospital, and also respecting the state of her mind subsequent to the operation. When she first consulted Mr. Jolin, on the 3rd Oct. 1846, she complained of pains and swelling in the abdomen, and told him she had been for five months a patient of the Finsbury Dispensary, but had received no benefit from treatment. Upon being questioned respecting the catamenia, she said she had ceased for near six months. Mr. Jolin proposed seing her in bed, at her house, before he would undertake to treat her. On the 7th, Mr. Jolin saw her in bed, in the presence of her landlady. Mr. Jolin listened with the stethoscope, and distinctly heard the fœtal circulation, proving that it was neither a tumour nor dropsy, as she had affected to fear. As she was nervous, a nervine tonic was sent, and she was to call on Mr. Jolin on the 10th, to let him know how she was going on. She reported herself much better, and had slept well, which she had not done for some length of time. She wished to continue her medicine, but was taxed with being pregnant, which at first she denied. Mr. Jolin impressed upon her mind the necessity of his examining her once more, and that the examination should be per vaginam, in order to ascertain if she could give birth to a child, knowing from her external appearance that she was very much deformed. She was some days before she would consent; but on the 23rd, she was examined, and at once told that an operation would be absolutely necessary. Mr. Jolin proposed, if she submitted to the operation, that she should go into St. Bartholomew's Hospital, and advised her to place herself under Mr. Skey to perform the operation. She readily consented, and wished to be admitted as soon as possible."

From the preceding history, it appears that this unfortunate woman was positively ascertained to be pregnant on the 7th of October, 1846, when the catamenia "had ceased for near six months"—when she was, in fact, only about six months pregnant. On the 23rd of October, "she was examined, and at once told that an operation would be necessary"—the Cæsarian operation. On the 5th of November, she was admitted, and remained during the rest of the month of November, the whole of December, and till the 26th of January, when the operation was performed, with the usual fatal result. In the whole history of the case, there is no allusion made to the propriety of inducing premature labour; and it may be inferred, from the total silence on the subject, that the question was never discussed by those under whose care she was placed. Why it was never mooted, does not appear, though a more favourable case apparently never presented itself for bringing on labour at the end of the sixth month of pregnancy, and thus avoiding all the dangers of craniotomy at the full period of the Cæsarian section. It is true, the distance between the base of the sacrum and symphisis pubis did not exceed one inch and one-third, but the whole brim of the pelvis was not so greatly distorted, and there was abundance of room in the sides of the pelvic brim, if not for the head to pass after craniotomy at the full period, to allow of the head of a fœtus of six months, after being perforated, to be extracted with ease and with safety.—I am, Sir, your obedient servant,

April, 1847. SPECTATOR.

### ETHER-VAPOUR AND OXYGEN.

*To the Editor of* THE LANCET.

SIR,—As my second paper on ether-vapour will not be ready for the ensuing week, may I beg the favour of you to state that the use of oxygen to remove the effects of ether-vapour was known to, practised and recommended by, the American discoverers. Mr. Robinson has published a book on the subject—why did he omit this fact? or why not state it in his note published in THE LANCET of last week?—Your obedient servant,

JOHN GARDNER.

Mortimer-street, April, 1847.

### POSTSCRIPT TO DR. MARSHALL HALL'S NOTE.*

I WILL conclude this note with a remark on the action of strychnine, as ascertained in a recent series of experiments, and on the morbid actions in tetanus and hydrophobia. The tetanic spasms in the frog affected with strychnine are ALL *excited, reflex actions!* Avoid excitement absolutely, and the frog remains without spasm, and duly recovers. Repeat the excitement continually, (the spinal marrow being divided, in this case, near the occiput,) and the frog, which, left alone, would survive eight and forty hours, dies in three minutes!

We learn, from these results, what modes of proceeding afford the greatest *hope* of treating with success tetanus and even hydrophobia; and what course will as infallibly destroy our patient.

So much for the inestimable value of *experiment!*

I will add one or two interesting facts, to show the direction of my present inquiries. An aqueous solution of

* This PS. arrived too late to be added, as it was intended, to Dr. M. Hall's note in our number of last week.—ED. L.

opium induces tetanus in the frog, (the tincture, paralyzes.) It was an interesting question to determine on *which* of the principles of opium this effect depends. I tried morphia and narcotine. The former induces stupor, the latter tetanus—but a tetanus of a peculiar kind. It is attended by arrestation of the respiration: this, after a time, leads to a paroxysm, and it eventually leads to fatal asphyxia. Of two toads equally affected with tetanus, one by strychnine, the other by narcotine, the former recovers, the latter dies!

A wide field is open for inquiry.

## REFORM OF THE LAWS RELATING TO MEDICINE.

*To the Editor of* THE LANCET.

SIR,—Truth is like a diamond: it is sure to sparkle when either accident or design obtains for it a right position. Every persevering and unflinching effort, then, should be made to rescue truth from obscurity, to obtain for it its right position, and to render its beauty so prominent that he who runs may read. On the other hand, is it not the bounden duty of every well-principled mind to uproot the far-spreading vice of imposition—to offer a barrier to the promulgation of lies—and to protect, as much as possible, the poor, the ignorant, and the thoughtless! Such, it appears to me, should be the ultimate object of all rational legislation; and I trust vigorous attempts will soon be made to ensure a full development of these righteous principles.

To no profession or calling will these observations apply more forcibly than that of the practice of medicine. If the public health be worthy of the serious consideration of Parliament,—if it should prove that this honourable body have agreed to discuss the innumerable causes of disease and death, with the sincere desire of furnishing a remedy,—I cannot but think that the illegal practice of the medical art must necessarily claim a large share of its undivided attention. Sanitary regulations will prove but futile, if Parliament permit the people, as at present, to be drugged to death by persons who know nothing whatever of the structure of the human frame, and whose presumption only equals their ignorance. Sanitary laws will be of little avail, if patent medicines and advertising quacks, like a destructive pestilence, be suffered to work their insidious, depopulating mischief. Common sense tells us, as plainly as possible, that he alone is fitted to prescribe and administer a dose of medicine who has, by industrious dissection, acquired a thorough knowledge of every part of the human body; and that he who lacks this knowledge should be strictly prohibited from practising in any department. Common sense would quickly consign that man to a prison who should be found driving a locomotive without having obtained competent knowledge. Common sense would justly make his employers pay for the mischief he would undoubtedly commit. And is life on a railway, or anywhere else, different from life in a palace or a cottage? If it be worth preserving in the one case, and demand education and knowledge in those to whom it is entrusted, does it not also in the other? Shall ignorance alone be allowed to pursue its wanton, tortuous course, as illustrated by the daring of a medical impostor? In the name of all that is just, let the protection of life be our principle aim; and let those who would rashly destroy it meet with befitting punishment. Can it be necessary, in the nineteenth century, to have to plead a truth so self-evident in terms like these?

But what do we see daily, and what is the extent of the mortality caused by reckless empiricism? Men who cannot even write their names,—men who never saw the interior of a human body in their lives,—men who do not possess the slightest glimmering of the inroads of disease, are, at this hour, suffered, without impediment, to dupe the mass, and bring unexampled discredit on the whole profession. Lamentable, indeed, is this galling fact; and if I may be permitted to trace the dealings of illiterate quacks in health and life, the picture deepens in gloom, and death, in most instances, closes the melancholy scene. Even they who have acquired some knowledge of drugs are, nevertheless, totally incompetent to prescribe, because they equally lack that anatomical information which is indispensnble to the scientific practice of medicine. Among this category, therefore, must be classed all druggists. As has been observed in another place,—"The druggist may know, and well too, the taste and smell of every article used in medicine, and he may know the doses in which it is usual to administer each; but what does he know of disease? The druggist may know how to make tinctures, extracts, and mixtures; but what does he know of disease? The druggist may know how to make pills, lotions, and ointments; but what does he know of disease? The druggist may know how to sell plasters, pickles, and paint; but what does he know of disease? The druggist may keep and dispense the heterogeneous compounds of quacks; but, we ask again, what does he know of anatomy, surgery, physic, or disease? Need we dwell a moment longer on a subject so self-apparent as this? Need we adduce anything further to convince you that the prescribing druggist is neither more nor less than a quack?" Can this man, then, have information sufficient? Should he be silently permitted to practise, on his own responsibility, and with the little knowledge he has, the principles of medicine? Surely not. The eye, the ear, the brain, the heart, the lungs; indeed, every individual organ in the poor man, is just as valuable and complicated as it is in the rich. There is no difference. Then should not the same knowledge be brought to bear on the diseases of the poor as on those of the rich? Are the poor fit only to be first starved, and then duped and preyed upon by advertising quacks? Such seems to be the wretched notion!

We must implore parliament to give ear to the reiterated expostulations which have, from time to time, been seriously urged; and, whenever these matters shall be discussed, to take a generous and searching view of the whole subject. The medical profession have patiently borne many inroads and many indignities, and it seems difficult for them to obtain redress. But though such a measure has been long delayed, it is to be hoped, that when it is granted, it will only prove more comprehensive, more enlightened, and more just; and that it will place the profession on such a basis as its importance and utility demand. Above all, I humbly pray that parliament will give a stern but salutary check to the practice of medicine by uneducated persons, and that it will throw a shield of protection over that large mass which becomes the easy prey of the unscrupulous and presumptuous quack. Let not, again, the demoralizing tendency of obscene advertisements escape its serious attention. Let it contemplate the amount of evil, and the effects of those prurient promptings, which are hourly disseminated among tender and yet unformed minds, and then let it determine whether this dreadful system shall be longer permitted to encourage and uphold vice.—I am, Sir, your obedient servant,

Halifax, March, 1847. FREDERICK SMITH GARLICK, M.R.C.S.

## EXPERIMENTS ON THE EFFECTS OF ETHER IN THE HORSE.

*To the Editor of* THE LANCET.

SIR,—The new and important discovery of the effects of ether, when the vapour is inhaled in sufficient volume and of sufficient density to render the nervous system not susceptible of painful impression, and that animal life may be kept under its influence for a very considerable period, without destroying the vital energy, seems now to be so well established, that to doubt the fact would be bordering on folly; but not so is the doubt as to the risks to be run in its administration, or in its after consequences.

It is not for the purpose of in any way throwing difficulty in the way of the progress of the discovery, or of bringing it into disuse or disfavour, that the results of the following experiments are related, but for the purpose of warning others, and perhaps thinking of guarding against the recurrance of untoward consequences.

We must own, that the results of our observations have been peculiarly unfortunate, when we see published so many statements of such great success, and we must further admit, that our surprise is the greater, after the statements which have been put forth by the Professors of the Veterinary College of its perfect applicability and easiness of exhibition to any kind of animal; indeed, so light has any difficulty in its use been made to appear, that one of the professors has publicly stated, that a common soap-dish, filled with ether, and held to the animal's nose, was all that was required, and that the sensation was so delightful that it was eagerly inhaled, and that when sufficiently affected, the animal quietly laid down and submitted to whatever was requisite to be done. Great, indeed, must we repeat, was our surprise at the results we have witnessed.

The time was taken, watch in hand, in each experiment.

*First Experiment.*—A medium sized cart-horse was put under the influence of sulphuric ether; after seven minutes' inhalation the animal reeled, and was on the point of falling; but it appearing doubtful whether any more striking results

would ensue, and the apparatus being too small, so that a considerable portion of atmospheric air was commingled with the ether, the whole was removed, and the animal recovered its usual state: the quantity of ether consumed was twelve ounces.

*Second Experiment.*—A bay carriage-horse, in high condition, of gentle temperament, and without any apparent disease, was submitted to the vapour. After the apparatus was adjusted, ten ounces of ether was put into the receivers; in two minutes and a half the animal fell, but not until he had turned about many times, partially falling, and staggering up again, throwing himself about most furiously, and at last falling with a crash, so as to induce fears that considerable mischief must ensue. The breathing was tremendously increased, every muscle connected with respiration in intense action. The effect of the ether was kept up as well as could be managed, for in falling, one of the receptacles was torn off, and the opening was obliged to be closed by the hand, but sufficient effect was produced for the horse to keep his limbs tolerably still for about half a minute, and on being pricked with a sharp instrument did not show any signs of sensation; upon rising, he reeled and staggered about for a few minutes, and on this subsiding it did not appear to be followed by any bad effects!

*Third Experiment.*—A black horse, of medium size, was put under the influence of the vapour. The apparatus (a new one) was, when adjusted, charged with twelve ounces of ether, which almost immediately produced a marked effect—heaving of the flanks, staring of the eyes, loud and laborious breathing, a constant shuffling, as if about to fall, reeling, staggering, partially falling, and at last falling with violence: this occupied seven minutes: when down, a series of most violent struggles commenced. It did not appear that the ether had the effect of stopping them, as the charged apparatus was not removed for three or four minutes after falling. The experiment lasted fifteen minutes, and the recovery, occupying five longer, was the same as in the experiment number two; and almost immediately the horse began kicking out and eating some hay from amongst the straw on which he had fallen.

In each of these three cases it was pretty clear that the apparatus was not sufficiently perfect to exclude atmospheric air, and it was presumed that the common air being mixed with the etherized vapour, produced these violent symptoms.

*Fourth Experiment.*—After an interval of forty-eight hours, the same animal as in the last instance was again put under its influence. The apparatus now employed was rendered as perfect as could be to exclude the atmospheric air. No bad symptoms manifesting themselves on the animal being closely examined, the apparatus was adjusted, and carefully inspected, to see that nothing that could in any way interfere with the success of the experiment existed. Being satisfied on this point, the receptacle was charged with ten ounces of ether. The same symptoms as before were evinced; but in one minute and a half the horse fell, as in the former instances, with violence. A good straw bed had been prepared, and guide-ropes were attached to the head, in order to prevent the danger so much to be dreaded from the violent plunging, and in falling down. A few symptoms of violence were evinced, the air-valve was opened for about a minute, then closed, and the vapour was again inhaled. The labour of breathing became terrific, and so continued for about a minute and a half. There did not seem to be any sense of feeling, when a sudden drawing up of the hind-legs showed that something was going on wrong, though of what nature we could not tell. The apparatus was removed, a few loud breathings followed; all became suddenly still; life was extinct within six minutes from the commencement of the experiment; this was at ten A.M. The quantity of ether consumed was six ounces.

*Autopsy, three p.m.*—We attended the post-mortem examination in full expectation of finding some organic change in the principal organs of life; such as would be likely to be affected by such a powerful agent, and which, under feeble powers of life arising from organic disease, would yield under extraordinary influence: not so, however; every organ was remarkably healthy. The bowels were enormously distended with flatus. On opening the abdomen a strong smell of ether was emitted, but not any could be detected in the contents of the stomach; the diaphragm was ruptured to the extent of at least a foot and a half; the pericardium was found distended with blood, which in quantity must have been at least eight pounds; the lungs were turgid with black blood, and smelt very powerfully of ether; the heart being removed, we minutely examined into the situation of the evident lesion, and found that an angular rent, full an inch in length, had occurred just immediately beyond the origin of the aorta, and above the semilunar valves, and within that portion which is included in the pericardium, otherwise there would have been blood effused into the thorax, which there was not.

The part exhibiting the lesion is in the possession of Mr. Alexander Henderson, junior, M.R.C.V.S., of Park-lane, who will be happy to show the same should any one wish to examine it.

*Remarks.*—By these experiments, two points of great importance have been proved. By the first three, that unless some ready means of regulating the quantity of vapour and the rapidity with which it is inhaled, it is not sufficiently under control to be generally practised. There is, in the application of a regulating power, one serious obstacle to be overcome—that is, the violence of the animal rendering approach dangerous.

The last experiment, though fatal in its result, is of the utmost value. It proves that pure vapour of ether cannot be inhaled without the most imminent risk; and though we have been informed, on good authority, that the apparatus was again tested on the same day, and produced its full effect in one minute and three quarters, yet it appears that it was not entirely without risk; the violence was as great as what we witnessed; and though the apparatus was removed immediately after the horse fell, the effect lasted for some four minutes afterwards: it is stated that the pulse rose to 120 per minute, and the horse slowly recovered.

The rupture of the diaphragm and of the aorta was no doubt the result of the violent action of the respiratory organs; and, in all probability, the diaphragm was the first torn, and that the aorta gave way at the time the hind legs were suddenly drawn up.

We are of opinion that neither of these lesions were produced by the act of falling, but were the result of powerfully excited respiration.

Our next observations will be for the purpose of ascertaining to what extent the difficulties which we have related can be met or removed, the question being too important to be allowed to rest without the fullest inquiry.

Apologizing for the unavoidable length to which this account has run, we are, your obedient servants,

ALEX. HENDERSON,
Veterinary Surgeon to the Queen Dowager.
London, March, 1847. W. ARTHUR CHERRY, M.R.C.V.S.

## THE INQUEST AT GRANTHAM.

*To the Editor of* THE LANCET.

SIR,—In reading the account of an inquest, lately held at Spittlegate, in Lincolnshire, on the body of a woman who died from the effects of the inhalation of ether, I perceive that the surgeon caused her to inhale the vapour three times before he began the operation, (the removal of a tumour from the thigh,)—viz., on the 6th, 8th, and 9th of March. It appears that, after the first administration of the ether, she became hysterical; from the second, she completely lost the power of vision, and complained of headach for many hours afterwards; and the third inhalation was attended with fatal results. Is it not probable that she was kept too long under its influence? And might not the operation have been successfully performed after the first or second inhalation?

Although this disastrous case would not justify the profession in relinquishing the use of this agent for the prevention of pain during surgical operations, it nevertheless clearly shows the danger attendant upon the repeated inhalations of ether, (recommended by some,) for the purpose of preparing patients to undergo operations.—I remain, Sir, your obedient servant, R. STEWART, M.R.C.S.

Park Crescent, Torquay, March, 1847.

# House of Commons.

## THE MEDICAL REGISTRATION & REFORM BILL.

[*From the "Notices of Motions" which now stand on the "Order Book" of the House.*]

"On Tuesday, April 20th:—

MR. WAKLEY to move for leave to bring in a Bill to provide for the Registration of legally-qualified Practitioners in Medicine, and to amend the law relating to the Practice of Medicine in Great Britain and Ireland."

## Medical News.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination and received certificates to practise, on Thursday, April 1st, 1847.—George Burton Payne, Birmingham; Henry Vevers; Thomas Balle Forster, Plymouth; John Lane Cutcliffe, South Molton, Devon; George Augustus Hartelbury Hepworth, Tewkesbury; James Tarzewell, Dorchester, Dorset; George Herring, Yarmouth; John Ingman, Trenddyn, Flintshire; William Nowell, Dewsbury, York; John Jessup Sewell, Fendrayton, Cambridge.

MEDICAL APPOINTMENTS.—Dr. A. B. Garrod and Dr. E. A. Parkes have been elected Assistant-Physicians, and Mr. J. P. Potter, Assistant-Surgeon, to University College Hospital.—Dr. A. L. Brownless, of Charterhouse-square, was on Wednesday last elected Physician to the Metropolitan Dispensary, Fore-street.

CRIMINAL TRIAL.—Dennis Cronin, the apothecary, who was prosecuted at the Old Bailey, on a charge of manslaughter, has been tried and ACQUITTED.

ROYAL FREE HOSPITAL.—MUNIFICENT GIFT.—A gentleman called last week at Messrs. Herries and Co.'s, in St. James's-street, and left, under the initials "Z. Z. Z.," £500, in aid of the funds of the Royal Free Hospital, in Gray's-inn-road. We are glad to find, that while enormous sums are being given, by the benevolent, for the alleviation of Irish distress, the charities of our own country are not forgotten.

ROYAL VETERINARY COLLEGE.—The students of the Royal Veterinary College, desirous of testifying their acknowledgments to the indefatigable zeal and industry manifested by Mr. Simonds, their professor, on the anatomy, physiology, and pathology of domesticated animals, in his valuable course of lectures, assembled last Wednesday evening, the 31st March, in the theatre of the college, for the purpose of presenting to that gentlemen a vote of thanks, as expressive of their respect for him, estimation of his talents, and gratitude for his unwearied assiduity. The honour of presentation devolved upon Mr. G. Brown, chairman, who, in an appropriate and well-delivered address, embodied the sentiments of the class, and, in conclusion, formally tendered over to Professor Simonds, on behalf of the pupils of the school, the following, handsomely transcribed and elegantly framed:—

"Royal Veterinary College, London, March 31st, 1847.

"*To Professor J. B. Simonds, &c. &c.*

"SIR,—The reward of merit is not more grateful to him that receives it than to those who present it. It is therefore with unfeigned sincerity that your pupils express to you their thanks for the information they have derived from your valuable instructions during the present session. Yours was altogether a new division of science, and the labour of surmounting its difficulties has consequently been great; yet you have nobly accomplished your task, and by industry and careful research, developed to the inquiring mind those truths on which the principles of science must ever be founded. Our fervent wishes are for your long continuance in the performance of the duties assigned to you; and, again gratefully acknowledging our obligations, we beg to subscribe ourselves, on behalf of the pupils of the college,

"G. T. BROWN, Chairman,
W. G. W. REEVE, R. SKELTON, T. J. MERRICK,
G. A. STATHAM, C. N. CARTER, W. BIRD,
DANIEL R. FOY, Treasurer,
B. CARTLEDGE, Honorary Secretary."

With the above was likewise presented to the Professor, in a separate roll of paper, a somewhat similar address, bearing the signatures of seventy pupils.

ETHERIZATION.—(*From a Correspondent.*)—In the *Gazette des Hôpitaux* of the 30th of March, Monsieur Pertusio, surgeon, of Turin, asserts that he has employed ether successfully in traumatic tetanus. Monsieur Roux has been unfortunate at Paris in an analogous case.

*Extract from the Gazette des Hôpitaux.*—"M. Pertusio, surgeon of the hospital of SS. Maurice-et-Lazare, at Turin, has just obtained a successful result, by the aid of etherization, in a very marked case of traumatic tetanus.

"From Feb. 4th, some tetanic symptoms had been manifested in a young patient received into the wards of this physician, and on the 13th these had attained the greatest intensity. M. Pertusio conceived the idea of trying etherization, and instantly obtained complete resolution of the muscular retraction. In fact, the tetanic symptoms reappeared as soon as the influence of the ether had ceased; but M. Pertusio immediately renewed the inhalation, and obtained, on the whole, sufficient benefit to encourage him to return to the etherization, at first as often as six times a day.

"By degrees, the tetanic attacks becoming more feeble and less frequent, the inhalations of ether were diminished, and at the end of a week, one single etherization was sufficient.

"On the 4th of March, the patient had passed a week without experiencing the slightest tetanic symptom, although the etherization had been discontinued, and he now walked in the hall of the convalescent patients, nothing of his complaint remaining, except a slight rigidity in the abdominal muscles."—*Clinique de Marseille.*

## CORRESPONDENTS.

*Querist.*—Broussais was not the discoverer.

*Mr. Hartnell.*—The plan will be fully considered. The investigation must necessarily occupy some time.

*Gratia.*—Yes.

*A Spectator.*—The "Partridge season is over." Partridges should be killed now only as vermin. Occasionally an ill-bred Partridge will act as vermin by annoying game of a high quality. The disturber of the peace should then be destroyed. A common weazel trap will be sufficient for the Partridge in question.

*Tyro.*—Announcements on the subject were made in THE LANCET three weeks since. It is now uncertain when the publication will take place.

*Dr. Burr.*—The request of our Subscriber shall be attended to without fail for the future.

*Dr. G. P. M.*—The "species of solicitation" and exhibition of literary quackery is a very old game of the vulgar and unprincipled parties concerned. Our correspondent is right in his estimate of the demerits of the trashy production he refers to.

*Mr. Kirby.*—There is excellent and practical sense in several of Mr. Kirby's suggestions; particularly in those relating to the separation of the practice of medicine from mere trade in drugs.

*No Simon Pure.*—Will the correspondent who writes under this signature disclose his name to us, not for publication, but as a guarantee of the truth of his statements, which are most extraordinary, and ought to call forth the most severe public reprobation of the vile practices he unfolds.

*Angry Sophy.*—There is not much *philosophy* in the semi-religious and obstetric twaddle of the writer. We can inform the midwife, as we suppose her to be, that Spectator is one of the most distinguished living obstetricians, and as such his criticisms are at least entitled to be treated with seriousness.

*Mr. Crisp.*—We shall have much pleasure in inserting the communication in an early number.

*A Governor of the Birkenhead Infirmary* ought in fairness to allow his name to be appended to his letter, in reply to Mr. ——.

*A Defender of his Profession* forwards for our perusal a variety of letters and documents relative to the non-payment of medical men by insurance companies. This subject is one which causes much irritation, and we shall, at an early period, give it our best attention. We shall be glad if any other medical men who have corresponded with offices respecting assurances on lives will forward to us any documents or letters which may be useful in vindicating the rights of the profession. They shall be turned to good account.

*Mr. Hunt.*—The papers shall appear in due *season*. Our contributor need not take it amiss that they have not been published earlier.

*C. T. K.*—The information respecting the naval service can be obtained from the Medical Directory.

*Dr. Chambers.*—The communication of our esteemed correspondent has been mislaid. If Dr. Chambers will kindly forward us another copy, it shall be inserted in the next LANCET.

*Mr. James Stephens.*—The paper "On a New Instrument for Replacing the Funis in Prolapsus of the Umbilical Cord," shall be inserted in an early number.

*Mr. Keating.*—We did not publish the whole of his paragraph, because the concluding portion of it was a very gross and palpable puff. We must decline the publication of Mr. Keating's letter, which has reference to the same object.

*Mr. Cattell.*—Your letter is an advertisement, the form and tenour of which we strongly disapprove; and still more strongly do we disapprove of what it indicates.

*** *Notice.*—We continue to receive specimens of handbills, unprofessional cards, and so forth; this evil has increased to a height we should scarcely have credited. We propose to print, in a monster article, the mass of those we have received, so as to abate, if possible, this crying evil.

Communications have been received from—Mr. Gorringe; An Admirer; F.R.C.S.E., (Liverpool;) Dr. Robert Barnes; Dr. Burr; Spring Session; Dr. Radford; Mr. F. S. Garlick, (Halifax;) Dr. Marshall Hall; Mr. E. A. Kirby, (Colchester;) Mr. H. Taylor, (Guildford;) No Simon Pure; Angry Sophy, (Edinburgh;) Mr. E. Crisp, (Walworth;) Mr. Henry Hough Watson, (Bolton le-Moors;) A Governor of the Birkenhead Infirmary; Mr. George Todd, (Evenwood, Durham;) Mr. Henry Smith; A. H. Sandford, (Wigston Magna, Leicestershire;) Mr. Thursfield, (Brosely;) Mr. Hewett; Dr. Chambers, (Colchester;) Mr. James Stephens, (Manchester;) Dr. Jephson Potter, (Manchester;) Mr. L. Norton; Dr. C. Radcliffe Hall; Mr. Keating; Mr. T. Cattell; Dr. Orpen; Dr. Bostock, (Horsham;) Mr. J. A. Dorr; A Juror, (Sheffield;) Dr. A. T. Thomson; Mr. H. O. Stephens, (Bristol,) Mr. Rothwell, (Bolton;) Dr. Brownless; Dr. Gavin Milroy; &c.

TO BE DISPOSED OF, a highly respectable and old-established MEDICAL PRACTICE, within twelve miles of London. Satisfactory reasons will be given for the present proprietor retiring. None need apply who cannot command £1000.—Application to Mr. Churchill, 46, Princes-street, Soho, London.

LEICESTER-SQUARE.—WANTED, by a Professional Gentleman, a PRIVATE HOUSE, furnished or unfurnished, or APARTMENTS, furnished or unfurnished, in this Square, or its immediate neighbourhood. If Apartments, there must be three sitting-rooms; one might be very small. If a House, one with Stables would be preferred.—Address, (free,) with full particulars, to "Medicus," Mr. Churchill's, Medical Bookseller, 46, Princes-street, Soho.

AN M.R.C.S., Thirty-three years of age, who has been actively engaged in extensive public and private town and country practice, is desirous of an ENGAGEMENT as ASSISTANT, or to conduct a Branch Practice, or do the onerous duties for a gentleman, who, from age, ill health, &c., requires confidential and efficient aid. Most satisfactory references and testimonials can be given.—Apply by letter to L. A., 61, Gray's Inn-lane, Holborn.

TO BE DISPOSED OF, in a populous and very flourishing Market Town, a highly respectable GENERAL PRACTICE, which has averaged upwards of £1100 per annum for several years past, connected with the disposal of which there are circumstances which entitle it to the immediate attention of gentlemen of requisite means, of leading professional acquirements, and who are experienced in operative surgery.—Apply to Mr. Underwood, 1, James-street, Adelphi, who has also for disposal, with an introduction of two years, a PRACTICE of upwards of £700 per annum, situated in Devonshire.

TO BE DISPOSED OF, an extensive MEDICAL PRACTICE, carried on in a fastly-increasing manufacturing town in Lancashire. The advertiser is leaving, owing to unavoidable family circumstances, and is willing to dispose of it for a very slight remuneration above the valuation of Books, Furniture, Surgery, Fixtures, &c., which may be left behind.—For further particulars, enquire by letter, addressed to A. Y. Z., Post-office, Burnley, Lancashire.

N.B.—The Practice will be found a very eligible one, being one of the most extensive in the neighbourhood in which it is situate.

A SURGEON'S HOUSE TO LET.—It is situate within six miles of Town. The Furniture in the house, and the Fittings-up of the private Surgery therein, may be purchased.—Applications for particulars to be made by letter, addressed to J. H. P., THE LANCET Office, 423, Strand.

MEDICAL PRACTICE TO BE DISPOSED OF immediately, in consequence of the death of the late owner, in a Borough Town in Shropshire. A fully qualified medical man has now an excellent opportunity of beginning business. The sum required for introduction, £150; the Fixtures and their contents to be taken to at a valuation.—For further particulars, apply to Mr. Thursfield, Surgeon, Brosely Iron Bridge.

A GENERAL PRACTICE of £300 per Annum for DISPOSAL, situated in an agricultural neighbourhood, including from £70 to £100 per Contracts, for a District of a Union and Clubs. £100 will be required for the Contracts, and a third of the receipts annually, for three years, for the Private Practice.—Apply by letter, to Q A, 56, John-street, Fitzroy-square.

A M.R.C.S. & L.A.C. is desirous of obtaining a SHARE of a City or Town PRACTICE equal to £400 per annum. The Advertiser is a married man, aged 31.—Direct, pre-paid, to X. M., Post-office, Bristol.

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WANTED, by a respectable Married Gentleman, aged Thirty, whose character will bear the strictest inquiry, and who has been in Practice for himself for the last four years, an OUT-DOOR SITUATION as DISPENSING and VISITING ASSISTANT.—Letters addressed to Mr. Williams, 13, Henry-street, Cork, Ireland, will be attended to.

TO CHEMISTS or SURGEONS desiring to form a Practice by means of a retail.—A Gentleman in either of the above capacities may be suited in the Business of the Advertiser. The locality is undoubted, and of the highest fashion; the house is in good condition, the shop attractive, and the purchase-money but moderate in amount. Principals will receive attention (by letter only in the first instance) from W., care of Mr. Peacock, 12, George-street, Portman-square.

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TO BE DISPOSED OF, A RETAIL BUSINESS, with PRACTICE attached, situate in one of the leading thoroughfares of the metropolis. The business has been established upwards of forty years; the present proprietor has been in possession seven years, and is leaving in consequence of being about to go into the country. The house low rented, and on lease.—For further particulars, apply, by letter only, to G. H., 21, Northampton-square, Goswell-road.

WANTED BY A GENTLEMAN fully-qualified, a share in an old established PRACTICE in the vicinity of London, or a good provincial town. Actual receipts must not be less than £1000 per annum, unless the advertiser may eventually succeed to the whole. Satisfactory references will be given and required.—Address, post-paid, to A.B., care of Messrs. Westwood and Co., Newgate-street, London.

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| 30 | 20 15 0 | 26 14 2 | 1,287 0 0 | 287 0 0 |
| 35 | 23 8 4 | 29 18 4 | 1,278 0 0 | 278 0 0 |
| 40 | 27 7 6 | 33 19 2 | 1,240 0 0 | 240 0 0 |

The NINTH ANNUAL REPORT may now be had at the London office. The number of New Policies issued during the year 1846 alone, was 416. The sums assured by these (exclusive of Annuities) amount to £191,102, and the Annual Premiums to £5483. Since 1837, (the commencement,) 2520 Policies have been issued, assuring upwards of £1,150,000.

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# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

SURGICAL CASES TREATED AT THIS HOSPITAL.

Reported by HOLMES COOTE, Esq.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO THE NORTH LONDON OPHTHALMIC INSTITUTION; AND FORMERLY HOUSE-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

### SLOUGHING PHAGEDÆNIC ULCER IN THE GROIN; DISORGANIZATION OF ITS SURFACE BY THE APPLICATION OF THE UNDILUTED NITRIC ACID; CICATRIZATION OF THE SORE.

CASE 1.—Jane E——, aged nineteen, a well-grown but pallid girl, worn out and enfeebled by her mode of life, states that she has been upon the town for the last two years, during which time she has twice suffered from venereal disease. Her circumstances have of late been very bad. Living in a low alley, and but rarely obtaining proper or sufficient nutriment, she has been obliged to support herself, in her intercourse with the most worthless and depraved of the opposite sex, by freely indulging in spirit-drinking. A month ago, she contracted gonorrhœa, which in the course of a fortnight yielded to common treatment. The disease was not accompanied by a bubo, nor, to the best of her knowledge, by any primary sore. Four days ago, there appeared in the left groin a small but foul-looking and painful ulcer, which spread rapidly, and in the course of thirty-six hours assumed a black aspect. For the last two nights she has had no sleep.

Admitted, July 2nd, 1840, into Patience ward, under Mr. Lawrence.

The left groin is occupied by a phagedænic sore, as large as a crown-piece, and covered by a thick black slough, shreds of which hang loose upon the wound. From the edges, which are undermined, eroded, and of dusky-red colour, there escapes a thin, ichorous, and extremely offensive discharge. The pulse is quick and feeble; the countenance is anxious, and she is in a state of agitation and alarm. The surface of the sore was immediately destroyed by the application of the undiluted nitric acid. Forty minims of laudanum were administered afterwards.

3rd.—She slept for some hours after taking the laudanum, and subsequently passed a good night. The sore has been much easier since the application of the acid; the dusky red zone is less apparent, and the peculiar fœtid odour has almost entirely disappeared. The pulse continues quick and feeble; the tongue is white, and the skin hot. She has no appetite, and complains of thirst, and of a feeling of great weakness and depression. To take a draught composed of citrate of potash in a state of effervescence three times a day; beef-tea, arrow-root, &c.

4th.—Slept well during the night. She complains, however, of some renewal of pain in the sore. Upon examination, it was found that the slough, which was separating, confined a quantity of light-red coloured sero-purulent fluid, the liberation of which afforded immediate relief. There is no unpleasant odour; the dusky-red zone has disappeared. Bread poultice.

5th.—The slough, in great part detached, is separating from a healthy granulating surface.

7th.—The slough is entirely separated; the wound is granulating healthily. Meat diet.

Aug. 10th.—The sore is healed.

She remained a few weeks longer in the hospital, in consequence of scabies having manifested itself upon various parts of the body. Upon recovering from this disease, she was discharged cured.

### SLOUGHING PHAGEDÆNA ATTACKING SOME SUPERFICIAL ULCERS IN THE GROIN; RECURRENCE OF THE DISEASE AFTER THE REPEATED DISORGANIZATION OF THE SLOUGHING SURFACE BY THE UNDILUTED NITRIC ACID; CICATRIZATION OF THE WOUND UNDER THE ADMINISTRATION OF TONICS, AND THE LOCAL APPLICATION OF THE BALSAM OF PERU.

CASE 2.—Jean G——, aged nineteen; cork-cutter; a healthy French lad, of temperate habits; but recently arrived in this country, and living near his place of employment, in one of the open suburbs of London; was admitted Dec. 6th, 1839, into Lazarus ward, under Mr. Lawrence, with slight discharge from the glans and the under surface of the prepuce, and several small, superficial ulcers of the right groin, of about three months' duration; there is the cicatrix of a superficial sore, but recently healed, upon the body of the penis. Bread-and-water poultice to the groin; zinc wash to be injected under the prepuce; broth diet; two aperient pills at bed-time.

28th.—The edges of the largest sore of the groin, much undermined, have a black, sloughy aspect. It being, however, doubtful whether the sloughing resulted from specific morbid action, or whether it was a consequence of insufficient supply of blood to the then undermined integument, no active measures were immediately employed.

29th.—The sore is somewhat larger; the edges, surrounded by a dusky-red zone, are eroded, and in parts mortified; the whole surface is covered by a brownish-black slough; a director passes readily under the integuments, which separate one spot of ulceration from another; he suffers no pain, but has lost his appetite, and complains of feeling very weak. The sloughing surface was destroyed by the free application of the undiluted nitric acid. Forty minims of laudanum were administered immediately afterwards; bread poultice.

30th.—He slept well, and says that he suffers no pain, but feels very weak; pulse 120; the sore is spreading along the upper edge. The nitric acid was again applied to the sloughing surface; thirty minims of laudanum were administered immediately afterwards. To take five grains of the carbonate of ammonia, in camphor mixture, three times a day; six ounces of port wine daily; broth diet; to be removed to another ward. In the evening a charcoal poultice was applied to the sore.

31st.—The sore, much increased in size, is spreading rapidly, especially at the upper part. It is observed, that along the edges, which are hotter than natural, and of a dusky-red colour, the cuticle first becomes loose; then a layer of cutis, about a quarter of an inch broad, sloughs, and partially separates from a foul, phagedænic surface, secreting a thin and extremely offensive discharge; pulse 126, and very feeble. Continue as before. Meat diet, if he can take it.

Jan. 2nd.—The sloughing surface is about the size of a man's open hand; towards the lower part the disease seems arrested; the surrounding integument has lost the dusky-red colour, and there is no fœtid secretion; pulse 130, and very feeble. To take three grains of sulphate of quinine three times a day; laudanum when necessary; omit the ammonia; balsam of Peru, upon lint, to be applied, under the bread-and-water poultice, to the sore.

3rd.—There is no extension of the disease; the integument is resuming its healthy colour, and the fœtid odour has entirely disappeared; towards the lower part the slough is separating; pulse 106, and stronger; he can take food with better appetite.

14th.—The slough has separated from a healthy, granulating surface, of which the long diameter is rather under six inches, and the short diameter somewhat above four inches.

Under proper treatment, this huge granulating surface eventually cicatrized; but it was many months before the part became sufficiently firm to allow him to take active exercise, or to follow his occupation with safety.

The two cases here related illustrate the principal features of the disease termed Sloughing Phagedæna, and point out those remedies best calculated to arrest its progress. It appears that, in particular constitutions, an excoriation on a small sore will, when exposed to certain injurious influences, suddenly lose its healthy florid aspect; the granulations are absorbed; the secretion of pus ceases; the surface becomes covered with a dark-coloured slough, and the edges, undermined, eaten away, and of dusky-red colour, pour forth an ichorous and fœtid discharge. In the deep wound thus formed, not uncommonly large nerves and important bloodvessels are completely dissected out; and if the walls of the latter give way, there may ensue active hæmorrhage, which in several instances has been the immediate cause of death.

Although sloughing phagedæna is seen by far most frequently in patients who are labouring under some form of syphilis, there does not appear any good reasons for believing that the former is in any way connected with the morbid action of the venereal poison. Those who are subjects of this disease are, for the most part, persons whose health has been ruined by habitual irregularities and intemperance, (Case 1,) or those who have been suddenly exposed to change of climate, or some other striking alteration in their former habits of life, (Case 2.)

But sloughing phagedæna is occasionally seen under circumstances where its appearance is wholly unaccountable. Mr. Lawrence has related, in *The Medical Gazette*, 1837-38, the case of a young, healthy-looking, and respectable married woman, who, having travelled a long distance from the

country, in a heavy rain, upon the outside of a stage-coach, noticed upon the buttock, about four-and-twenty hours afterwards, an excoriation, which speedily assuming an unhealthy aspect, became affected with sloughing phagedæna. There was no venereal history connected with this patient, who, up to the time of her admission into the hospital, was living with her husband, a mechanic in easy circumstances. The disease was arrested by the application of nitric acid. Those who have had extensive opportunities of witnessing cases of this affection, do not, in general, regard them as instances of any form of syphilitic disease, but rank them as a variety of that peculiar species of humid gangrene termed the malignant ulcer, or the hospital sore.

The treatment consists in removing the patient to an airy situation; in destroying the sloughing surface by the application of the undiluted nitric acid, (as first recommended by Mr. Welbank;) in alleviating pain by the administration of opium; and in maintaining the strength by suitable tonic remedies, and by proper diet. The disorganization of the sloughing surface by the nitric acid, will in some few instances (Case 2) fail to arrest the disease. The patient is then in a state of imminent peril; for, independent of the exhausting effects of this serious malady, it unfortunately happens that the ulcers most frequently attacked occupy situations, (e. g., the groin,) near which runs an artery of sufficient size to give rise to fatal hæmorrhage if wounded. But Case 2 also shows, that by perseverance in judicious measures, recovery may be brought about under apparently hopeless circumstances; and it is interesting to notice the rapidity with which a phagedænic sore will assume a healthy character, lose its fœtid odour, throw off the sloughs, and present to view a healthy granulating surface, over which a cicatrix will form, without an unfavourable symptom.

## Original Papers.

## ON THE WRITINGS OF SYDENHAM.

By GAVIN MILROY, M.D., &c.

### No. IV.

(*Continued from p.* 378.)

For the relief of the *catarrh* and *cough*, which are not unfrequently present during the course of this fever, no remedy is on the whole so good as almond oil, administered in small doses, frequently repeated throughout the day and night.* The cough that is apt to supervene in aged and weak persons during the stage of convalescence, is frequently more speedily and effectually relieved, by a glass or two of good wine daily, than by any medicinal agent.

I must not omit to mention, that when the strength of a patient, more especially when he is advanced in years, is alarmingly reduced by an attack of fever, Sydenham tells us, that, after other means failed, he had found the greatest benefit from the application of the fresh and living heat of young men, to assist debilitated Nature to throw off the dregs of the morbific matter; "for it is easy to understand, that a considerable quantity of wholesome effluvia will thus pass from a robust healthy body, into the exhausted frame of the patient. . . . And," he adds, "this way of transmitting into the body of the patient a sort of balsamic spirits and vapour, however quaint it may seem, has since been successfully used by others; nor am I at all ashamed to have bethought myself of this remedy, however much some proud and conceited persons may sneer at me; for I have always thought, that the good of my fellow-creature is far to be preferred to their vain and empty notions."†

That the practice of Sydenham, in the treatment of synochus, was, on the whole, perfectly judicious, and vastly superior to that which was in vogue in his time, will be allowed, I believe, by every one. He was, doubtless, too timid in the use of purgatives, not so much, be it remembered, from any evils which he had found to accrue from their administration, as from the mere dictates of a fanciful speculation. That mischief has been done in our day by the excessive and indiscriminate adoption of active purgation, without due regard being paid to the nature of the existing fever, the period or stage of the disease at the time, the constitution of each patient, &c., is but too apparent to stand in need of proof. Within the last four or five years, several entire *séances* of the Academy of Medicine in France were actually occupied with the discussion of the subject—the treatment of typhoid fever with purgatives; as if a constitutional or systemic malady (*morbus totius corporis*) can ever be judiciously treated with any one remedy, or one set of remedies! The use of large emollient enemata, as recommended by Sydenham, will be found very beneficial in a multitude of cases: this practice was followed by the late Dr. Williams, of St. Thomas's Hospital, and much insisted upon by him, if I mistake not, in his work on fevers. If mild mercurials, of which, by far the best is the *hydrargyrum c. creâ*, in combination with *sod. carbon.*, be administered twice or thrice in the course of the twenty-four hours, at the same time, the greatest possible advantage will be obtained. When the system is brought under the gentle influence of mercury, not only is the feverish excitement, in most cases, very promptly subdued, but many of the visceral complications, or sequelæ, are effectually dissipated or prevented.

The reader will miss, in our author's treatment, any allusion to two very important remedies, whose value, indeed, was not duly estimated in fevers, until the present century; we mean, the frequent ablution of the surface of the body with tepid acidulated water, and the use of leeches and other topical derivants, for the relief of local suffering. The more accurate means of diagnosis of visceral affections, especially of all pulmonic diseases, gives the physician of the present day a great advantage over his predecessors.

I now proceed to notice the treatment of the pestilential fever and the plague of the years 1665 and 1666, these two being the predominant and stationary diseases of the second epidemic constitution, as described in my former paper. It will be necessary, however, to premise a few remarks on a difficulty which often encounters the reader, in the perusal of Sydenham's writings. Such expressions as "inflammation of the blood," "hot and spirituous particles in the blood," a "hot and inflammatory disease," &c., are continually meeting the eye; nor is it at all easy to discover their exact meaning. Probably, Sydenham himself had no very clear or intelligible ideas upon the subject; and therefore he, after the too common practice, sought to get rid of the difficulty, by clothing it in a garb of learned phraseology, forgetting all the while his own admirable injunction, that in the description of diseases, "words should stand for facts, and results correspond with promises." Let us try, however, to find out, as nearly as possible, what was his meaning. We read in one passage, that the *confluent* form of small-pox proceeds from a greater inflammation of the blood, than the *distinct* form, and that it therefore requires more cooling medicines for its successful treatment. The former, indeed, to use our author's language, "inter morbos calidissimos jure optime habetur," and the petechiæ, bloody urine, &c., often present in it, and, indeed, in malignant fevers generally, are by him ascribed to "the excessive heat of the blood." That a dissolved condition of this fluid was included under this phrase is sufficiently obvious, from such expressions as these, "hot and spirituous particles which agitate and *attenuate* the blood;" "the texture of this fluid being broken and loosened by the strength of the inflammation;" and "the petechiæ and hæmaturia being owing to a violent inflammation and extreme attenuation of the blood, whereby it is forcibly driven through the mouths of the small vessels." One might almost suppose, that the idea of a virulent and an almost caustic poison existing in the mass of the blood, was present in our author's mind; for when speaking of the carbuncles in the plague, he alludes to the scorched appearance of the skin around them; and such words as "accensa," "accenditur," are not unfrequently met with. But all this is very ambiguous and fanciful, much more so, indeed, than when allusion is made to "putridity" and "putrefaction" of the morbific matter circulating through the system; for, certainly, something like a definite meaning can be attached to such words as these. The following passage will probably best serve to enable the reader to form an idea of Sydenham's vague and unsatisfactory speculations on the subject of malignancy of fevers:—

"The invention of the term or opinion of malignancy has been far more destructive to mankind than the invention of gunpowder. For, as those fevers are more especially called

* It is amusing to observe the contradiction which actual experience offered to the speculations of the animal chemistry of that day. "Neither reason nor experience," says Sydenham, "have convinced me that the use of this oil is not to be allowed in fevers, because it is of an inflammable nature, and, consequently, may tend to increase the distemper; for, granting it to be naturally hot, it is, however, certainly not so hot, but that the advantages arising from its use are greater than the inconveniences. For it is an excellent pectoral, opening and lubricating the passages, and thereby promoting expectoration."

† The physicians of those days had a high opinion of the natural heat of a living animal, as a means of fomentation. Thus, in the treatment of *ileus*, Sydenham recommends that a live puppy should be kept assiduously applied to the bare stomach of the patient, while other remedies are being used.

malignant in which the degree of inflammation is most intense, physicians have immediate recourse to the use of cordial and alexipharmic medicines, in order to expel by the pores of the skin the imaginary poison, (for so it must be called, unless they rather choose to play with words than propound in earnest what is capable of being understood;) and hence they have attempted to suit the hottest regimen and plan of treatment to those diseases which required the very reverse. This appears sufficiently manifest in the rise alike of the small-pox, which is one of the most inflammatory of all diseases, and of other forms of fever. Medical men have perhaps fallen into this error by the appearance of the petechiæ, purple spots, and other symptoms of a similar kind. All these phenomena are entirely owing, in the majority of subjects, to an inflammation superinduced on the blood which has already become overheated by the fever, seeing that they seldom come out spontaneously, except on the approach of the plague, or at the commencement of the confluent small-pox, in both of which diseases the highest degree of inflammation is present. In the latter, the purple spots make their appearance, in various parts of the body, along with the pustules on their first eruption; and there may be, at the same time, a flux of blood either from the urinary passages, or by cough from the lungs; for the blood is put into such violent agitation by the inflammatory orgasm, that it bursts the vessels in which it is confined, and becomes effused into the cavities of the body. And although the purple spots in this fever do not proceed from such an intense heat of the blood as that which gives rise to the hæmorrhages now mentioned, yet they are produced by the same morbid cause in a less degree of intensity, and when not accompanied with such a flux of blood, (the only symptom in the small-pox which defies the art of medicine,) readily yield to a cooling regimen."

Now, however fanciful and unmeaning may be our author's doctrine, that a malignant fever like the plague "arises from an inflammation of the more spirituous particles of the blood," perhaps all that he meant to imply was merely this—that the disease depended upon the presence of an exceedingly subtle and rapidly pervasive acrid principle, which tended to corrupt and dissolve the texture of the blood, acting at the same time as a poison upon all the powers of life. The subtlety and virulence of the poison are sometimes (more especially at the commencement of an epidemic) so very great—"permeating, with the speed of lightning, the innermost recesses of the body, dissipating the spirits (or heat) of the blood, and dissolving its texture"—that the system is unable to offer any resistance, and the patient dies before any "ebullition" or febrile reaction has ensued. This is evidently what would be called in the present day an aggravated or intense form of congestive fever. Sydenham alludes to it on more occasions than one, cautioning his readers not to allow themselves to be deceived in their diagnosis by the indistinctness of the symptoms; for "Nature," says he, "is in a manner oppressed, and rendered unable to produce. The usual symptoms of the disease and almost alll the phenomena are irregular, by reason of the entire subversion of the animal economy. Sometimes, also," he adds, "fewer signs of a fever appear than the nature of the disease requires, from the translation of the malignant cause either to the nervous system, to some other parts of the body, or to some of the humours not contained in the blood, while the morbific matter is yet abundant."

As already stated, the cases of what the French writers have termed "peste foudroyante"—wherein the patient appears suddenly struck with the hand of death from the first moment—almost always occur at the commencement of an epidemic. This circumstance holds true of other pestilential disorders as well as of the plague. It is alluded to in the following passage, in sect. iv. cap. 3, of the "Observationes:"—

"All epidemics, when they first break forth from the womb of Nature, (as far as can be judged from their symptoms,) seem to be of a more spirituous and subtile nature than when they become older; and the more they decline, the more gross and humoral they daily grow; for whatever be the nature of those noxious particles which, being intimately mixed with the air, are esteemed to produce an epidemic constitution, it is but reasonable to conclude that they are possessed of greater activity at their first eruption than when their energy has been broken. Thus, in the infancy of the plague, scarce a day passed, but some of those who were seized with it died suddenly in the streets, without having had any previous sickness; whereas, after it had continued for some time, it destroyed none, unless a fever and other symptoms had preceded: whence it clearly follows that this disease, though it then took off fewer persons, was more violent and acute in the beginning than afterwards, when its influence was more extensive. The same thing may be said of the dysentery."

I must not omit to mention here, that in Sydenham's opinion there is a considerable resemblance, in many points of view, between erysipelas and the plague; and when we consider that there is every reason to believe that the former disease was generally of a much more malignant type in his time than in the present day, the analogy is far from being either forced or unnatural.

One of his commentators points out the following circumstances of resemblance between these two exanthemata:—1. Their leading symptoms—viz., sudden rigors, prostration of strength, violent pain in the head and back, vomiting, &c.; 2. The expulsion of the malignant matter to the skin between the third and fourth day, with an abatement of the symptoms; 3. A tumour, redness and pain being first perceived in or near the groin, and thence descending to the feet; 4. The parotid and the axillary glands becoming inflamed, when the head or chest is chiefly affected; and 5. The danger occasioned by the striking in of the morbid matter.

With respect to the question, as to the communicability of the plague from one person to another, our author seems to have believed that it was chiefly in the way of infection—i. e., by means of effluvia or miasms, which, emanating either directly from the body of the sick, or from *fomites* that had been charged with them, become diffused in the atmosphere, and are thus received into the lungs—that this was effected. But it is obvious that he did not look upon personal communication or transmission from one individual to another as the principal cause of the extension of the disease when it had once broken out in a place; for he expressly says that whenever this occurs in a state of atmosphere favourable for its development, (of the nature of this state we are utterly ignorant,) "the whole air of the tract of country becomes contaminated, (just as we see a frightful conflagration arise from a little spark,) both from the breath of the diseased, and also from the exhalations arising from the bodies of the dead; so that there is no longer any need of infected *fomites*, or of direct intercourse with the sick, for the propagation of this dreadful malady; and although a person be most sedulously removed from all proximity with the infected, yet the air received in by breathing will of itself be sufficient to inoculate him, provided the juices of his body be disposed to receive the infection." Sydenham makes no allusion to the plague being ever communicable by mere *contact* with an infected object, apart from, and independent of, contamination of the air with miasmatic particles—a doctrine, it may be observed, which did not come into vogue for fifty years afterwards, and which, after having most unaccountably been recognised by the medical schools for more than a century, and made the basis of the quarantine laws of almost every country in Europe, is at length about to be repudiated alike by the public and the profession. He alludes, indeed, to the disease having been kept out of Tuscany, when it raged with violence in other parts of Italy, in consequence of the vigorous prohibitory measures adopted by the Grand Duke to prevent all intercourse with infected places; but this circumstance, it will be observed, affords no argument whatsoever in favour of the preposterous idea just referred to.

We shall now notice very briefly the plan of treatment recommended by our author in the plague and pestilential fever which existed in London in the years 1665 and 1666. For several months before the outbreak of the pestilence it appears that the prevailing diseases were of a highly phlogistic or inflammatory character. From the circumstance of the vomiting and diarrhœa which attended the existing fevers being generally aggravated rather than relieved by the use of emetics, it seems a not unreasonable conjecture to suppose that there was a decided tendency to gastro-enteric irritation. Inflammatory affections, too, of the respiratory organs, peripneumonies, pleurisies, and quinsies, were very prevalent, and required active depletions for their successful treatment. Sydenham, it is well known, withdrew from London when the pestilence broke out with severity; and his testimony is therefore not entitled to all the respect which it would have commanded had he persevered in watching the disease throughout its persistence. But his absence was not very prolonged; for he tells us himself that "he returned to town soon afterwards, and whilst the disease still raged with violence; so that, on account of the scarcity of more able physicians, he could not avoid being called in to assist the infected." The cases under his care, it would seem, he treated with copious bloodletting and cooling medicines; and his success, he tells us, was wonderfully great: the blood exhibited a buffy coat. He subsequently moderated the activity

of his practice,—not so much, he says, from being dissatisfied with its effects himself, as from the difficulty which he experienced in inducing his patients to submit to it,—and trusted chiefly to the use of powerful sudorifics, as will appear from the following extract:—

"First, if no glandular swelling has yet made its appearance, I take a moderate quantity of blood, according to the strength and constitution of my patient. This being done, a diaphoresis (which, in certain habits, not only could not be done without extreme difficulty, but would be liable to aggravate the inflammation and the risk of the purple spots) is easily and readily excited. The benefit of this speedily-induced sweating has been observed to afford ample compensation for the loss of blood, which, however small it may be, might otherwise have done serious mischief. After the venesection, (which should always be performed in bed, when all things are in readiness to promote the sweat,) I immediately order the patient to be covered over with the clothes, and to have a piece of flannel applied to his forehead. This little expedient contributes more towards raising a sweat than one might imagine. Then, if the patient does not vomit, I administer some sudorific medicine every six hours or so." When the stomach is so irritable that it cannot retain the medicines given, Sydenham directs that the diaphoresis should be excited by the mere warmth of the bed, before the dose be repeated; for he says that the vomiting will almost invariably cease, whenever the surface of the body begins to perspire. The sweating was ordered to be kept up for twenty-four hours, by giving the patient frequent draughts of sage posset drink, or mace ale, &c., which drinks are usually sufficient to support the strength of the patient. On the second morning after this profuse diaphoresis, a mild aperient draught of senna, rhubarb, tamarinds, and manna, was given.

The preliminary venesection, it is to be observed, was not performed, if any glandular swelling had already made its appearance. Our author evidently laid much stress upon this point in reference to the treatment to be adopted, as in one passage he expressly appeals "to the physicians, who continued in town during the late plague, whether free and repeated bleeding, *before a swelling appeared*, was ever observed to prove fatal to any of the infected."

Those who are acquainted with the history of the yellow fever, the malignant cholera, and other pestilential disorders, will remember that, in certain seasons at least, the prompt use of active bloodletting, before the full development of the symptoms, has often proved of very marked, and even marvellous success. At other times, and perhaps, too, in other localities, the very same practice, and pursued, it may be, by the same individual, has been found to be not only inefficacious, but positively pernicious. So dangerous and unwise it is to insist upon the same remedies at all times in the treatment of what may seem to be the same kind of fever!

It is unnecessary to extend our remarks on the subject of Sydenham's mode of treating the plague and the accompanying fever, which he calls "pestilential," from its appearing to be but a less severe degree of the former. Suffice it to observe, that he evidently regarded the prompt and decided use of antiphlogistic measures, in the early stage of the diseases, as the practice that promised the best chance of success. The same remark applies to the next stationary fever that comes under our notice.

The *variolous* or *varioliform* continued fever of the years 1667, 1668, and part of 1669, was characterized by exhibiting most of the general or systemic features of small-pox, the unusual prevalence of which gave the epidemic constitution of this period (of two years and a half) its peculiar features and type. Our author's words are these:—

"As this fever depended upon that epidemic constitution of the air which produced at the same time the small-pox, so, in effect, if it were really the same disease, it was evidently in all respects of the same nature, with the exception only of those symptoms which were the necessary consequences or results of the cutaneous eruption; for they both attacked in the same manner, and were attended with the same sort of pain and soreness in the epigastric region: there was the same colour of the tongue, the same appearance of the urine, the same profuse perspiration in the beginning, and the same tendency to a salivation, when the inflammation was violent. Moreover, since this fever did also prevail at the time when the small-pox was more extensively diffused than I had ever known it before in this place, no one can reasonably doubt that they belonged to the same family. This one thing I certainly know, that all the practical indications were manifestly the same in both diseases, those only excepted which the eruption of the pustules, and the effects thence ensuing, gave rise to in one of them."

Then, starting with the hypothetical assumptions, that this *variolous* fever essentially consisted in a simple violent inflammation or heat of the blood, there being no gross matter or humour present therein requiring regular concoction or digestion, and subsequent elimination or expulsion, as in the depuratory fever of 1661-4, and that there was not any definite or regular period for its ordinary duration, Sydenham at once lays down the therapeutic position, that "the whole of the treatment consists in checking the inflammation by evacuations and cooling remedies." With this view, he recommended that blood should be drawn from the arm (unless the weakness or the advanced age of the patient forbade it) every other day for two or three times; that an enema of milk and sugar, or the like, should be given on the intermediate days; and that a refrigerant potion be freely used throughout the course of the fever; the patient not keeping his bed constantly, but being made to get up for several hours every day, so that the blood might not become unduly heated. This practice, it may be remarked, was adopted by Sydenham in almost all diseases which he considered to be of an inflammatory nature. The sweatings that often occurred in the beginning and during the progress of this disease were obviously, he says, not of a *critical* character, depending upon any effort of Nature to expel some morbific matter from the system, but were merely one of the symptoms or regular phenomena of the malady. In some cases, it would seem, the sweats were most profuse, and the petechiæ on the surface very numerous—reminding us of what we read of the sweating sickness; yet bleeding, and the use of cooling medicines and diet, promptly relieved, we are told, these unpleasant symptoms. On the other hand, the use of hot cordials and alexipharmics served only to increase the febrile excitement, aggravate the thirst, produce a more abundant eruption of petechial spots upon the surface, and even check the very perspiration which was sought to be rendered more profuse by their operation. The diarrhœa, too, which often accompanied this variolous fever was more speedily restrained by the depletory and cooling remedies mentioned above, than by any others; "inasmuch as this symptom proceeded from inflammatory vapours thrown off from the blood of the mesenteric arteries upon the bowels, and irritating their internal surface."

As the solution or cure of the febrile action was in many cases effected by a copious flow of the saliva, which appeared to act as a critical evacuation, the petechiæ and feverish irritation disappearing when it came on, our author advised, that whenever the salivation commenced, all other evacuations should at once be suspended, "else the humour might be diverted to another channel." The business of salivation goes on more favourably under the use of whey and other cooling drinks, than of such as are of a cardiac and heating nature.

With respect to the treatment of the *dysenteric* continued fever, which succeeded the *variolous* one, and which prevailed during the years 1670, 1671, and 1672, it will be better to defer any observations on the subject until the treatment of the dysentery itself has been considered. I therefore pass on to the fever of the following epidemic constitution — that which was characterized by the predominance of certain *cerebral* symptoms—the most conspicuous being a coma-like stupor—and which was also accompanied, more especially in its first stage, by a severe pain in the side, and other symptoms of pleuritic suffering. Active antiphlogistic measures were required for its successful treatment. In almost all cases bleeding from the arm was practised once or oftener. A blister was applied between the shoulders, or on the neck, after the venesection; and the bowels were kept freely open by the repeated use of laxative enemata. In spite of these remedies, the comatose condition often continued for days or even weeks. The proper indication of treatment seemed to be not so much to make a prompt impression upon the head symptoms by very vigorous or energetic remedies, as to mitigate their severity by the persevering employment of more gentle ones, until Nature had completed the course of the fever—an operation which was generally effected in fourteen days, but sometimes not till the twenty-first or twenty-eighth day. It is in reference to this fever that Sydenham made the remark, (already quoted,) that in many cases "we do not proceed slowly enough, and ought to use less expedition in removing distempers, and that more should frequently be left to Nature than is usually done. It is a grand mistake to conclude that Nature always wants the assistance of Art..... What it may do in other diseases, I cannot say; but I am

convinced, from diligent observation, that in the fever under consideration, this symptom (the stupor) was, after using bloodletting, and the use of aperient enemata, generally conquered by time alone."

In some instances, delirium and almost constant restlessness took the place of the comatose oppression. The former symptoms would not brook delay so safely as the latter, and the disease proved fatal in a short time, unless the inflammation was promptly restrained. "In this case," says our author, "spirit of vitriol was of more service than anything else; so that, after bleeding, and the use of one or two enemata, I gave it in small beer for common drink. In a few days, it disposed the patient to sleep, and the symptoms having been thereby subdued, he was gradually restored to health—results which I could not obtain from any other plan. This was proved to me by ample experience."

Although this fever appeared to have, in most instances, a definite course to run, and a fixed time to continue, it is obvious that Sydenham looked upon it as very distinct from the *depuratory* (to use his own epithet) fever which prevailed in 1661-4. In the latter, the disease manifestly consisted in an effort or nisus of Nature to discharge, after due digestion and concoction, a morbid matter from the system; and this discharge took place usually by perspiration and by urine. In the former, however, there seemed to be no such uniform process of elimination going on. However this may be, certain it is that sweating did not afford the same amount of relief, towards the decline of this disease, as it almost always did in the preceding one.

It should be mentioned, that in this fever the patient was always directed to sit up, for at least some hours, every day; or if he were unable to do this, he was to have his head raised well up with pillows, with the view of "checking the course of the blood upwards, by which the heat of the brain is increased, and the animal spirits are agitated, whence the heart beats quicker, and the fever rises higher."

Usually the first sign of convalescence in this fever was the wish or longing of the patient for some odd and uncommon kind of liquid or solid food. In general, there is seldom much risk in indulging the patient's appetite under such circumstances, within bounds at least.

It is unnecessary to do more than merely allude to the treatment recommended by Sydenham in the "new fever" described by him in "Schedula Admonitoria," the latest of his writings; for it agrees in almost every respect with that of which we have just spoken. In this fever, too, which seems to have somewhat resembled what is now called influenza, there was frequently a tendency to the supervention of delirium or coma. In some cases a petechial, and in others a rubeoliform miliary eruption made its appearance on the surface. A moderate bleeding at first, followed by purgatives, cooling medicines, and avoidance of all heating and stimulating drinks, formed the basis of the treatment. The body was to be kept cool by having the patient frequently out of bed during the day-time; and if the cerebral symptoms were unusually severe, the best of all remedies (after bleeding and purging) was to have the head shaved. A blister between the shoulders was often used with marked advantage. But it is unnecessary to say more. I must not, however, take leave of this part of my subject, without giving the reader the benefit of one passage which a learned physician of the last century, Dr. Barker, expressed a wish might be engraved on the mind of every one engaged in medical practice.

"It must be carefully observed in this kind of fever, (in the same manner as in rheumatism, and several other distempers only curable by evacuations,) that if we obstinately persist in the use of the said evacuations until all the symptoms have been entirely removed, the disease will often prove fatal. For it is not uncommon to find some slight symptoms remain for a time, even after the disorder has ceased; these, however, do not endanger a relapse, inasmuch as they go off by degrees, spontaneously, as health returns. For, in reality, these symptoms are frequently nothing more than the genuine product of the repeated evacuations, by which the physician endeavoured to cure the disease, and proceed in part from the inanition occasioned by the patient's abstinence from his common food and drinks; all which circumstances, when they occur in persons who are debilitated, and, in a manner, worn out by disease, tend to produce what are called the *vapours*, as we see in women, from weakness and the low state of the animal spirits. For this reason, therefore, after using such evacuations as are sufficient to remove the disease, a judicious physician ought to forbear the unreasonable use thereof, and wait awhile to see what time (often the best and the most successful physician) can do for the removal of these slight symptoms; and I have often known them to disappear, in the declension of such a disease, without anything else than a dose of paregoric for two or three nights in succession."

In my next paper I purpose to examine the treatment recommended by Sydenham in small-pox, ague, and other febrile epidemic and intercurrent diseases.

Fitzroy-square, March, 1847.

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CASE OF

# ACCIDENTAL STRANGULATION,

WITH RECOVERY.

PECULIARITIES OF FORMATION AND DEVELOPMENT IN A MOUNTEBANK.—WITH REMARKS.

By W. D. CHOWNE, M.D., Physician to Charing-Cross Hospital.

The subject of the following detail was a person of theatrical celebrity, as a man remarkable for activity, great physical power, and skill in performing difficult and peculiar feats. He was admitted into Charing-Cross Hospital, under my care, on the 15th of December, 1845, labouring under phthisis, and a collection of matter in the right cavity of the thorax. I do not intend, however, to enlarge upon the disease of which he died, but rather to advert to one of the achievements which constituted a prominent part of his theatrical performances, and to certain events, possessing physiological and pathological interest, incidental to them. I shall submit to the profession an abstract of such of my notes as bear relation to accidents which befel him, and put his life in extreme jeopardy.

His theatrical celebrity was acquired under the name of Monsieur Gouffe; but he was admitted into the hospital in his real name, John Hornshaw. He stated his age to be forty-seven.

Amongst other feats, it was customary with him to exhibit himself hanging by the neck, trusting to a plan of managing his head, and the muscles of his neck and throat, so as to accomplish it with impunity. He informed me that when a boy he was very fond of tumbling and climbing, and commenced his career for gain while still a boy, by climbing and jumping about in public houses from the chairs and benches to the tables, window-ledges, chimney-pieces, &c., as a monkey would, and got a good living in this way by the halfpence that were given to him. His health had been failing for some time when he came into the hospital, and he had been obliged gradually to give up his theatrical engagements.

In describing the process, he said his plan was to make a loop, with a fixed knot, (which could neither slip nor draw round his throat in any way,) and then to place his head within the loop, putting the rope behind the lower jaw, and letting the two sides of the loop pass up behind the ear. When doing this in public, he always, "what he called, jumped into the rope"—that is, he took one side of the loop in each hand, and opening it gave a spring, and quickly placed his head within it. He remarked, that this to "look well, and have a good stage effect, must be done quickly;" and that there was great danger, unless "particular care was taken" that it was "all right" before the hands were removed. Such was his command over the muscles of the throat, that he could sustain not only the weight of his body, but great additions to it. It was a custom with him to have weights, sometimes as much as three half hundreds, placed in his hands while he was hanging. Sometimes instead of weights, he has supported a man in his arms. The average time of his hanging was from ten to fifteen minutes. Like Scott, the American diver, however, he was not always successful in the adjustment of the rope, although happily he had the better fortune of timely rescue. It happened three times to Hornshaw to mismanage the rope, and to remain suspended until all consciousness had left him, on either of which occasions he must have perished had he not been saved by persons at hand.

In the first accident (at Grantham) he had become quite insensible; but being set free, soon recovered. During this suspension he had a dream.

In the second accident (at the City Theatre) he also soon recovered, was not so long insensible as at Grantham, but could not say how long that was. He considered that he must have been longer hanging, as he could not be so readily got at.

The third accident, (which happened while he was playing in the character of Jocko, the Brazilian Ape,) at the Victoria Theatre, "was the worst of all;" but from this also his entire

recovery was surprisingly quick. After his consciousness began to return, he "at first looked about, but did not recollect anything. He asked whether he had been playing, and was told he had; he then asked whether he had finished playing, and was told he had the dying scene to do." To use his own expression, "he jumped up, and was ready to go to work directly."

Opportunities occasionally occur of obtaining information as to the sensations experienced during hanging, suicidal, accidental, and penal, from persons who have been cut down prior to the extinction of life; but I do not know of any other individual who has given so clear a detail of his experience in three such catastrophes.

With regard to the different opinions entertained as to the immediate cause of death in hanging, the experience of Hornshaw is available; for it cannot be doubted, that so far as sensation and consciousness are concerned, he passed through the whole ordeal of dying; and that had he been permitted to remain hanging until actually dead, he would have passed out of existence without further consciousness.

Accounts that have been collected from various sources tend to show that death by hanging is not essentially a severely painful one; that consciousness ceases almost immediately; that in some there is a sense of great weight of the body upon the neck, scintillations of light, or light in other forms before the eyes, and sounds in the ears. Hornshaw stated, not with particular reference to either one of the three accidents he sustained, but as general facts which were similar in all, "that he could hardly recollect anything that happened to him in the rope;" that "he lost his senses all at once; the instant the rope got in the wrong place, he felt as if he could not get his breath; as if some great weight was at his feet; could not move only to draw himself up; felt as if he wanted to loosen himself, but never thought of his hands." And he added, "you cannot move your arms or legs to save yourself; you cannot raise your arms; you cannot think." He did not see sparks or scintillations of light before his eyes, but had in his ears a rattling sound of drawing up, (he meant like the drawing up of the curtain or a drop-scene of a theatre.)

How far death by hanging is a peculiarly painful one—whether it is rapid—what are the bodily sensations—and what the state and capabilities of the mind, are still questions of interest.

The facts recorded in works on medical jurisprudence are sufficiently numerous and sufficiently well authenticated to enable us to feel assured that the mode of carrying capital punishments into effect on malefactors in this country does not inflict great bodily suffering. The experience of Hornshaw confirms this view. We do not learn from him that in either instance of his all but fatal suspensions he had acute sufferings. It may be said that those he described were bad enough; but he did not speak of the difficulties as giving great distress. Yet there cannot be a doubt that whatever of suffering is incidental to death by hanging, he had fully and wholly gone through, and that in each instance he had passed into that state of unconsciousness which would have been final but for the timely succour he received. With regard to the state of the mind, and its capability, these appear to me to have been expressed more fully and more positively, and in a manner more defined by Hornshaw, than by any other narrator with whose account I am acquainted.

I have quoted his own phrases, first, because I would not incur the risk of misinterpreting them; and secondly, because they were short, graphic, and seemed to carry with them internal evidence of expressing feelings of which he had a full and positive consciousness; his expressions seemed obviously suggested by what he had known and felt; that he "could hardly recollect anything that occurred to him in the rope;" that he "lost his senses almost all at once, as soon as the rope was in the wrong place;" that he "could not get his breath;" and "felt as if some great weight was hanging at his feet;" that he "could not move only to draw himself up;" that "you cannot move your hands or legs to save yourself; you cannot think."

That the power of thinking and acting are soon lost, there have long been facts on record to show. We see, for instance, fatal hanging, even where apparently a very slight effort (were effort possible) would enable the victim to save himself; and the not having made that effort is often attributed, in cases of self-destruction, to determined perseverance on the part of the suicide.

When the American diver, Scott, so unhappily terminated his existence by accidental hanging, the spectators came to the very mistaken conclusion that he was safe because he was still, and did not raise his feet and stand upon the scaffold, which his legs were actually touching.

It is of importance not to lose sight of the fact, that persons may, and do, often destroy themselves under circumstances producing at first a suspicion that they must have been dead prior to their being placed in the situations where they are found. At an inquest held by Mr. Wakley, a juror expressed his astonishment, that as deceased's feet touched the ground, he could not have saved himself.

With regard to the immediate cause of death by hanging—whether injury to the spinal column, by fracture, by dislocation, or by rupture of ligaments; apoplexy, from extravasation, from congestion, or from effusion; indirect asphyxia, by pressure on the nerves of respiration; direct asphyxia, from closure of the air passage by the cord; or complicated causes, from two or more of the above causes—we may, I think, draw some inferences from Hornshaw's all but fatal accidents and rapid recoveries; for (as already stated) consciousness was quite destroyed in each instance, and in each returned quickly and completely; even in the worst, he was able to return to his performances almost immediately, as if nothing had happened.

We must keep in mind, however, the difference between hanging such as Hornshaw underwent, which was simply suspension, and hanging such as malefactors undergo, combining the addition of a deep fall, and consequent greater probability of injury; with the addition, also, of a greater degree and extent of constriction on the neck.

In the course of some lectures given some time since,* I entered into a consideration of the immediate cause of death by hanging; but on the present occasion, I will merely state my belief, that although there are instances in which each of the causes enumerated might be found to have produced death, and others in which it has been produced by two or more acting together; yet that, as a general rule, it is caused by occlusion of air from the lungs, produced by the direct pressure of the cord.

The comparatively recent well-known experiments on dogs I scarcely need allude to; I may, however, advert to those of Mr. Chovet, made on dogs in the early part of the last century, and to the further experiment made by him upon a malefactor.

Mr. Chovet having proved that in dogs neither apoplexy, nor injury to the spine, nor pressure on the nerves, occurred to such an extent as to produce death, and that death would not occur within any moderate time, if free access for air to the lungs was preserved, made an attempt to save the life of a criminal called Gordon, (who was hung at Tyburn in the year 1733,) by making an incision in his windpipe preparatory to his execution; so that when Gordon stopped his mouth, nostrils, and ears, for some time, air enough came through the opening to allow of the continuance of life. When hanged, he was observed to be alive after all the rest were dead; and when he had hung three-quarters of an hour, being carried to a house in the Tyburn-road, he opened his mouth several times and groaned; and a vein being opened, he bled freely. No further attempts, however, succeeded in eliciting other signs of life. It has been considered that the want of success was probably owing to the great weight of the man, "by which the compression of the vessels of the neck must have become more effectual than in ordinary cases; and perhaps, at the same time, the opening into the trachea was not sufficiently free." This case is quoted from "Smith's Forensic Medicine,"† by Dr. Guy, in his work on the same subject.

In the case of Scott the diver, there was neither injury to the spine, nor any visible change in the nerves of the neck, nor appearances of apoplexy in the brain; the chief morbid appearances were in the lungs, florid colour of the surfaces of the air-tubes, and congestion of the upper parts.

We see, also, that where insufficient strength in the rope, or other accident, lets the culprit fall to the ground, he can stand and converse immediately after. Such cases enable us to draw conclusions with regard to the immediate cause of death, which are, as I consider, strengthened by Hornshaw's experience; and that in his instance animation was suspended rather by asphyxia than by apoplexy. We know, on the one hand, that under asphyxia, consciousness is very suddenly lost, and that asphyxia being removed, consciousness very soon returns; while in apoplexy, either from extravasation or congestion, although insensibility may come on quickly, it is removed slowly, and that bodily and mental powers, such as were evinced by Hornshaw and by many others, could not be quickly restored.

I believe, however, that apoplexy, far more frequently than

* A course of lectures on pseudo-morbid appearances, THE LANCET 1838-9, vol. ii.

† Appendix, p. 560.

injury to the spinal column and its contents, is consequent upon hanging, especially that degree of apoplexy which consists of mere over-plenitude of the vessels, and that apoplexy might sometimes be almost the sole cause; when, for instance, from accidental circumstances, a peculiar position of the rope admits air to the lungs, and yet obstructs the circulation.* Authors state that it might be the sole cause, and, according to a table of cases classed by Remer and Casper, under three distinct heads, the following results are cited:—

| | Remer. | Casper. | Total. |
|---|---|---|---|
| Apoplexy | 9 | 9 | 18 |
| Asphyxia | 6 | 14 | 20 |
| Mixed conditions | 68 | 62 | 130 |
| | 83 | 85 | 168 |

Thus, although a mixed condition is recognised, eighteen out of the 168 are implied, indeed stated, to be caused by apoplexy alone. I am not prepared to concur in the correctness of this view; but rather incline to the opinion, that although asphyxia without apoplexy is often the cause of death, apoplexy, independently of asphyxia, so seldom is, as to constitute an extremely rare exception.

It has been considered, that persons in the habit of suspending themselves, in imitation of hanging, do not, in fact, suspend themselves by the neck, but rather by the under-jaw; that they place the rope in the depression at the under edge, and near the angle of the inferior maxillary bone; that the sides of the noose pass up before the ears, and that in this way the weight of the body is sustained without involving the neck in the ligature at all. Whether this is or is not the usual plan by which impunity to the organs of respiration is preserved, it is not that which was adopted by Hornshaw.

His own account was, that he used an ordinary loop, with a fixed and immovable knot; that he put the rope fairly behind the rami of the inferior maxillary bone, passing the sides of the loop up behind the ears; that he then depressed his chin, and made the muscles of his throat as tight and hard as he possibly could. He gave this account soon after he came into the hospital, and at that time he was still active, and felt so strong, that he wished to have an opportunity of suspending himself, in order that I might see the process, and requested me to desire that he might have a rope for the purpose: this I declined. He was very desirous, however, of showing me his method of making the noose, and of placing his head in it, and the manner in which he managed with his chin and the muscles of the neck, and being supplied with a cord, arranged it, and requested me to hold it over him, as if he was suspended by it, and wished me, indeed, to lift him off the ground. This, however, I of course did not do, although I have no doubt, from what I saw, that he would have completely preserved the means of respiration, and the free circulation of the blood.

Immediately the rope is applied to the neck, certain muscular actions suddenly take place; in endeavouring to define them, however, I shall advert to those only which seemed to be the most obvious.

Four changes in the position and the condition of the larynx, and parts about it, appear to be simultaneously accomplished, all conspiring to protect the respiratory function, and to give the rima glottidis immunity from external pressure.

1st. The os hyoides and the thyroid and cricoid cartilages are drawn firmly and closely into apposition with each other, virtually constituting a strong resisting canal, continuous from the os hyoides to its junction by means of the cricoid cartilage with the trachea. This appears to be accomplished by the thyro-hyoideus, the musculus glandulæ-thyroideus, the crico-thyroideus, &c.

2nd. The os hyoides and the cartilages of the larynx thus bound together, are strained in an upward direction, and apparently brought into a situation slightly above that which they occupy in the ordinary state. We may regard the stylo-hyoidei muscles as producing this effect.

3rd. By the joint action of other muscles the chin is depressed, and a firm layer of muscles is made tense, passing from the anterior part of the lower jaw, backward to the os hyoides, tending, while the larynx is held firmly up, to make firm downward resistance against any upward pressure of the rope between the chin and the os hyoides. This would be effected by the mylo-hyoidei muscles. The digastricus would have the twofold effect of assisting the muscles stretching backward from the chin to the os hyoides in their downward resistance, and the stylo-hyoidei in sustaining the larynx.

4th. The platysma-myoides forms, by its contraction, a strong tense fascia or sheath, almost like a collar, around the anterior and lateral parts of the neck.

It appeared to me, in my examination of the process, that it was chiefly by the muscular exertions I have described, that he preserved a passage for respiration; and that so long as he had the power to continue these contractions, the rope could not ride over the os hyoides, so as to prevent ingress and egress of air by the glottis.

When Hornshaw had properly adjusted the larynx, &c., he placed the rope against the anterior angle of the thyroid cartilage, pressing the cartilage against the anterior surfaces of the cervical vertebræ, and the tendency to slip up, which the rope of course had, was prevented by the tense state of the layer of muscles extending from the os hyoides and the upper part of the larynx to the chin. The alæ of the thyroid cartilage formed an angle less acute than they commonly do, as if they had been forced apart at their posterior edges by being frequently compressed between the rope and the spinal column. The cornua ascending from the alæ did not rise in a direction obliquely upward and backward, as is usual, but perpendicularly; a change also produced, as I suppose, by pressure against the spinal column.

April, 1847.

* This happens sometimes when any accidental movement of the culprit's body takes place, (as in turning,) and the rope gets displaced.

## OBSERVATIONS ON THE INHALATION OF ETHER.

By RICHARD CHAMBERS, M.D., Physician to the Essex and Colchester Hospital.

A period of four months has elapsed since the inhalation of ether as a means of producing insensibility to pain was brought under the notice of the profession in this country; and notwithstanding the repeated trials it has had, no decided opinion has yet been arrived at, as to its value as a therapeutical agent. Contrary to what generally obtains, in estimating the value of scientific discoveries, the occurrence of a few adverse cases has sufficed to counterbalance the favourable opinion which the safe result, in innumerable instances, ought naturally to have produced. But admitting that there have been some adverse cases, may not the result be dependent as much upon the mal-administration of the remedy as on any inherent noxious properties it may possess? Doubtless, ether is like a two-edged sword, but not more so than several other remedies in daily use.

As one of the few fatal cases that we are aware of occurred under my own observation, in the Essex and Colchester Hospital, and as I am of opinion that it ought never to have been adverted to, to throw discredit upon the use of this important remedy, I feel it a duty I owe to the profession, (before whom it has been so prominently brought,) to state my opinion on the subject.

I refer my readers to the several medical journals of the last month for the particulars of the case, which have been so lucidly detailed by my colleague, Mr. Nunn; I may, however, be permitted to add, that the operation was well and ably performed.

After having inhaled the ether for eight minutes, the patient became fully under its influence, even to the extent of stertorous breathing, and the face and lips presented a livid hue; the nose-spring was then for a moment removed, but it was gently reapplied, and the stertorous breathing kept up. From the first inhalation to the commencement of the operation occupied a period of ten minutes, and the completion of the operation occupied ten minutes more. During the first half (five minutes) of the period occupied by the operation, the patient was kept under the full influence of the ether, but during the remaining five minutes its use was somewhat relaxed. On the whole, then, we may say that the ether had been used for twenty minutes. The patient gradually became restored to consciousness, but at first he replied to questions, evidently without comprehending their meaning or his replies.

The operation was performed a little after two o'clock on Friday, and from that time till about the same hour on the following day, the patient continued in a quiet, passive state; but about this time, twenty-four hours after the operation, he was seized with a severe chill, upon which the very intelligent house-surgeon, Mr. Taylor, gave him two ounces of brandy diluted with water. He continued after this in a quiet dozing state, when he was visited by Mr. Nunn, who deemed it necessary, in consequence of the extreme prostration, to direct the free exhibition of stimulants. A consultation of the hospital staff was also requested for the next morning, at which we all met, about forty-four hours after the operation. It only remained for us to add our approval to, and recommend a con-

tinuance of, the treatment which was being pursued. The patient, notwithstanding, continued to sink, and died at five o'clock the same afternoon: I happened to be in the ward at the time. A post-mortem examination was made in sixty-seven hours after death. I transcribe from the published account the appearances observed:—

"Membraneous congestion of the brain, but no effusion; brain firm; lungs permeable throughout—anteriorly exsanguineous, posteriorly engorged; heart flaccid, of a natural size, and nearly empty; left kidney pale, the right slightly congested; the bladder and the adjoining parts presented the usual aspects after an operation."

I witnessed the examination of the brain and lungs; but having been called away, I did not see that of the other viscera, which, I doubt not, has been accurately described.

To the foregoing account of the examination, I wish to add, that the substance of the brain was paler than natural, indeed I might even say blanched.

Considerable stress has been laid upon the congested appearance of the membranes of the brain, and the engorgement of the posterior parts of the lungs. But when I consider the total absence, during the last hours of life, of any dyspnœa, or other symptom indicative of pulmonary congestion, or any insensibility or other symptom indicative of cerebral congestion, I am compelled (which I do readily) to conclude that congestion of either organ had nothing whatever to do with causing the fatal result. A heart so feeble that its sounds were only indistinctly audible through the stethoscope, could not, and did not, propel much blood to the brain, and, as a consequence of the imperfect flow of blood from the heart, the return of the blood through the veins must naturally have been retarded; in addition to which, we must make considerable allowance for the influence exercised by post-mortem gravitation, aided by the fluidity of the blood, in producing the appearances revealed by the examination. And to the same causes do I solely attribute the pulmonary appearances. Indeed, the appearances were such as the symptoms during life would have led one to expect.

I must also allude to some other circumstances in the case that may have exercised an injurious influence upon it. The man was of a spare and timid habit, and of indifferent constitutional powers, superadded to which, he had (not known till afterwards, and at all times a dangerous prognostic) a presentiment of death; nor must I omit to state, that some small vessels which were divided in the operation bled rather freely—I should say to the extent of a pint. This, though not in itself of consequence, may, with the other circumstances, have interfered with reaction; and although I am inclined to attribute the death to the secondary depressing action of the ether, aided by the causes just mentioned, I contend that, on the closest examination of the case, there is nothing to be found in it that ought to militate against the proper use of the remedy. The same reasoning that would be applied to forbid the therapeutical use of ether, in consequence of the fatal result in this case, would likewise be applied to forbid the therapeutical use of opium, prussic acid, or any other powerful remedy which should happen to cause death, when given in an over quantity.

The fluidity of the blood which existed may properly be attributed to the ether; not to any direct specific action exercised upon the blood, but indirectly, by interfering with its supply of nervous influence. But nevertheless it does not follow that a moderate use of ether would produce a like effect.

The peculiarities observed in the action of ether when inhaled, depend, I think, upon the readiness with which it enters the circulation through the medium of the lungs, and the smallness of the quantity requisite to produce its effects, rendering the latter of only a temporary character. Upon the latter point its safety depends.

The effects of ether are exhibited upon the cerebral, spinal, and ganglionic systems; through the cerebral system, by inducing insensibility; through the spinal system, by causing stertor, and in some cases strong convulsive action; and through the ganglionic, by depressing the heart's action. Its primary action is unquestionably stimulant; its secondary action depressing and narcotic; but the preponderance of either is so much influenced by accidental or constitutional peculiarities, that it is not possible, *à priori*, to anticipate which may preponderate. Its employment is contraindicated in individuals of full habit, or where there exists any tendency to cerebral or cardiac diseases. Its effects are but feebly exhibited upon the habitual drunkard, tending, I think, to prove that the action of ether is allied to that of ordinary alcoholic drinks, the difference depending upon the different modes by which admission is obtained into the circulation.

After insensibility occurs, the utmost caution ought to be observed, should it be necessary to keep the patient for any time under the continued influence of the remedy; because the insensibility is an evidence of a certain amount of cerebral congestion; and after this every portion that is inhaled tends towards the production of spinal or ganglionic symptoms, the result of which we can neither anticipate nor control.

In consequence of having read Mr. Nunn's account of the case, a writer (Mr. Beckingsale) in several of the journals condemned the stimulating treatment that had been adopted, and recommended the abstraction of blood. I think that, without injury to his modesty, he may have assumed that those in attendance were the most competent to decide upon the adoption of the most proper treatment. I allude to the matter more particularly, because it appears to me that his advice was carried out by the accidental hæmorrhage already alluded to, and from which I am quite sure that no benefit was derived.

Although there is a certain amount of congestion produced, it is so evanescent as not to call for a remedy, (sublata causa tollitur effectus;) for I consider that we are not justified in employing the remedy in individuals likely to suffer an amount of congestion that would demand, nor ought we in any case to carry the inhalation to the extent of justifying the adoption of, bloodletting. From what I have seen of the subject, I would recommend the early adoption of stimulants, should not a proper amount of reaction set in; for my observation in cases of ague leads me to look upon venous congestion as an antecedent to a chill; and as I have already mentioned, I view the venous congestion here as a sequence to the depressed action of the heart.

I feel assured that the writer of the letter before alluded to will be the first to regret its publication: but before dismissing the subject, I must protest, in the name of common sense, against an individual attempting to instruct others upon a subject, of which he confesses to have seen nothing, and (as it really would appear) knows less. Several other suggestions have been put forward with a degree of confidence they little deserve; indeed, some of them are of a character to induce me to believe that they were written under a forgetfulness that the fundamental principle of our profession is, TO SAVE LIFE.

Colchester, April, 1847.

## Reviews.

*Outlines of Structural and Physiological Botany.* By Arthur Henfrey, F.L.S., &c. London: Van Voorst.

If the number of introductory works published on any branch of Science is an index of the progress of that department of science they are intended to illustrate, botany must have obtained a vast accession of students of late years. At least a dozen "Introductions to Botany," by English authors alone, repose on our library shelves. True it is, these compositions are of various degrees of merit, yet they are all written by authors of respectable acquirements, and some bear the names of botanists of the highest celebrity. Publications of this sort, however great their intrinsic excellence, must enjoy but an ephemeral existence, and after a temporary popularity, are superseded by other compilations, which have the advantage and recommendation of being written up to the latest period. So many sources of novelty of illustration, and such a multitude of important discoveries, are daily added to our knowledge of vegetable anatomy, more especially of the ultimate structural anatomy of vegetables, by the microscope, and so great is the accumulation of new facts to be registered, and deductions to be drawn from these facts, that an "Introduction to Botany," however complete in 1847, will be behind the mark in 1848. This class of books ought, indeed, with truth, to be catalogued among the "annuals." Every lecturer on botany finds it convenient that his class should use a text-book, arranged upon the same plan, and enforcing the views he is accustomed to teach in his course of lectures. This is the *fons et origo* of the little work before us. Nor is it an easy task to compile such a work well in these critical days. Botany has become a microscopic study, and an author must expect his work will be scrutinized by the botanical world with microscopic minuteness and acumen. Read the

bibliography affixed to Mr. Henfrey's publication, and then judge how much bulky and heavy aliment must have been digested before the author had saturated himself up to the point of elimination. There is nothing in the style of the work before us of what is called popular writing, (alas for true science, that she should ever be so degraded!) it is a strictly scientific condensation of facts and physiological principles, executed with great clearness and precision, in which the student will find an epitome of structural and physiological botany, in which the discoveries and opinions of the continental philologists are carefully incorporated. The investigations of Schleiden, Nägele, Mohl, Müller, &c., and their theories of cell-physiology, are discussed by Mr. Henfrey, and contrasted with the views on the same subject advocated by the author himself.

In this debateable ground, in which observers of equal excellence maintain contrary opinions, there is yet ample space for closer investigation. Is not too much functional importance attributed to the cell wall? Cell membrane we consider to be only condensed protoplasma; and its direct uses are, we think, confined to its containing powers; in fact, it serves to divide and maintain, in situ, the organizable contents of the cell, but effects no change itself upon these contents.

All cells, we believe, are formed by and out of the protoplasm, cytoblastema, or by whatever name the organic granules and mucilaginous matters found in their cavities may be called. We cannot think there is any organ specialized to perform the function of originating new cells, and are compelled to doubt the accuracy of Schleiden's views concerning the organs he denominates cytoblasts. It is certain, cell formation does, in many instances, proceed from other points, and is effected by vastly dissimilar processes, and a philosophical axiom is violated when two independent causes are assigned for the production of one effect.

Mr. Henfrey has, we think, satisfactorily shown, in the instance of conferva glomerata, how this is accomplished by the contraction and folding-in of the walls of the primordial utricle, and subsequent division of the parent cell; if this be the process in one or more instances, doubtless the rule will be found of pretty general application. Mr. Thwaites has published some admirable remarks on cell formation, which are not referred to by our author; possibly these observations were not in print when Mr. Henfrey's book was under composition. Another paper, read at the Linnæan Society by the latter gentleman, and reported in the "Annals of Natural History," on bacellaria paradoxa, tends to throw a shade of light on what are called the spontaneous movements of the free spores of algæ. Mr. Thwaites has shown that the singular movements of the frustules of bacellaria are, in all probability, caused by the action of ciliæ situated along the margins of the frustules. The minute algæ are most suggestive subjects for study, and it will be through these, we are convinced, great additions to cell physiology will be made. We cannot feel satisfied with Mr. Henfrey, (page 44,) that the gelatinous investment of so many of the algæ is a mere secretion from the external surface; still less that it is derived from the decomposing outer layers of the cell wall, (page 106,) because this mucous envelop occurs under all stages of organization, varying from a thin slippery mucilage in confervæ and ulvaceæ, to the semi-solid, gelatino-cartilaginous pond-like receptacle of the frustulæ in micromega, in which the gelatine is almost condensed into cellulose, and within which morsels of endochrome can be distinctly seen.

There are many probabilities in favour of the supposition, that out of this gelatine, cellulose is formed, and that it becomes organic. In the early stages of evolution, the myxogastric fungi are entirely gelatinous, and this gelatinous basis exsiccates, as it were, into cells. There is a very striking analogy, we think, between these facts.

In the eighth chapter, when treating of the reproduction of fungi, Mr. Henfrey commits a slight oversight in classing the genus clavaria among the thecasporous groups: it is figured (tablo 10, fig. 4) along with geoglossum, as being furnished with asci; whereas, it is a genus of the pileati, and consequently is basideisporous.

The notion of Schleiden, that all the thecasporous fungi of authors should be referred to the lichens, is surrounded by insuperable difficulties and improbabilities. At first sight, the cupulati and pyrenomycetes, in their fructification, do seem to approach the lichens very nearly; but when we take the highest genera of epigeous thecasporous fungi,—e. g., the mitrate genera, morchilla, helvella, geoglossum, &c., which grow from a flocculent mycelium, have the same mode of development, and contain the same chemical elements, as the basidiosporous fungi—having, in fact, everything in common with the latter, excepting the exosporous hymenium,—Schleiden's idea seems no longer tenable. If his theory be accepted, the hypogeous genera, Genea, Stephensia, &c., which are furnished with highly developed asci, must be regarded as subterranean lichens—an association unnatural in the extreme.

These observations are not offered as condemnatory of Mr. Henfrey's own opinions—they are only criticisms on the views of other authors quoted by Mr. Henfrey. Great commendation is due to that gentleman for the skill with which he has constructed a smooth fabric out of so much and so various material.

We can conscientiously recommend this work to the medical classes, for which it is chiefly intended. We ought to add, that the illustrations are copious, and if not of high artistic merit, are correct and well chosen.

Mr. Henfrey has condensed a vast amount of the best material into a very narrow compass; and if the style of his outlines is not light and popular, it deserves the far higher praise of being solid and scientific.

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*Turner's Elements of Chemistry.* Eighth Edition. Edited by Baron Liebig and W. Gregory, M.D.—Vol. I.: Inorganic Chemistry.

It is necessary for us to do little more than notice the appearance of a new edition of this standard work, and which is a proof of the high estimation in which it is held by students of chemistry. We have only before us, at present, the first volume, embracing inorganic chemistry; but we are informed by the advertisement, that the second and concluding part will shortly appear. The editors also state that they "have introduced all such new facts as appeared to them sufficiently established, and have thus made a very large number of additions and corrections in almost every section."

"One change has been made in this edition—that, namely, of doubling the equivalents of phosphorus, arsenic, and antimony, as is now done by most chemists, both here and abroad. The effect of this change is to simplify formulæ, substituting, for example, for such as $P_2 O_5$, $As_2 O_5$ and $Sb_2 O_5$ the more simple formulæ of $PO_5$ $As O_5$ and $Sb O_5$. It seems now to be generally admitted that, in the case of these elements, there is no good reason for using the smaller equivalent."

The simplification of the above formulæ is certainly valuable; but it has the disadvantage of causing some confusion in reference to old formulæ, as, indeed, must the alteration of any standard.

We can cordially recommend this volume as an excellent digest of our knowledge of inorganic chemistry, and excellent from the clear and succinct manner in which that knowledge is conveyed—a feature in "Turner's Chemistry" which we have always remarked and admired, especially when compared with some other works on the subject.

Every student must make himself acquainted with the contents of this part—inorganic chemistry; for the facts included in it have been confirmed, and there are fewer theories than in organic chemistry, which, if we may so express ourselves, is as yet but in a transition state.

Not that we would depreciate organic chemistry, or cast

any hindrance in the way of its pursuit, for it is of primary importance, and especially so to medical men.

All that we wish to convey is, that inorganic chemistry presents us with more certain results than does organic, and consequently, that students should be more fully acquainted with the former; and until they have the opportunity of prosecuting researches into organic chemistry for themselves, there is little need for them to enter into the numerous hypotheses and details comprehended in it, but may satisfy themselves with a knowledge of the principles of organic analysis, and of the more important organic compounds and radicles.

## Medical Societies.

### MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 5, 1847.—MR. DENDY, PRESIDENT.

#### PATHOLOGY AND TREATMENT OF LARYNGISMUS STRIDULUS.

MR. LINNECAR, in reference to the case detailed at the last meeting by Mr. Headland, inquired if the convulsions preceded the difficulty of breathing. He had only seen convulsions in two or three cases of laryngismus stridulus; and in these instances, the convulsions preceded the stridulous inspiration. The cases were all fatal. He related a case in which the convulsions were very frequent. After death some mischief was found at the base of the brain; but he did not know the nature of it. In simple cases of this disease, unaccompanied by convulsions, he had found the emetic treatment the most effectual. It had been supposed by some practitioners that the depression resulting from emetics was to be apprehended; but this soon went off. He could not agree in the propriety of lancing the gums in the extensive manner which had been recommended by some authorities, although if the gums were tense he generally incised them moderately.

Mr. LOWE related a case of laryngismus stridulus, attended by convulsions, in which the convulsions succeeded the difficulty of breathing. The child was fourteen months old, and under the influence of teething. The gums were scarified, the secretions attended to, and a warm bath employed. The child had ten or twelve convulsive attacks at intervals of ten, fifteen, and twenty hours. The child was now well. In more simple cases, counter-irritation to the spine, alteratives, and sedatives, seemed generally to fulfil the indications presented to us.

Mr. HEADLAND observed that there was no disease respecting which opinion was more unsettled than laryngismus stridulus. We seemed to be ignorant of the remote cause of the attack, and of the means of treatment. At all events great difference on these points prevailed. His own opinion was, that the disease originated primarily in the central plexuses of nerves, by which the pneumogastric nerve became irritated, and spasm of the glottis was the result. It had been said to have its origin in congestion of the brain; but this congestion, where present, was a secondary effect, and depended on the difficult respiration. Attacks of the disease seemed to come on under all circumstances, and in all conditions of the frame. In some cases, the disease yielded to depletion; in others, to antispasmodics and sedatives, the latter treatment being that most usually required. He related a case in which, after various remedies had been in vain employed, the disease gave way almost immediately, under the use of asses' milk. In this instance, the child had been brought up on farinaceous diet, milk, and tops and bottoms. These were given up when the asses' milk was employed. He had found benefit in some cases, by painting the throat with dilute sulphuric acid, and syrup of poppies. In other instances, change of air had been of service. With respect to convulsions, he had never seen them in these cases, except as the result of the difficulty of breathing. It was worthy of remark, that if a child laboured under a combination of symptoms, some of which required antiphlogistic remedies, the patient was liable to sink from exhaustion, if the depletion were carried to any extent. Soothing and alterative remedies were more usually required. He thought that teething had less to do with the disease than had been supposed, as he had not found it connected with the symptoms in more than one case in five.

Dr. COPLAND considered that the disease was connected essentially with three distinct states of the system. Thus it might be the result of disorder of the digestive organs, of teething, or of irritation at the base of the brain. The last might be truly said to be, in some cases, the result of the spasmodic disease, but in some instances, it was the cause. The causes, then, being different, the treatment must vary. It was occasionally associated with a plethoric habit, but more frequently with anæmia. He had seen it frequently in children that had been brought up by hand, as the result of disorder of the digestive functions. In these cases it was usually simple. It was occasionally, though not very often, associated with teething, and in these cases, lancing the gums was of service. The disease was sometimes attended by convulsions, and might be the result of pressure, from the thymus gland or other glands infringing on the nerves connected with the plexuses. In cases of a plethoric condition of body, the treatment must be in accordance with the indications. Attention to the digestive functions, to diet, the employment of antispasmodics and sedatives, the injection of turpentine and syrup of poppies into the bowels, the use of turpentine, with an anodyne, externally, to the neck; and a due attention to the secretions and excretions; formed a summary of the remedies which he had usually found of most service.

Mr. HIRD agreed with Mr. Headland, that in many cases the disease had its origin in disorder of the digestive organs, resulting from the ingesta. He related a very protracted and obstinate case, in which, after all remedies had failed, a rigorous attention to diet, and a most careful preparation of the food, effected a cure. He did not consider bloodletting in any case desirable, if it could be avoided.

Mr. HOLDING said that the attacks of this disease were often so sudden, that life would be destroyed before ether could be resorted to. In a case which had been painfully under his immediate and constant attention, the child died in a moment from one of these attacks, and the examination revealed no cause whatever for the disease. In this instance, the little patient had been brought up by hand, and he had attributed the disease to the loss of the natural sustenance. When out of town, the attacks in this case were less frequent.

Mr. STEDMAN had practised many years in the country without seeing a single case of laryngismus stridulus; he had seen it frequently since his residence in town. It would appear to be a disease more frequently attacking the inhabitants of large towns than those residing in country districts.

Mr. HEADLAND could not think that the causes of this affection were so various as did Dr. Copland. It was a special affection, and he thought that we should look for a special cause. If it were the result of disease of the brain, the cause would be in constant operation; but it was not so in these cases; the state of the pupil, too, was against this hypothesis. It was, in his opinion, the result of irritation in one part of the body producing special effects. He referred this irritation to the ganglionic system of nerves. Mr. Holding's case was in point; for although it proved fatal, dissection threw no light on the cause. He (Mr. Headland) considered that the primary origin of the disease was irritation of the pneumogastric nerve, resulting from defective aliment; that spasm of the glottis coming on, asphyxia was induced, congestion of the brain followed, and convulsions terminated the chain of phenomena.

Mr. LOWE related a severe case of laryngismus stridulus which had occurred at Henley-on-Thames. Most of the cases which he had seen had occurred in children brought up by hand, and who there was reason to think were defectively nourished.

Dr. CLUTTERBUCK considered that the hypotheses which had been advanced by the different speakers were generally untenable; they admitted of no proof. Looking at the disease in its most simple form, he considered it impossible to refer the crowing inspiration to any other organ than the larynx. It was evidently spasm, a spasmodic affection of the muscles of the part; there was often no other marked symptom in the disease. We had no right to go to the brain for an explanation of this phenomenon, though he would admit that the brain was sometimes secondarily affected. What evidence had we that the digestive organs were at fault? How often were these organs affected, and crowing inspirations absent? He thought there was still less evidence that the nervous plexuses were involved. The spasm was a secondary symptom in these cases, the primary cause being irritation resulting from inflammation of the larynx. This inflammation was probably very slight indeed, but sufficient to bring on spasmodic action of the muscles of the organ of voice. The treatment which was beneficial in these cases did not militate against this opinion. Acting on this view, the indications were to lessen the irritability of the parts by anodynes and other remedies, and relieve the inflammation by counter-irritants. Beyond this we had nothing to guide us. The disease was not usually fatal, and, if so, it was in consequence of being complicated with other diseases.

## PATHOLOGICAL SOCIETY OF LONDON.

MONDAY, APRIL 5, 1847.—DR. WILLIAMS IN THE CHAIR.

MR. POLLOCK exhibited a specimen of

ABSCESS OF THE CEREBRUM, CONNECTED WITH DISEASE OF THE PETROUS PORTION OF THE TEMPORAL BONE.

The boy from whom the preparation was taken had been under the care of Dr. Wilson, and had enjoyed good health to within six weeks of his admission into St. George's Hospital, when he had an epileptic attack, which recurred a week after, followed by unconsciousness and involuntary discharge of urine and fæces. From the last attack he gradually improved, continuing, however, in a half silly state, with ptosis of the left eyelid. He had had from early childhood pain in, and purulent discharge from, the left ear.

On admission, profuse fœtid purulent discharge from the left ear; ptosis of left eyelid; dilatation of pupils, particularly the left; mouth drawn to the left side.

He died on the fifth day, coma having supervened on two distinct fits, the first of which occurred two days before death. The vessels of dura mater and surface of brain were found congested, the convolutions of the latter being much flattened; the surface of brain on the left side, and corresponding with squamous portion of the temporal bone, lighter in colour, and less consistent than usual. The dura mater corresponding to this portion was healthy; the general structure of the brain highly vascular; and the lateral ventricles were considerably distended with limpid serum. Occupying the outer portion of the left hemisphere, and the greater portion of the middle lobe of the cerebrum, was a large abscess, the cyst of which was extremely firm and tough, and lined with a blackish sloughy membrane; it was capable of containing at least six ounces of fluid, and was filled with most offensive pus. The substance of the brain surrounding the abscess was much softened and pulpy, so that the cyst readily fell away from the surrounding parts when the brain was removed. The lower portion of the wall of the abscess was attached to the dura mater, where it covers the petrous portion of the temporal bone, and at this point a small communication existed between the abscess and the internal ear, passing through an ulcerated opening in the dura mater. The dura mater covering the petrous portion easily separated from the bone, but did not appear much diseased, though perforated by a small circular ulceration corresponding to the opening into the tympanum. The surface of the petrous portion was roughened and dark-coloured, and an ulcerated opening existed through its upper wall into the tympanum. The cavity of the tympanum was filled with pus, and the membrana tympanis destroyed, and the internal ear. The other viscera were healthy.

MR. TOYNBEE had seen cases of diseases of the petrous portion of the temporal bone give rise to disease of the jugular vein, when the lower wall of the tympanum was affected; to contraction of the carotid canal, when the anterior wall was affected; and to inflammation of the osseous portion of the lateral sinus, (as he remarked was the case in the specimen shown by Mr. Pollock,) when the posterior and internal part of the petrous was particularly involved.

DR. WILLIAMS had met with a case of gangrene of the lungs induced by purulent deposits in the pulmonary capillaries, the lateral sinus having been affected from disease of the petrous bone.

MR. BUSK had met with two cases analogous to that related by Dr. Williams.

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MR. LISTON exhibited three specim

1. DISEASE OF THE TRACHEA AND LARYNX,

taken from a patient who had suffered from venereal disease for three or four years, having been at different times treated with mercury. The attack was followed by gradually increasing dyspnœa and expectoration, which increased to such an alarming extent, that he came to London, where tracheotomy was performed. Some relief followed the operation; the dyspnœa became somewhat less; but the expectoration was so profuse and fœtid, as to lead to the idea of a foreign body being in the trachea or bronchi. It was deemed necessary to enlarge the original opening made in the trachea, and owing to the rigid state of the rings of the tube, the bone forceps were found necessary. He now went on favourably for a short time; but the dyspnœa and expectoration soon increased, and at the urgent request of the patient the opening was again enlarged, and the tube worn in the opening was passed lower down. During the operation a violent fit of coughing took place, and two or three pieces of bone were ejected. The patient died shortly after. The left lung was found inflamed at its back part, and there was pleuritic effusion on the right side, with old-standing adhesions. Small portions of bone were found in the left bronchus. The posterior part of the cricoid cartilage was entirely destroyed, its place being supplied by membrane, and there could be little doubt that the portions of bone expectorated were the body of the cricoid, which had undergone ossification.

2. DISLOCATION OF THE ASTRAGALUS,

which had become separated from its connexions with the os calcis and the bones of the leg, neither the tibia nor fibula having been fractured or separated from each other.

3. THE CONTENTS OF A LARGE INGUINAL HERNIA,

which were composed of a portion of omentum, with about two inches of ileum, of the cæcum, the ascending and portion of the transverse colon. The peculiarity of the specimen was the presence of a complete peritonæal investment to the large intestine, which was such, that a movement of vasculi could be produced, and reduction into the abdomen easily effected. In a practical point of view it was important, the opinion generally entertained by surgeons being, that hernia of the large intestines were irreducible.

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MR. JAY exhibited a specimen of

MULBERRY CALCULUS AND ENLARGED PROSTATE.

The patient, aged sixty-two, tall and spare, and temperate in his habits, having restricted himself for years to a vegetable diet, eating large quantities of apples, pears, and oranges, as an habitual diet, and drinking only water. In 1840, symptoms of irritable bladder set in, which subsided under treatment till 1842, when they returned, accompanied by severe eczema and symptoms of heart-disease, together with dyspepsia. An attack of erysipelas came on in the leg in the following year. In 1845, bronchitis supervened, and the irritability of the bladder increased, which, at the end of the year, subsided under treatment. From January to May he could walk some miles without inconvenience, and occasionally rode in an omnibus, the symptoms at no period being so severe as to lead to the idea of the presence of a calculus. He died comatose at the end of May, the chest affection having rapidly increased. The result of extensive bronchitis was found after death, together with pleuritic effusion. The heart generally hypertrophied and dilated, with disease of the aortic and mitral valves. The kidneys had a granular aspect, and the bladder was hypertrophied. The third lobe of the prostate much enlarged, and just to its left side was a depression, in which was lodged the calculus. The lateral lobes about half as large again as their natural size. The urine removed had a specific gravity of 1030, was acid, and contained albumen. No oxalates were found. The calculus weighed 330 grains, and was very rugged and rough on the surface; and the following analysis of it had been made by Mr. Marshall:—

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| Water | 5.0 |
| Oxalate of lime | 81.5 |
| Urates of lime and ammonia | 5. |
| Uric acid | .85 |
| Phosphate of lime | 1.65 |
| Animal and colouring matter | 3.3 |
| Extractive matter } Insoluble residue } | 2.7 |
| | 100. |

Mr. Jay alluded to the fact of the patient being capable of walking five or six miles without inconvenience, which circumstance illustrated the remark of Sir Benjamin Brodie, that an enlarged prostate, by preventing the stone from falling on the neck of the bladder, causes a considerable diminution in the sufferings of the individual.

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DR. QUAIN exhibited a

MICROSCOPIC PREPARATION OF A TUMOUR OF THE BRAIN, CONNECTED WITH THE TENTORIUM,

which had been forwarded to the Society by Dr. Hughes Bennett, with the following description and history of the case:—

A lady, between seventy and eighty years of age, two years ago, was seized with loss of consciousness and hemiplegia of the left side, with contraction and rigidity of the arm of the same side. She recovered slowly, the intellect remaining weak, and latterly being very defective. The head, when she died, was the only part examined. The right corpus striatum, and part of the optic thalamus, were converted into a yellow

ochry substance, of a pulpy consistence, presenting, under the microscope, the usual appearances of inflammatory softening. There was also found at the same side, attached to the under surface of the tentorium cerebelli, but causing no corresponding depression on the surface of the cerebellum, a tumour, the size of a walnut, of a soft, fibrinous structure and consistence. Being examined microscopically, the structure was found to consist of round or slightly oval bodies, varying in size, from the $\frac{1}{1000}$ to the $\frac{1}{250}$ of a millimetre in diameter, apparently solid, transparent, with dark, abrupt edges, shadowed gradually towards the centre, (transmitted light.) Each was enclosed in a sheath of cellular tissue, varying in thickness from the $\frac{1}{1000}$ to $\frac{1}{250}$ of a millimetre in diameter. Pressure caused them to crack, generally in a radiated manner, from the centre to the circumference.* Excess of ether caused no change in them, neither did acetic acid; although this last reagent rendered the cellular sheath more transparent, and the nuclei proper to this tissue more distinct. These bodies were imbedded in what at first appeared a simple granular matter; dilution with water, however, showed this to consist of an immense number of fibro-plastic cells, (Lebert,) and fusiform cells, in various stages of development. Here and there, capillary vessels, ramifying in the mass, could be distinguished.

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Mr. Forster exhibited a specimen of

A HEART WITH ONLY TWO CAVITIES.

A young woman, aged twenty, was delivered of a male child, to all appearances well developed; it refused the breast, and its surface became cold and livid; had several attacks of dyspnœa, a paroxysm of which, lasting some time, terminated its existence, seventy-eight hours after birth. Father is said to labour under heart disease; mother healthy. Upon inspecting the body, the abdominal viscera appeared perfectly healthy; vessels of the head turgid; heart gorged, especially what was supposed to be the right auricle; lungs imperfectly inflated. Upon examining the heart more carefully, it was found to consist of but one auricle and one ventricle. Auricle of large size, and has five vessels opening into it—viz., superior and inferior cava, two pulmonary veins, and the coronary vein. Inferior cava provided with a large Eustachian valve; each pulmonary vein is formed by the junction of two branches. Auriculo-ventricular opening of large size, provided with a valve, curtains of which are small, thickened and corrugated, and attached by numerous chordæ tendineæ, to four powerful carneæ columnæ. Ventricle well developed, and dilated into a point at the upper and anterior part, from which arises the aorta, guarded by three semi-lunar valves: from the posterior part of the aorta, two pulmonary arteries are given off. Coronary arteries are not given off at the aortic sinuses, but a single vessel, which appears to have been given off from the concavity of the arch of the aorta, above the two pulmonary arteries, passes down in contact with the left side of the aorta, and divides at its root into two branches, which are distributed upon the anterior and posterior aspect of the heart. This heart would seem to be an arrest of development at the fourth week, at which time it is analogous to the heart of a fish, the pouch of the ventricle corresponding to the bulbus arteriosus of that creature.

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Mr. Crisp exhibited two specimens of

MALFORMATION OF THE HEART, WITH ABSENCE OF THE PULMONARY ARTERY.

The first specimen of malformed heart was taken from a female twelve years of age, who was found dying (apparently from bronchitis) when her medical attendant was called to her. The following history I obtained from the father, after I examined the body. "When born, the accoucheur thought that she could not live, but she had then no blueness of skin; she had been dumb from her birth, and was always very delicate; had been examined by several medical men, who said that her heart was diseased; she had frequent palpitation and dyspnœa on bodily exertion, especially on ascending the stairs, and the action of the heart was sometimes discernible beneath the dress; she was also subject to cough and pain of the side; the hands, feet, lips, and face, were often blue, the last generally so. The ends of the fingers were bulbous; she had, before her death, frequent cough, and expectoration of sero-purulent matter, but as she had often been indisposed, her friends were not alarmed, and, consequently, did not obtain earlier assistance." The body small. Chest: heart rather large, and both ventricles slightly hypertrophied, and of equal thickness; the right cavity dilated; there is an opening in the upper part of the septum of the ventricles, which would readily admit the little finger; the mitral, tricuspid, and semilunar valves healthy in structure, but the last are thicker and more lax than usual. Two small vessels, which will admit a common-sized probe, are seen running along the anterior part of the aorta; they are about an inch in length, and terminate in two or three smaller branches. On injecting these with air and water, the trunks are found to end in blind extremities in the parietes of the ventricle, at the root of the aorta, so that the blood must have regurgitated into them from a larger branch; the pulmonary artery is absent; four pulmonary veins enter the left auricle, and the two cavæ the right. The foramen ovale is closed, and both the auriculo-ventricular valves are normal. The innominata is large, and given off from the anterior part of the aorta an inch and a half from the commencement of the latter vessel. The aorta was divided close to the left subclavian, and its lower part not examined. The lungs were of their natural size; their substance normal; but the bronchial membrane highly injected, and covered with sero-purulent fluid.

The next specimen was taken from a child, ten weeks old, affected with blue disease. The child increased in weight, appeared lively, and had no difficulty of breathing. Eight or ten days before death, it had several convulsive fits, and appeared to die from this cause. The heart only was removed from the body. It is of a rounded form, having a flattened, fig-like appearance. It consists of one large ventricle, from which the aorta arises at the anterior and upper part: this vessel was divided near to its origin. On cutting into the aorta, the semilunar valves are seen in a normal state; and below these is an irregular opening formed by tubercular projections from the sides of the ventricle: the parietes of this cavity are rather thicker than natural. Behind the aorta, there are the remains of a vessel which terminates in a cul-de-sac on the surface of the ventricle; and above this, the extremity of a larger artery, which has been divided. There is a large auricle into which four veins enter: one below, and on the right, large, and corresponding with the inferior cava; another above, and smaller than the last, in the situation of the superior cava; the other openings are small, and posterior to the aorta. These venous openings, and the aortic orifice, were the only means of communication between the heart and other parts of the circulatory apparatus. The auricle* (which is small) has not been cut into, but the auriculo-ventricular valve appears to be perfect.

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Dr. Barlow exhibited a specimen of

GRANULAR KIDNEY,

taken from a patient who came under the care of Dr. Addison, in Guy's Hospital, in February. He had, on admission, swollen legs and abdomen, puffy face, and dropsical conjunctiva, accompanied with much bronchial obstruction; the heart apparently healthy; the urine of specific gravity, 1012, densely coagulable, about two and a half pints being passed in the twenty-four hours. For the space of a month the case took the ordinary course of Bright's disease, the amount and character of the urine being much as on admission. At the end of this period, a severe attack of rigors supervened, together with much febrile excitement, and great dyspnœa; and the amount of urine diminished to one pint in the twenty-four hours, and contained the lithates in abundance, being densely coagulable. He somewhat rallied from the attack under treatment; but a second attack of rigors coming on nine days afterwards, with aggravation of all the symptoms, he died asphyxiated. Old pleuritic adhesions were observed on both sides of chest. Lungs emphysematous, the bronchi and their divisions being much dilated; slight atheromatous deposit in the arch of the aorta; the kidneys enormously large and white; the capsule stripped off with undue ease, leaving the surface of the kidney smooth, and stellated with closely aggregated white spots, —which seemed to consist of interstitial deposits,—in parts, while in others there were large contracted spots of a deep-purple colour, congested; the general appearance was very

* A similar structure is delineated in Wagner's Handworterbuch de Physiologie, Part vi., and is described as being found in the pineal gland and choroid plexus.—N. W.

* Since the heart was exhibited to the Society, the auricle (which was supposed to be single, in consequence of the probe passing from one of the left venous openings to the right) has been carefully examined, and a thin, imperfect septum is seen, forming two cavities: the right the larger, and its communication with the ventricle guarded by three small curtains; the left cavity small, with two venous openings, having, also, an auriculo-ventricular valve with two curtains. There is a small appendix to this auricle. The opening in the auricular septum (foramen ovale) will admit a common-sized goose-quill, but it is so guarded by a valvular flap, that very little blood could have passed through it.—E. C.

beautiful and not unlike, in the recent specimen, to a piece of variegated marble; the pelvis of the organ was considerably dilated; the mouth of the renal artery was patulous, and unyielding to the touch. On examining the renal vein, it afforded no slight surprise to find it filled with a firm fibrinous coagulum, and on tracing it in its divisions, this strange and unusual condition was found to exist to its ultimate ramifications. Under the microscope the white interstitial deposits were found to consist principally of fat, while evidence was afforded of the inflammatory origin of the coagula in the veins. In the abdomen about a pint of muddy serum was found effused. In consequence of the curious condition of the renal veins, the venous system generally was examined with considerable care, but no abnormality was discovered.

# Foreign Department.

## ACADEMY OF SCIENCES.

*Physiological Effects of Ether.*

The effects of the inhalation of ether, and the mode in which they are produced, form the prevailing subject of investigation and debate; and this, in some measure, to the neglect of other medical and physiological questions. Numerous have been the experiments performed upon the lower animals to determine the effects of ether upon the nervous centres, upon the blood, upon the fœtus in utero, and also upon the actions of the uterus itself, and lastly, upon some of the animal functions.

The chief experiments touching the action of ether upon the nervous centres are those made by Baron Flourens, long celebrated for his researches into the functions of the several segments of the brain and spinal cord, by means of vivisection. From his recent experiments with ether, he concludes that its action upon the nervous centres follows a definite course; that it at first acts on the brain, properly so called, (the cerebral hemispheres,) and disorders the intelligence; in the next place, on the cerebellum, and disorders the equilibrium of the movements; it then acts on the medulla oblongata, extinguishing the principle of sensation and motion; and lastly, on the spinal marrow; and having extended its action thus far, extinguishes life. Baron Flourens also observes that hydrochloric ether produces the same effects as the sulphuric. He also considers the phenomena of etherization to resemble asphyxia. To show this, he placed some dogs in a certain confined portion of air, and thus asphyxiated them. He then exposed the spinal marrow, and pinched and pricked its sensory and motor columns, but no sensation was evinced, and there were but a few feeble muscular contractions.

M. Roux, on the contrary, from seeing the effects of ether on those operated on surgically, believes that there is not the sequence in their occurrence taught by Baron Flourens; but that they often occur simultaneously; and very frequently consciousness, a readiness in comprehending questions, and in answering them by voluntary gestures, remains till the moment complete sensibility sets in. Further, M. Roux would rather compare the phenomena of ether to intoxication than to asphyxia. M. Roux narrates a case of traumatic tetanus following upon the removal of a testicle. The ether was administered on the fifth day from the accession of the tetanus, and when that had gone on to a great degree, there being trismus and opisthotonos, and the muscles of the abdomen affected, yet the pulse was tolerably full and regular; but the power of swallowing was lost, and the breathing was embarrassed. The ether-vapour soon brought on somnolency, but this was of short duration. At the moment of waking, which took place without agitation, cold water was sprinkled on him. The patient having regained his consciousness, it was thought that there was some movement of the head, and that there was less stiffness in the muscles of the neck. But almost immediately, or at least after a few seconds, the respiration became short and rapid, the pulse enfeebled, and half an hour had hardly passed, when the patient was no more. His death M. Roux believes to have been hastened by several hours or more by the administration of the vapour of the ether.

M. Mandl communicated, in a note, some observations he had made respecting the action of ether on the peristaltic movements of the intestines. Having produced complete insensibility in a dog, he opened the abdomen, when he observed that the peristaltic motion of the intestines had entirely ceased, nor did mechanical irritation reproduce it. The complete state of etherization lasted for ten minutes, when the dog moved, and his respiration became accelerated. He was then killed. Consentaneously with this there was a general tremor, and some contractions of the cervical muscles: besides this, the peristaltic action of the bowels reappeared, although feebly, and continued for some time.

This seems to show that the ganglionic system may be influenced by the ether equally with the cerebro and spinal systems; and it also supports the hypothesis which regards the ganglionic system as independent of the functions of the spinal cord. Indeed, respiration and circulation, which, according to Baron Flourens, depend on the spinal system, continue, whilst the vermicular motions cease entirely.

*Effects of Ether on a Pregnant Female.*

M. Cardan sent to the Academy an account of a case of pregnancy in which the vapour of ether was inhaled. A young woman in the sixth or seventh month of pregnancy was submitted to the respiration of ether. Intoxication was long in being established; the pulse was hard, but the number of pulsations was not sensibly augmented. She was seized with a disorderly hilarity, as is often observed. After ten or twelve respirations, the infant made some struggles and convulsive movements, very painful to the mother; these movements became more violent, and succeeded each other with greater rapidity, in proportion as the ether became absorbed; but as the mother grew insensible at the same time, she evinced only a vague kind of consciousness. When the mother recovered herself from the effects of the ether, she complained of pain in the uterine region, such as might arise from blows and bruises.

The heart of the fœtus beat with extreme rapidity, so that the individual pulsations could scarcely be distinguished; it might be said, indeed, to be in a constant tremor. The rapidity of the pulsations appeared to be in pretty direct relation to the motions or struggles of the child. The placental bruit lost its simple continuous character, and took place in fits, which varied according as the strugglings of the fœtus were more or less rapid.

*Practical application of Ether to Medical Jurisprudence, to distinguish feigned from real disease.*

M. Baudens illustrates its application to this purpose by two cases:—1. A soldier who had been enlisted, applied for discharge, on account of spinal curvature, which was strongly marked. The man was placed on a table on his back; but from the dorsal curvature, which was like a semicircle, all the weight of the trunk was thrown on the lumbar region. The vapour of ether was administered, and in four minutes insensibility came on, which was very soon succeeded by a relaxed state of the limbs. The cushion, which had previously been placed under his shoulders for support, was now removed, when his head and shoulders sank down flat on the table, and presently he lay quite prone, all curvature having disappeared. The deception the man practised was now clearly proved.

The other case was that of a young soldier recently enlisted, who entered the Val de Grace, presenting complete ankylosis of the hip-joint of the left side. When the limb was touched, a spontaneous contraction was felt, which seemed voluntary; and hence the disease was deemed to be simulated. He was put under the influence of ether, which produced somnolency in five minutes, and perfect insensibility in eight minutes; but relaxation of the muscles did not follow till after twelve minutes. Then the reality of the disease was manifested; a complete ankylosis of the hip-joint, allowing motion in no direction, and such that the pelvis was raised by an attempt to elevate the femur.

*Alteration of the Blood.—Ether in Midwifery.*

M. Ed. Robin states that when ether is inspired in sufficient quantity with atmospheric air, it prevents, in a remarkable manner, the transformation of venous into arterial blood. It so acts, that the red blood, which is the necessary stimulus to the various organs, becomes replaced by venous blood in a great measure, and which produces a stupefying effect. Hence the insensibility and other phenomena observed, where ether is effectual in its operation.

M. Robin would explain why the ether opposes the arterialization of the blood in this manner, both from its preventing the impregnation of the blood by the normal amount of air, and from its being burned by the proportion of oxygen which naturally should serve for the production of hæmatosin.

M. Stoltz, of Strasbourg, had recourse to turning in a case of transverse presentation, in a primipara. Now M. Velpeau thought that the inhalation of ether would facilitate the introduction of the hand into the uterus in the opera-

tion of turning. But M. Stoltz concludes from his case, in which he administered the vapour of ether for ten minutes, while he performed the operation, that it does not lessen the resistance of the uterus to the introduction of the hand into its cavity, nor facilitate the version or extraction of the child.

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### Medical Periodicals—French.

*The Influence of Strychnine on the Urinary Organs.*

In several cases of paralysis affecting the lower extremities and the bladder, strychnine has been employed; and it has been remarked that it, in the first place, increases the urinary secretion, then causes very frequent desire to empty the bladder, and when this is done, it is attended with some smarting. This influence on the bladder declines in proportion as the effects of the strychnine manifest themselves in the muscles of the limbs.

In one case in which strychnine was given a varioloid eruption came out, which did not suppurate, but terminated by crusty desiccations. When this eruption came out, the paralysis declined, and the bladder acquired power.

Strychnine, from the observations just mentioned, would therefore appear to exert a stimulant effect on the muscular tunic of the bladder; and if so, its utility would be rendered probable in paralytic conditions of the bladder, whether they be idiopathic, or arise from a mechanical cause; and it would act as an adjuvant to other remedies, where a palsied state of the bladder is only symptomatic of other disease.

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*Varicella, ending by an Eruption of Pemphigus.*

A child, fourteen or fifteen months old, had been suffering for some days with varicella, and had hitherto followed its regular course. But the mother one day observed that the vesicles had changed their appearance, or rather, that new bullæ had appeared, presenting a form, colour, and extent, unlike the primitive vesicles, which were now in progress of cure. The bullæ of pemphigus were seated on the neck, distended with serum, fringed at their margins, and surrounded by an inflamed circle. Several had broken, and produced extensive excoriations. From what influences does varicella become pemphigoid? Ordinarily it would seem to become so in certain epidemic conditions—i. e., under the influence of causes always latent.

The transformation of varicella into pemphigus is not very rare, but is always of serious import. In an epidemic of varicella which prevailed in the Hospital Necker, in 1845, there was the case of a child, in which this transformation had taken place, an immense pemphigoid bladder having formed, covering almost the half of the trunk; and this ended in a dreadful sore. No cause could be assigned. However, individual conditions must be taken account of, as the existence of a disposition to suppuration from debilitating and irritating causes, as dentition, long confinement in a hospital, or in any place where the air is vitiated; for under such circumstances, measles, variola, or scarlatina, or similar affections, will assume a severe form. Measles and scarlatina, diseases extending not deeply into the skin, but superficial, will take on a more unhealthy inflammatory form, and produce suppuration about the eyelids, ears, and nares. This, which is observed in these severer exanthemata, also happens in varicella, and the modification it undergoes is into pemphigus.

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*Partial Insertion of the Placenta over the Os Uteri, attended with a Hydrocephalic Fœtus.*

The case is recorded in *L'Union Médicale* of April 1st. A woman, aged thirty-seven, pregnant for the eighth time, had suffered in the course of her present pregnancy from losses of blood, not to a large amount, but occurring at irregular intervals; yet she went her full time. On the 8th of April, the first uterine contractions were felt; two hours after there was a loss of blood, moderate at first, but soon becoming alarming. Dr. Kiewier found her in an anæmic state, the vagina blocked up by clots of blood; the os uteri soft, and dilated to nearly the size of a five-shilling piece. Over the left side of the os internum, a spongy, soft mass, whence the blood flowed, was discovered. He endeavoured at first to compress the placenta against the walls of the pelvis, and at the same time to dilate the os; but full dilatation did not take place for half an hour. He determined to turn, but found he had to deal with a transverse presentation of the right hip. The turning at first presented little difficulty, which did not occur till the moment when the extremity of the head began to be engaged in the hollow; then he experienced a resistance to further movement, and was obliged to introduce the left hand under the infant in the uterus. He thrust his fingers into the mouth, not only to depress the chin on the breast, but also to bring the head into the oblique position. As the child advanced, he felt at the occiput a very distinct fluctuation, indicating the head to be hydrocephalic. The head was placed too high up for an endeavour to be made to reach it with the trocar or bistoury. Fortunately, strong traction brought about an elongation of the head, and its descent to the outlet of the pelvis. The child was emaciated, and in an advanced stage of decomposition. The cranium contained a quart of serum of a yellowish colour, and the brain was completely atrophied. The mother recovered perfectly.

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*Spontaneous Amputation in a new-born Child.*

M. Paul Dubois presented to the Academy of Medicine a child, two days old, which presented remarkable and rare congenital lesions. Immediately after its birth, it was perceived that the middle and ring fingers of the left hand were reduced to the first phalanges; the free extremities of the latter were rounded, and covered over with skin, except at a small part, which still presented a wound, and showed the removal of the distal phalanges to have been recent. From alongside these small wounds, arose a slender but resisting filiform prolongation, larger than the wanting phalanges would have been, otherwise it might be considered as the remains of them.

A similar lesion existed in the second and third toes of the left, and also of the right foot. The last phalanges were wanting, and stumps replaced them, presenting central wounds and filiform appendages, as in the hand.

The left leg presented, a little above the malleoli, an obvious constriction, circular and straight, as though it had been produced by a ligature, but no vestige of such a thing was to be found. The great toe of the right foot offered, on a level with its first phalanx, a similar constriction. This alteration, and the removal of the toes, seemed to constitute two stages of the malady. Lastly, the right leg also presented a circular depression, having the same characters, and occupying the same position, as the constriction on the left leg, but much less marked. At the time of birth, no trace of inflammation existed around the mutilated parts; but since, and under the influence of the new conditions of external existence, a true inflammatory state had been set up.

The umbilical cord was but half its usual length; the membranes enclosing the child seemed to be constituted only by the chorion; at least, the amnion could not be distinguished. The placenta offered nothing remarkable. Setting aside the mutilations described, the child was well formed and fully developed.

The mother was not taken into the hospital until after the membranes had burst, and it was impossible to discover any trace of the deficient members.

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*Modification of the Moxa.*

M. Guepratt proposes to use, in the place of cotton or amadon, paper which has been dipped into a solution of subacetate of lead, and afterwards dried; or he would prefer cotton so treated, to paper. This he tears in strips, and rolls into small rollers, which he makes to adhere at first, on the part to be treated, by a solution of gum arabic.

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## British Medical Journals.

A late number of the *Edinburgh Monthly Journal* contains a series of

observations on cancer,

by Dr. Hughes Bennett. These inquiries are a decided advance on our knowledge of this disease. They are evidently the result of much careful investigation, and we are glad to place them before our readers in an abridged form.

"Dr. Bennett confines his observations to the four questions connected with cancer, which more particularly interest the medical practitioner—namely, 1st. Is there any anatomical character which will enable us positively to distinguish a cancerous from any other kind of growth? 2nd. Is there any evidence that cancer is ever spontaneously curable? 3rd. What means do we possess of diagnosing cancerous from other

tumours or growths in the living subject? and 4th. What influence should our present knowledge of diagnosis have upon the treatment?

"1. *Is there any anatomical character which will enable us positively to distinguish a cancerous from any other kind of growth?* A cancerous growth may contain the following elementary structures:—1. Molecules and granules; 2. Nucleated cells of various shapes; 3. A filamentous or fibrous tissue; 4. A viscous fluid; 5. Bloodvessels; 6. Fatty matter; 7. Pus, and compound granular cells; 8. Black pigmentary matter; 9. Earthy matter. Of these, some are accidentally, and others invariably, present. The essential elements of cancer are,—1st. A fibrous mesh-work or stroma; 2nd. Nucleated cells; 3rd. A viscous fluid in which these float.

"The fibrous tissue of cancerous growths exactly resembles that found in lymph, or in the healthy tissues of the economy. It may be formed either by deposition, or by means of cell-growth. In the former case, filaments more or less delicate, and closely aggregated, may be seen crossing each other, or running in bundles, forming various kinds of mesh-works, in which the cells of cancer are deposited. In the latter case, we can observe fusiform cells splitting up into fibres, and are able to trace their formation from round, oval, or caudate cells, until perfect fibres are formed. These cells, in their different stages of development into fibres, have been frequently mistaken for those of cancer; Müller placed them among cancerous growths; and hence the erroneous opinion, that the caudate or spindle-shaped cell is characteristic of cancer.

"The nucleated cells peculiar to cancer vary greatly in shape and size. Sometimes we see nothing but oval bodies about twice the size of a human blood-globule, or closely resembling, except in colour, the oval blood-corpuscles of the camel. They measure about the $\frac{1}{75}$th of a millimetre in length, and $\frac{1}{100}$th or $\frac{1}{120}$th of a millimetre in breadth. These oval bodies are the nuclei of cancer cells. Sometimes they exist alone; at others, we may observe a round or oval delicate cell wall, frequently resembling a mere shadowed halo, in the fluid in which it floats. On adding acetic acid to them, we find the cell wall disappear, whilst the nucleus becomes more distinct than formerly. Such is the character of a cancer cell in its young state. At a more advanced period of development, the cell wall is more distinct. The nucleated structure is now round or oval, its medium diameter being about the $\frac{1}{50}$th of a millimetre, with a round or oval nucleus, about the $\frac{1}{100}$th of a millimetre in diameter. The addition of acetic acid always produces a remarkable change in these bodies, causing the cell wall to become very transparent and faint, and the nucleus to assume an unusual degree of distinctness. Hence the author considers that Dr. Walshe has committed a fundamental error in the histology of cancer, in stating, that 'the ultimate microscopical cells of cancer are insoluble in cold and boiling water, and are not seriously affected by acetic acid.'

"Dr. Bennett minutely describes the further growth of these cells, showing how they multiply from cell rising within cell. It is owing to this cellular structure that cancer owes the reproductive power which constitutes its malignancy. The cells occur isolated or in groups, surrounded by the other elements of the growth, but more especially by the fibrous tissue.

"The third essential element in cancer is a gelatinous fluid. On cutting through a scirrhous tumour, however hard it may be, we may generally succeed in scraping from its surface a fluid more or less transparent. In soft cancer it is more abundant, and contains the granules and cells previously described. In some forms of cancer, however, it constitutes a very large proportion of the mass, presenting a gelatiniform or mucilaginous appearance, varying in colour from a pearly white to a deep amber, and in consistence, from a slightly viscous fluid to a firm semi-solid mass. Collections of this kind may occur in loculi formed by fibrous tissue, or in cystic tumours perfectly structureless, or containing only numerous molecules and granules, constituting the simple colloid tissue.

"It is the relative amount of the three essential elements of cancer now described which constitutes its peculiar form. If the fibrous element be in excess, it constitutes scirrhus. If the corpuscles be numerous, encephaloma is produced; and if the fluid abound, and is collected into loculi, we call it colloid cancer. There is no other difference between these three forms than this, and Dr. Bennett expresses his conviction that there was no essential distinction between them. We frequently find all these forms of cancer in the same tumour—in one place scirrhus or hard cancer, in another encephaloma or soft cancer, and in a third gelatiniform, alveolar, or colloid cancer.

"At an early period in the study of histology, it was natural to conceive that a certain form of the cell should be thought characteristic of cancerous growths; and Müller thought that the caudate or spindle-shaped cells were peculiar to this growth; but it is now known that these bodies are common to fibrous structures in general, frequently seen in lymph, and especially in the exudation forming the granulations on ulcers, recent wounds, vegetations on the endocardium, &c. &c.

"The structure of the cell and the action of acetic acid upon it is much more distinctive. If the corpuscles are in that stage of growth in which they present a distinct nucleus which contains nucleoli, and if on the addition of acetic acid their external wall be rendered more transparent, whilst the border of the nucleus is apparently thickened, they are highly characteristic of a malignant structure. But even this is not an absolute and invariable mode of distinction; besides, it is only applicable when the cells have arrived at a certain stage of development. Dr. Bennett had frequently seen young epithelial cells, under certain circumstances, present all the characters just mentioned, with the exception of enclosed nucleoli, and undergo the same reaction with acetic acid. We need not wonder, then, that epithelial cells have frequently been mistaken for those of cancer, even by histologists, and that many growths, consisting of hypertrophy of the epidermis, or epithelium, as in several so-called cases of cancer of the lip, ulcerated warts, excrescences, &c., should have been mistaken for malignant growths.

"Dr. Bennett states that he is not aware of any tissue in which a fibrous and a cell structure, such as had been described, were combined, and he was therefore inclined to think that whenever we find cells of this kind deposited between the meshes of a filamentous structure, we may be satisfied that cancer is present. If we trust to the form of the cell alone, we may confound epithelial growths with cancer; if we trust to the fibrous elements alone, we may mistake sarcomatous growths for it. But in no case, so far as his experience has yet gone, can the two be associated without the existence of malignant growth. This character, then, he thinks one which will apply to all forms of cancer.

"2. *Is there any evidence that cancer is spontaneously curable?* Of the ultimate causes of cancer, or why an exudation thrown out from the vessels should ever undergo the peculiar transformations described, we know nothing. Observation and experience, however, coincide with the modern theory of cell growth, in attributing to it a reproductive power, on which its malignancy and power of spreading from tissue to tissue depends. Is this process ever checked? A general opinion prevails that cancer is necessarily fatal. Dr. Bennett does not coincide in this opinion, because it is not easy to understand why Nature should never cause the degeneration and disappearance of this particular growth, whilst every other tissue and form of cell-life are occasionally abortive.

"Trousseau, Hodgkin, Cruveilhier, and others, have frequently traced the conversion of scirrhus into ossiform matter, in the lower animals and in man. Dr. Walshe observes, 'I feel myself justified in affirming, after careful investigation of the point, that if the bony lamellæ actually continuous with some part of the skeleton, and which formed a marked characteristic of certain cancers connected with osseous structure be excluded from consideration, the phenomenon in question will be found to be much more written of than observed.' Dr. Bennett states that he had seen this transformation into calcareous matter in five cases, and presented four preparations to the Medico-Chirurgical Society of Edinburgh, taken from three of these. The first preparation was a portion of a large soft cancer, lobulated externally, taken from a case of Dr. Paterson's, preserved in spirit. A microscopic examination showed it to contain numerous cancer cells, deposited in areolar tissue, combined with an immense number of crystalline masses of phosphate of lime. The second preparation was a dried section of this tumour, the volume of which was only slightly diminished, and seemed to be wholly formed of calcareous matter. The third preparation was a dried portion of intestine, with a mesenteric gland attached, the external portion of which was converted into calcareous matter; where fresh cancerous matter could still be squeezed from its centre, exhibiting the characteristic cell structure, mixed with a quantity of earthy matter. The fourth preparation was a dried portion of mesentery, studded over with enlarged mesenteric glands, completely calcareous, removed from the body of a female who had died from scirrhus and chronic stricture of the pylorus. This series of preparations, Dr. Bennett considered, offered conclusive evidence that cancer is capable of undergoing the calcareous transformation.

"It has been stated, that cancer sometimes becomes transformed into fibrous or fatty tissue, and thus produces cicatrices in organs. It is very difficult to prove such a statement, because if there be no cancerous cell in a fibrous tissue, it is contended that it is not malignant and never has been. On the other hand, if cancer cells be present, it is clear that we have no evidence of degeneration. There can be no doubt that many organs and tumours are considered cancerous which are only fibrous.

"Professor Bochdalek, of Prague, formerly pathologist to the hospital there, and now Professor of Anatomy in the university, published a memoir, in 1845, "On the Healing Process of Cancer in the Liver." He describes the cancer in this organ, as breaking down into a cream-like matter, the fluid parts being absorbed, and the whole shrinking together, forming a puckering on the surface, often corresponding to a fibrous mass or a fatty material, in which collapsed cancer cells may yet be detected. In some livers he has seen these cicatrices in all stages of formation, cancer in some places, and perfect cicatrices in others.

"Dr. Bennett had frequently seen these appearances in the liver, but he had never been able to satisfy himself that they were proofs of cured cancer. There are strong probabilities in its favour, however. Tubercular masses are rare in the liver of adults, and such lesions must depend either upon cancer or upon chronic abscesses.

"The same difficulties exist with respect to the supposed degeneration of cancer into fat. Nothing is more common than to find associated with cancer a yellowish friable matter, more or less abundant, resembling cream in colour or consistence, or presenting a bright gamboge yellow tint. This, on examination, is found to consist of numerous granules, which disappear on the addition of ether, and refract light, like globules of oil. Whether these granules are elementary nuclei and cells, or whether they are the result of the disintegration of cells previously formed, is unknown.

"*What means do we possess of diagnosing cancerous from other growths in the living subject?* The local symptoms and general signs of cancer have frequently been found to be insufficient for the purposes of diagnoses, such as the lancinating pains, unequal surface, hardness, elastic feel, softening, ulceration, the surrounding tissue being affected, a general alteration of the constitution, and a tendency to return after excision. All these symptoms have, at various times, been proved to be connected with epidermic, fibrous, fatty, or cystic growths.

"In the living subject it is clear that the anatomical arrangement of the fibrous and cellular elements, observed in morbid specimens, can seldom be seen. We have no opportunity of obtaining a section. Still there are certain places where the detection of such cells as have been described, exhibiting their peculiar change under the action of acetic acid, will enable us to diagnose a malignant growth with certainty. Over most of the surface generally,—for instance, where the diagnosis most concerns the surgeon,—a group of such cells cannot leave us in doubt, because the epidermic scales in such cases never resemble them, as they do in internal organs, as the bladder, stomach, or brain. Thus, although anatomically, and in all cases, we cannot depend upon the form or even structure of the cell, as connected with the epidermis alone we can. Hence, to the surgeon, a minute examination is a more precious means of diagnosis than to the physician. Various ulcerated and fungoid tumours of the surface may be diagnosed with certainty, from an examination of the cells alone, whilst in fluids discharged from the stomach, bowels, or bladder, this means of diagnosis is not so certain.

"Many instances are now on record, where in doubtful cases such an examination has determined the nature of the growth. Several have been lately published by M. Sedillot, of Strasburgh, and others may be found in the works of Lebert and Vogel. There can be no doubt that many tumours and ulcerations exist, which, to the naked eye, and according to the ordinary symptoms, resemble cancer, although they are perfectly innocent. To all such growths Lebert has given the name of cancroid. Among them may be placed many so-called cancers of the lip, which, on examination, are often found to be fibro-epidermic; many tumours of the breast, which are either fibrous, fibro-epidermic, or cysto-sarcomatous; fungoid swellings of the dura mater: the ordinary fungus of the testicle, which Messrs. Goodsir and Syme have shown to consist of healthy granulations; and probably the so-called chimney-sweep's cancer of the scrotum. Several instances were referred to, published in the writings of Lebert, Vogel, Syme, and Sedillot.

"4. *What influence should an improved knowledge of the pathology and diagnosis of cancer have upon the treatment?* Most of the practical points connected with the surgical treatment of cancer were fully discussed in the French Academie de Médecine, in 1844, on the occasion of a paper read by M. Cruveilhier. That pathologist maintained that surgeons are continually cutting out fibrous tumours from the female breast which never undergo cancerous transformation, and which therefore might be allowed to remain with perfect safety. So far from fibrous growths ever degenerating into cancer, he considered that they indicate a state of constitution altogether incompatible with malignant action, so that in being able to detect them in the breast or uterus, he has confidently assured the patients that they would never be subject to cancer. In support of these statements he brought forward cases of tumours in these situations which had existed from ten to thirty years, and cited one exceptional instance, where cancer having attacked a breast already the seat of fibrous tumours, these remained unaffected, while all the rest of the organ was cancerous. He pointed out that cancer always depended upon a constitutional disorder, that local disease was the effect, and not the cause, and to remove the first, while the latter was allowed to remain, was an irrational practice.

"In these opinions M. Cruveilhier was supported by M.M. Velpeau and Jolly. The first maintained that he could diagnose fibrous, or what he called fibrinous tumours of the mamma, which never degenerated into cancer, although he frequently removed them, to tranquillize the patient, or to get rid of a deformity.

"On the other hand, it was contended by most of the practical surgeons of Paris, including Blandin, Gerdy, Roux, Amussat, Berard, and Lisfranc, that it was impossible to diagnose fibrous from cancerous tumours of the breast at an early period; that the former were only an incipient stage of the latter, and consequently frequently degenerated; and that the best practical rule to be followed was always to excise them as early as possible. They maintained that the disease was first local, and that the cachexia was induced by absorption from the morbid growth—was the cause, and not the result. They denied the law of incompatibility, sought to be established by M. Cruveilhier, and denounced his paper as one likely to be followed by the most injurious consequences in practice.

"This celebrated discussion left the practical question in the same state as before—namely, that as a matter of prudence, all tumours should be removed from the female breast as early as possible, whatever be their nature. No one practitioner who took a part in it, appeared to be aware of the real structure of cancerous tumours, or knew that a fibrous as well as a foreign growth was invariably present in them. Indeed, many cited, as the best proof of cancer, the presence of the dense fibrous structure, often grating under the knife, which is exactly that part of the tumour which is least malignant.

"A more perfect diagnosis, however, has already led to some useful modifications in surgical practice. Among these, Dr. Bennett alludes to the altered operation of fungus of the testicle, so successfully executed by Mr. Syme, and already quoted in The Lancet. Another valuable modification has been introduced by M. Sedillot of Strasburgh. It is well known, that in many cases of incipient cancer it has been advised to make the incision embrace a considerable portion of the sound textures, in order to ensure eradication of the malignant growth. Thus the whole female breast has often been removed, although the extent of the tumour has been inconsiderable. In cases, however, where a restoration of parts is necessary, as in the lip, the rule is very inconvenient. M. Sedillot, therefore, in several cases, having satisfied himself, in the manner pointed out, that the ulcer or growth is not cancerous, has barely removed the indurated structure, and thus been enabled to preserve a larger amount of soft parts than he otherwise would have done. These operations have been perfectly successful.

"In some cases, an exact diagnosis formed by a microscopic examination, has prevented an operation which would otherwise have been determined on. Vogel gives a case of ulcerated breast of this kind. (Icones Histologiæ Pathologicæ, p. 127.) Dr. Bennett has seen two others, where, in a cancroid growth in the breast, he diagnosed non-malignant disease. All these cases ultimately recovered.

"If when this means of examination has been so little employed, such good results have already resulted, what may we expect when surgeons are more extensively aware of the benefits which may be derived from an exact diagnosis? Dr. Bennett believes that we were only on the threshold of the inquiry, and that the most important discoveries would yet be made in the pathology and diagnosis of cancerous growths, the influence of which upon surgical practice could not be calculated on."

# THE LANCET.

LONDON, SATURDAY, APRIL 17, 1847.


On Monday last, General Sir Howard Douglas, in an excellent speech, called attention, in the House of Commons, to the cases of army physicians and surgeons who were not included in the warrant issued in July, 1846. It appears that in 1840 a warrant was issued, giving full pay on retirement to officers in the cavalry and infantry of a certain standing; and this boon was subsequently extended to the artillery, the engineers, and the marines. In the warrant of 1846, an increased retiring allowance was also given to the quartermasters and veterinary surgeons, while nothing was done for the medical officers. On the injustice of this omission, and the evils resulting therefrom, Sir H. Douglas insisted with much ability. The surgeon enters the service at twenty-four years of age, and after thirty years of active service, at the age of fifty-four, when the time for active professional labour has passed, his retiring allowance is only fifteen shillings a day, or about £270 per annum. Of course, the higher medical officers have an increased allowance beyond this; but that the chances of promotion are not very brilliant, is evident from a circumstance stated in the speech of Colonel Lindsay, that there are at the present time in the army list, eleven surgeons who have been in the service between thirty and thirty-five, and twelve between thirty-five and forty years. Sir Howard Douglas dwelt particularly upon the fact, that the stated allowance tended to keep medical men in the army, when their age would render their retirement beneficial to the service; and Colonel Lindsay pointed out the injustice of giving the army surgeon a less retiring allowance than other officers of the same rank, when it was considered that other officers may obtain their commissions at sixteen or eighteen years of age, while the surgeon must be twenty-four years of age before he obtains his surgeoncy. It appears that the paymasters are in the same predicament as the medical staff; and Mr. Fox Maule, in reply to the arguments of the gallant officers who supported the claims of both parties, said that it was not fair to put the paymasters on a footing with those officers who may be engaged in action. This, however, does not apply to the surgeon, who is exposed to as much danger as any other man in the regiment. We have a strong feeling on the claims of medical men, both in the army and the navy, to increased remuneration and honour, and we have lost no opportunity of advocating these claims. We believe it would be of infinite service, if the heads of the army and navy medical departments—Sir W. Burnett and Sir James Macgregor—could be induced to take those active steps which their position would justify, in obtaining an amelioration of many of the evils which affect army and navy medical men. We may allude to two subjects in which their advocacy would be of importance, and which have been recently discussed in this journal. The one is, the injustice of placing the fully qualified naval assistant-surgeon in the gun-room, with the raw midshipman; the other is, the injustice of withholding military decorations from the medical staff. The thanks of the whole medical profession are due to Sir Howard Douglas and Colonel Lindsay, for the mode in which the subject of retiring pensions to medical men have been brought forward. We say the whole profession, because the elevation of any part of the medical body to its rights is a benefit to the entire faculty. We are happy in being able to add, that the impression which prevailed in the House of Commons was, that the claims of army medical men on retiring would be admitted by the government.

In another page of our journal will be found the particulars of the late trial, at the Old Bailey, of Dennis Cronin, the apothecary, for manslaughter. Taken in connexion with the facts divulged at the inquest, it is one of the most extraordinary trials furnished by the annals of quackery. Human life has been sacrificed—that it has been so carelessly and ignorantly none will deny; yet it appears that no party is punishable, and life may be sacrificed again, at any moment, without legal let or hindrance. As regards the party placed at the criminal bar to take his trial for manslaughter, it appears that, armed with a Giessen diploma, he assumed the title of physician, and was so considered by the patient who consulted him, though his legal qualification is that of an apothecary. It appears, too, that he played the part both of physician and chemist, sitting in one room to write prescriptions and take fees, while in another he dispensed his own prescriptions through his assistant, and pocketed the money. In one prescription he deliberately mixes four poisons, pretending to expect that one would neutralize the other. The ingredient which actually poisoned the patient was called by Cronin "aqua amygdalæ amaræ;" and it was proved that this article was not described in any British pharmacopœia in any form; while in the only pharmacological work containing it in this country—viz., "Gray's Supplement"—the two preparations having a similar name were both highly poisonous. It was also proved, that in some foreign pharmaceutical works this article *was* found, but of the most various strength, from simple water to the most deadly poison. All this Cronin knew, or ought to have known, before he ventured to prescribe; yet such was the carelessness with which this possibly, and even probably, poisonous article was used, that at the inquest it appeared the word "amaræ" was omitted altogether from his prescription book, and that the directions for taking the liquid which proved fatal actually did not specify whether the two spoonfuls to be taken should be tea-spoonfuls or table-spoonfuls. There is another point to which we would direct special attention. According to the evidence as reported on the coroner's inquest, Cronin told the unfortunate victim of bitter almond water that the prescription (he had written as a physician, and dispensed as a druggist) could be "made up anywhere." Now Cronin either knew that bitter almond water was kept by certain druggists,—and if so, he must have known that it was of variable strength,—*or*, he did not so know! If he knew, he suffered the poor patient to run the chance of having this ingredient introduced as a poison, or not, as the mere chance might happen, and as it did happen. If he did not know that druggists kept these waters of various strength, he must have intended to deceive the patient; believing that she would be forced to return with the prescription to his own shop. He is welcome to whichever horn of the dilemma he may choose. It was assumed at the inquest, that because the accused professed to have a German diploma, he must, *ex necessitate*, be familiar with foreign medicines. But this is by no means a

corollary attending on the possession of a Giessen diploma. If Giessen degrees were of any intrinsic value, the fact—which we have seen stated, on the authority of Baron LIEBIG—that there are in this country *one hundred forged diplomas* of that university sold fraudulently to parties by means of public advertisement, would render all such degrees which had not been tested of no value whatever! But as these degrees have been marketable articles, having no scientific value whatsoever, it does not follow that their possessors shall know anything whatever of foreign medicaments or foreign modes of prescribing. An M.D. of this creation may never have been out of England, and never have read a word of German in his life; in fact, he may be unable to read the parchment which confers his fictitious title. It does not then follow, necessarily, that CRONIN, because in the possession of a degree, real or spurious, knew anything of "aqua amygdalæ amaræ" as a foreign medicament; and it is quite possible that he wrote the prescription, intending it to be hieroglyphical and unprofitable to all but his own dispensary and his own till.

So much for CRONIN before the death of the unfortunate young lady who had trusted her life in his hands. The only other point in which he appeared personally was at the inquest, when he wished it to be believed, that if the compound strychnia powder had been introduced into the prescription, the iron said to have been an ingredient of this preparation would have neutralized the hydrocyanic acid. It, however, subsequently came out, that the strychnia powder of CRONIN's dispensary contained no iron, being composed of strychnia and sugar; but now it was the strychnia which was to have played the part of antidote! Such are the plain facts of the whole case, to the eye of the medical profession, as regards the principal party implicated.

The part borne by the chemists, in the investigation before the coroner, and in the trial at the Old Bailey, is another subject for consideration. The heavy censure of the judge rested on Mr. CORFIELD for his share in the transaction; but this, as regards the poisoning, arose solely from a misapprehension by the judge of the medical bearings of Mr. CORFIELD's conduct. It is next to impossible that a judge could, without ample medical evidence before him, give an opinion upon such a point as that which arose in relation to Mr. CORFIELD. We do not hesitate to assert that, as regards the poisoning, not the shadow of blame attaches to Mr. CORFIELD. The chemist has a prescription sent to him, with an ingredient which he has never before heard of, and which Mr. MORSON, during an experience of thirty years, had never known prescribed internally, (so that Mr. CORFIELD's not being acquainted with this preparation is no proof whatever of ignorance in his business.) No suspicion of its being an article of an injurious nature would enter Mr. CORFIELD's mind, because the bitter almond water was ordered as the last item of the prescription, just as cinnamon water or mint water might be, and signed with initials, as if by a regular English physician, nothing whatever being written to indicate its strength or its poisonous properties. He copies the very words of the prescription, and sends them to two of the most eminent establishments in London, for the really poisonous ingredient; obtains it from one of them, labelled boldly, in the very words of the prescription, and sends it to the patient. As regards the bitter almond water, the prescription was dispensed by Mr. CORFIELD with the strictest and most literal faithfulness. Nor can we blame Mr. BELL; he could not know that the name "aqua amaræ amygdalæ" had been copied from a careless prescription; he must have taken it for granted that the writer of the order knew the nature of the preparation. It was a mistake that might have happened at any time, and may happen again, if people with foreign degrees are to be allowed to prescribe all sorts of foreign poisons; for it is quite impossible that all our chemists, metropolitan and provincial, can know the composition of the thousand articles of the foreign pharmacopœias. Where the fault and the crime really rested there can be no doubt in the minds of the profession. If it is considered necessary that chemists should recognise poisonous ingredients, it is ten thousand times more necessary that physicians or pseudo-physicians should know how to avoid them. It was assumed at the trial, that a chemist ought to be able to correct a physician's prescription; doubtless, he should be able to see any palpable error in a recipe containing articles in regular use; but even here, if a mistake and a fatal result ensue, the great blame should rest with the prescriber, if his directions were literally fulfilled, and not with the dispenser. A chemist is indeed placed in a hard position if he is to be held responsible for professional and his own mistakes. They may be punished for refusing to make up a prescription; or if a mistake occurs from dispensing it literally, they are held responsible. It is the medical practitioner, not the dispensing chemist, who is the guardian of the lives of patients, and who must take the responsibility in case of accident from the literal preparation of prescriptions. How often, in certain forms of disease, are what would seem poisonous doses of opium, and other remedies, ordered; yet what chemist would be justified in stopping a prescription, accusing it of poisonous properties, under such circumstances. We maintain, then, that no blame could properly, or did, rest with Mr. CORFIELD; and we are the more ready to place this on record, because we have no doubt he has already received injury for his share in this unfortunate transaction. One other point in the pharmaceutical evidence is very significant. CRONIN showed, at the inquest, two bottles of bitter almond water, which he had procured of Messrs. TURNER and SPRATT, chemists, of Tichborne-street. This was intended as a defence; but Mr. MORSON at once declared that either of them would have been fatal in the dose prescribed. Mr. SPRATT swore, according to the report published in the *Pharmaceutical Journal*, that "he was "in the habit of keeping five kinds of bitter almond water. "These five waters were kept on his shelves, correctly labelled, "and were frequently used. He should say, that on an "average, he prepared about two prescriptions a day contain-"ing the bitter almond water!" He also stated, upon oath, that several English physicians were in the habit of prescribing it; but when called upon to name them, he could not mention one! With reference to his assertion, that "five waters were kept on his shelves, correctly labelled," it is not a little remarkable, that when an application was made at the shop, immediately after the inquest, Mr. TURNER (Mr. SPRATT's partner) stated, "*that he had no bitter almond water of any kind in the house*"!! Mr. VENABLES, a pupil (!) of CRONIN's, and Dr. VENABLES, (father and son,) swore they had obtained some bitter almond water of Mr. FRENCH, a chemist in Holborn, which was not poisonous in ounce doses. But there was nothing remarkable in this, seeing that it was after

the first report of the inquest had gone abroad, and when any chemist would have taken care to sell only harmless bitter almond water. Dr. VENABLES appeared, both at the inquest and at the trial, as a witness for CRONIN. We wish particularly to direct attention to his evidence at the trial. He is reported to have sworn, that "if the strychnia powder had "been added, although it would not have had any chemical "effect, it would have acted physiologically upon the system, "and would have had a similar effect to ammonia, in neutral-"izing the prussic acid." It was at this point of the evidence that the jury interposed, and returned the verdict of "Not Guilty." This testimony of Dr. VENABLES, then, requires to be thoroughly sifted. If the report be true, he gave his evidence so as to make the jury believe that the strychnia powder, omitted by Mr. CORFIELD, would have neutralized the poisonous effects of the prussic acid. Now, the quantity of bitter almond water taken by the deceased at one dose amounted to one ounce, and contained sixty-one minims of the hydrocyanic acid of the Pharmacopœia. The dose of the strychnia powder was half a grain, and, according to the evidence of VENABLES junior, the compound strychnia was composed of two grains of strychnia to half an ounce of sugar. Thus, according to the evidence of Dr. VENABLES, the poisonous effects of sixty-one minims of prussic acid are to be neutralized by an infinitesimal dose of strychnia. The five-hundredth part of a grain of strychnia is to neutralize physiologically a full drachm of hydrocyanic acid. There is scarcely any point more gross in the whole of this gross and fatal proceeding, than this evidence. We believe Dr. VENABLES is a member of the London College of Physicians, and a recognised lecturer on medical jurisprudence. This evidence of his ought to be duly considered by all those medical bodies who recognise his lectures, and it ought to be weighed by the College of Physicians. Neither the examining bodies, nor the College to which he belongs, will do their plain duty, if so flagrant a matter be passed over without prompt punishment.

These are some of the salient points of this deplorable trial, the particulars of which must excite the indignation of every honest man in the profession. But there was, in fact, no searching trial at all! There was no real prosecutor. The depositions were handed over by the Court to Mr. PAYNE; but he had no brief, and no attempt whatever was made to obtain evidence such as would have put the case fairly before the judge and the jury; and so the COFFINS and the CRONINS will proceed in their several careers until legislation has placed the profession on a different footing. The sacrifice of human life will go on until such a feeling of indignation has been roused, in and out of the profession, by constant exposure, that it will be impossible to refuse sound laws in all that relates to medicine and human life.

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We are glad to see, from the *Glasgow Constitutional*, that Sir B. BRODIE promptly repudiates the impudence of HOLLOWAY in using his name to his vile nostrums. This repudiation is a severe censure on Dr. BRIGHT, who, though dragged much deeper through the mire by the quack, preserves an obstinate and undignified silence.

We are getting quite sickened with the greed of some of our friends of the press, and the manner in which they jump at quack advertisements, *provided that the money is paid.* We say nothing of the fraudulent one that is at present flourishing so *very* conspicuously in some of the "*most respectable*" papers of this city. We have seen the day when a couple of paltry sovereigns would not have tempted the conductors to give currency to such a barefaced attempt to dupe their readers. While upon this subject we may mention, that seeing the name of Sir Benjamin Brodie, the celebrated London surgeon, the other day, (along with many other eminent men,) at the head of a list of patrons and partakers of certain pills, we took the trouble, for the first time in our life, just to drop a line, to inquire whether there was any authority given for such a liberty. The following is the reply:—

"14, Saville-row, April 3, 1847.

SIR,—I know nothing of Holloway or his remedies. If he uses my name, he does so without my authority.

I found that he had advertised my name in the same manner some years since, and I then published a letter in one of the medical journals, stating what I have now stated to you.—I am, Sir, your obedient servant,

B. C. BRODIE."

And this is the way of the whole fraternity. Indeed, HOLLOWAY is much less offensive than many of the others we see daily *at the foot of the columns*, in some of the Glasgow papers."

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THE trial at Bolton, the particulars of which will be found at page 419, is of great importance to the profession. If the decision should stand, the quacks may prepare themselves for something like punishment. But the matter must be followed up, and the reader will see, by a circular letter, appended below, from a Mr. SWEETNAM, that the same kind of prosecution has been commenced in London. This document, signed MICHAEL SWEETNAM, has been sent to all the names printed in the black list of the *Medical Directory*. We fervently wish the prosecution success; it is one of the first fruits of the anti-quackery war, and must be supported by the entire profession. On Thursday last, the grand jury found a true bill for a misdemeanour in this case, so that there is every probability of a second quack conviction. The cry of the miserable quack for help, to all whom he considers his brethren in quackery, at the fear of his righteous punishment, is most ludicrous. It is, however, in some sort, a lesson for good. If men bandy together in a bad cause, how much the more is it their duty to unite together for the good and righteous purpose of dethroning quackery, of the murderous influence of which scarcely a day passes without offering its testimony:—

"50, St. John Street, Clerkenwell, April 5th, 1847.

SIR,—I beg leave to inform you, that criminal proceedings have been instituted against me by the Apothecaries' Company, for practising without their licence. As this is the first time such a proceeding has been attempted in this country, I have determined to test its legality, and confidently look for your aid, and that of every uncertificated man, to defray the expenses of the proceeding. Should this not be extended towards me, I must of necessity suffer judgment to go by default, and thus establish a precedent which will be used to crush a useful and intelligent body of practitioners. By resistance they may be beaten, but combination is necessary to attain this object; and as the trial comes on this week, I trust you will lose no time in forwarding your subscription to my solicitor, Mr. WM. WOODGATE, 40, Gresham-street, corner of Aldermanbury, and in case it should be inconvenient to leave your business, you will be waited on, either by myself, or a gentleman deputed by me.—I am, Sir, your obedient servant,

MICHAEL SWEETNAM."

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THE subject of medical etiquette has been agitating the half dozen British medical men located in the island of Madeira. It would appear from the correspondence which has been forwarded to us, that the rest of the medical men having seen reasons for complaining of the conduct of Dr. GILHAM, took the opportunity afforded by a transaction in which Dr. GILHAM and Dr. ROSS was concerned, to hold a summary court-medical, and decided that the conduct of Dr.

Gilham "was unprofessional, and calculated to lower the respectability of the profession in public estimation." They went on to recount the charges which had been made, and, as they conceived, substantiated, against Dr. Gilham, by the following resolution:—"Under these circumstances, in order "to uphold the respectability of an honourable profession, we "feel it to be our duty to decline all professional intercourse "with you until a satisfactory refutation of these statements is "placed before us. We shall hold a meeting in Dr. Lund's "house, Santa Clara, on Tuesday next, Feb. 9th, and any "statement forwarded to us by you to Dr. Lund's residence "will be duly considered by the meeting." To this document the names of Drs. Broughton, M'Kellar, Lund, and Miller, are affixed.

The "statements" referred to declared, that Dr. Gilham having been asked by her husband to see a lady under the care of Dr. Ross, as a "friend," Dr. Gilham made "a professional examination of her case," promised to "cure her in a fortnight," but did not communicate with Dr. Ross. On the contrary, when Dr. Ross expressed to the patient a wish to meet Dr. Gilham in consultation, the latter was said to have informed the husband of the patient, "that unless Dr. "Ross would consent to, and approve of, the plan of treatment "you wished to pursue, it was of no use your meeting on the "subject." Reference is also made by the judges to "other instances," as though this was not the only case in which Dr. Gilham had committed breaches of professional etiquette.

## CENTRAL CRIMINAL COURT.

*(Before Mr. Justice Coleridge.)*

Dennis Cronin surrendered to take his trial upon an indictment, charging him with the manslaughter of Sarah Ellen Collyer. The indictment alleged, that before the commission of the felony, the deceased was sick and distempered in her body, and that the defendant undertook to treat her in a medical capacity for such illness, and in the course of that treatment administered to her a certain noxious, dangerous, and destructive compound, composed of spirit of ammonia, prussic acid, and bitter almond water, and thereby caused her death.

The personal appearance of the prisoner has been duly complimented by the reporters, and the Old Bailey was thronged by a great number of quacks and sympathizing irregulars, anxious, no doubt, respecting the issue of the trial.

Mr. Payne prosecuted; Mr. Clarkson conducted the defence.

Mr. Clarkson having stated that he should not attempt to dispute the facts connected with the death, they were given very briefly, and it will only be necessary to state that it appeared that the deceased was suffering from some malady at the commencement of last February, and applied to the defendant, who furnished her with some medicine, which was sent from his own dispensary, and after she had taken it she appeared better. The defendant afterwards gave her a prescription, telling her that she could get the medicine made up at any chemist's, and it appeared, that on the 15th of February, a person, named Johnson, was sent with the prescription to the shop of a chemist, named Corfield, in Camden-town, and he received from him a bottle of medicine, which he brought back to the deceased, and upon her taking a table-spoonful of the mixture, she immediately complained of illness, and died in the space of a very few minutes, the death being clearly occasioned by the prussic acid contained in the compound thus furnished.

Mr. Daniel Corfield was examined: He deposed that he was a chemist, and resided in High-street, Camden-town. He remembered Mr. Johnson coming to his shop on the evening of the 15th of February, with a prescription for a mixture, which was to be composed of two drachms of compound spirit of ammonia, sixteen drops of tincture of opium, four drops of prussic acid, (Scheele's strength,) two grains of compound strychnine powder, and six ounces of bitter almond water. The prescription was dated the 3rd of February. Having no strychnine powder or bitter almond water, he sent his boy to fetch some, and he brought back a twelve-ounce bottle of bitter almond water, and having placed the other ingredients in a bottle, with the exception of the strychnine powder, he filled it up with six ounces of the bitter almond water, and gave the mixture to Mr. Johnson. In addition to this evidence, he stated, that having been in business as a chemist for twelve years, he never before heard of strychnine powder or bitter almond water being used as the ingredients of medicine.

Cross-examined: He was entirely ignorant of the qualities of bitter almond water and strychnine powder, and they were not named in any recognised Pharmacopœia. The last edition of the Pharmacopœia was published eleven years ago, and since that period there had no doubt been a great advance in medical science, and many new discoveries in medicine had been made.

Mr. Clarkson: Do you know anything of the character of strychnine powder, or whether it would be calculated in any way to neutralize the effect of the other ingredients of the mixture?

Witness: I don't know anything of the quality or effect of this powder.

Mr. Clarkson: And yet you did not communicate the fact of its having been omitted to the party to whom you gave the medicine?

Witness: I did not.

Mr. Clarkson: In justice to Dr. Cronin will you tell us whether you sent the prescription to Mr. Bell, from whom you obtained the bitter almond water?

Witness: I did not.

Mr. Clarkson: Then he had no means whatever of knowing how it was to be used—whether internally or externally?

Cross-examined: The bitter almond water appeared only to be intended as a medium for mixing the other ingredients and making up the quantity. The different articles mentioned in the prescription he should say were calculated to neutralize each other; the spirit of ammonia, for instance, would decompose the prussic acid. He was not aware that there were a great many different descriptions of bitter almond water, and that some were deadly poison while others were perfectly harmless. It was evidently the intention of the prescription that the simple bitter almond water should be used, and not the concentrated essence of the bitter almond, and then only as a vehicle for mixing the other ingredients.

Mr. Clarkson: And you filled up the bottle with six ounces of deadly poison?

Witness: I filled it up with the bitter almond water that I received from Mr. Bell.

Mr. Clarkson: Without meaning anything offensive, will you allow me to ask you whether persons who follow the profession of a chemist undergo any medical examination before they do so?

Witness: They do not.

Mr. Justice Coleridge here interposed, and observed, that, to say the least of it, the act of pretending to make up a prescription sent by a physician, without putting in all the ingredients mentioned in it, was most monstrous. Although not a fraud in the ordinary sense of the term, still it was one on the person to whom the medicine was intended. Such a proceeding was very dangerous in any case, and he was not prepared to say what the effect had been in the present instance.

Mr. Morson, a chemist in Southampton-row, to whom the first application was made by Mr. Corfield's messenger for the powder and the bitter almond water, but who, not having them, referred him to Mr. Bell, of Oxford-street, was next examined, but he merely proved, that having been in business as a chemist for a great many years, he had never heard of bitter almond water being used in compounding medicine.

Mr. Jacob Bell deposed that he received an order from Mr. Corfield for the bitter almond water and the strychnine powder. He had none of the powder, and therefore he only sent the bitter almond water, and a formula of the powder that he found in a book to which he referred. There were twenty-two different descriptions of bitter almond water, and looking at the prescription he should not know which description was required; and if such a prescription had been sent to him he should not have made it up without communicating with the physician. Different distilled waters were made use of to mix medicine in, some being poisonous and others harmless; but in the former case he should expect the prescription would denote the strength that was to be used. Chemically speaking, he was of opinion that the omission of the strychnine powder would not at all effect the quality of the mixture in question, excepting that the omission of a poisonous ingredient would have rendered it less poisonous. This powder was a

preparation from nux vomica, but the quantity mentioned in the prescription would in itself have been perfectly harmless.

Cross-examined: If he had seen the prescription he should have known that the bitter almond water was merely intended as a vehicle for the administration of the medicine, and he would have made use of a harmless description of bitter almond water. In that case no mischief would have happened. He had no means of knowing whether it was to be used internally or externally, or, in fact, to what purpose it was to be applied. If he had known that the bitter almond water he sent was to have been used internally, he should not have put the word "poison" upon the bottle, because he should think a chemist would be aware of the fact; but if he had known that he was dealing with a person who admitted, although in that profession, that he was entirely ignorant of the qualities of the article, then he should certainly have put the word "poison" on the bottle. The article he sent was a concentrated bitter almond water, but there was some of a more powerful description.

Mr. Justice Coleridge inquired of the witness whether, when the chemists sent out the concentrated almond water, it was not customary to label it as such?

The witness said it was not customary to do so.

In answer to further questions put by Mr. Clarkson, the witness said, that although he did not consider the quantity of bitter almond water that he sent was sufficient to kill a horse, there was quite enough to destroy a human being. He likewise said that there was no doubt the physicians of the present day were infinitely in advance of the existing Pharmacopœia.

Reëxamined: In his opinion, the prescription should have defined the strength of the bitter-almond water that was to be made use of.

Mr. J. E. Spratt, chemist, deposed, that he kept five descriptions of bitter almond water—two English, and three foreign. He was in the habit of making up physicians' prescriptions, and constantly used bitter almond water. If the word "concentrated" was not mentioned in the prescription, he should use the strength stated in "Gray's Pharmacopœia," which would be quite harmless.

Mr. Justice Coleridge: Then, in your opinion, the omission of the word "concentrated" was an indication that the weak description of bitter almond water was intended to be used in the prescription?

Witness: Certainly. If this prescription had been sent to me, I should have used the weak compound.

Mr. Justice Coleridge: And if you had done that, would the mixture have been harmless?

Witness: I conceive so.

The learned Judge here inquired of Mr. Payne whether he thought the case ought to be carried any further.

Mr. Payne said, he certainly thought, after the evidence that had just been given, that the matter was too doubtful to justify a conviction.

His Lordship observed, it appeared perfectly clear that a chemist possessing the ordinary knowledge of his profession must have known that a weak description of bitter almond water was intended to be used for the prescription. Mr. Corfield did not appear to have known anything upon the subject, and he did not give the prescription a fair chance.

The jury then deliberated together for a few minutes, when

Mr. Clarkson observed, that perhaps it would be more satisfactory to all parties that another medical witness should be examined.

Dr. Robert Venables, a member of the College of Physicians, and lecturer on forensic medicine, was accordingly called; and after having stated, that upon analysis he discovered sufficient prussic acid in the liquid of which the deceased had partaken to account for her death, he said that, looking at the prescription, he should have expected that the ordinary weak compound of bitter almonds would have been used, and that was perfectly harmless. He also said, that if the strychnine powder had been added, although it would not have had any chemical effect, it would have acted physiologically upon the system, and would have had a similar effect to ammonia in neutralizing the prussic acid.

The jury here interposed, stating that they were quite satisfied with the evidence that had been adduced, and they at once returned a verdict of *Not Guilty*.

Mr. Clarkson observed, that if the case had gone further, he had twenty chemists present to prove that bitter almond water was constantly an ingredient in the prescriptions they made up for physicians.

Mr. Justice Coleridge ordered the defendant to be immediately discharged.

## BOROUGH QUARTER SESSIONS, BOLTON.

*(Before R. B. Armstrong, Esq., Recorder.)*

INFRINGEMENT OF THE APOTHECARIES' ACT.

Ellis Flitcroft, a bricklayer by trade, but now a shopkeeper, residing in Boardman Field, was indicted for misdemeanour, having practised as an apothecary without a certificate. Mr. Brandt conducted the prosecution, instructed by Mr. John Gaskell, the public prosecutor; and Mr. Sowler appeared for the defendant, instructed by Mr. Richardson, solicitor.—Mr. Brandt, in opening the case, called the attention of the jury to the indictment, which was of a different character from any that had previously been before them. The charge was made under the 55th Geo. III., c. 194, the fourteenth section of which prohibited parties from practising as apothecaries without being duly qualified by a certificate from the Apothecaries' Company. The learned counsel then detailed the facts, as given in evidence, and referred to two cases in which convictions had taken place under similar circumstances. These were,—the Apothecaries' Company *v.* Allen, reported in Barnwell and Adolphus, vol. iv. p. 625; and Woodward *v.* Ball, in Carrington and Payne, vol. vi. p. 577. He then called the following witnesses:—

Lettice Bartley, wife of Thomas Bartley, said: On the 7th of December last, I was living in Bolton. My son Robert was ill at the same. He was seventeen months old. I know the defendant, Ellis Flitcroft. I went to him on the 8th of December, at his house in Boardman Field. I saw him there, and told him about my child. I said it was very poorly, and very red in its cheeks. Flitcroft said his child would have been in its grave but for Dr. Coffin's medicine. I told him there were three of my mother's children ill at the same time. He said that if they were red in the cheeks, and there were three of them down beside mine, it would be scarlet fever. He sold me three-halfpence worth of what he called raspberry leaves, and told me to get one pennyworth of pennyroyal, and mix them together. Afterwards, he came to my mother's house, and brought a bottle with him. I got him some boiling water, and he mixed some medicine for the child, which I gave to it. He said the medicine was to make it sweat. My mother also gave some of it to her children. Flitcroft said it would do them good: it would warm them. He also gave me a bottle of stuff; but it was not so terribly strong. I tasted it, and found it mild. It was to be given to the child, a teaspoonful every twenty minutes. He said it was to make the child sick. I gave it to the child every twenty minutes till about seven o'clock at night. The medicine did not sweat the child: it became very sick, but could not vomit. Flitcroft came to my mother's house at dinner-time, and applied a bottle of hot water to the child's feet and back. At eight o'clock the same night I went to his house again. He was not in, but I saw his wife, and she gave me some medicine for the child. He came the day after, and I told him his wife had given me something for the child. I tasted it, and found it very hot. The next day he came again, between two and three o'clock in the afternoon, but did not bring any medicine. He then told me to put the child in a warm bath, and to give it the medicine his wife had given me, once every hour. I did so, but the child grew worse. I went to his house again on the Friday, and he gave me something to make the child vomit. It was in a bottle. A powder was sent up the same night, but I did not give it to the child. The stuff that was left in the bottle was given to Mr. Denham, surgeon. He charged 1*s.* 9*d.* for what I had from him on the Friday, but I paid nothing, except three-halfpence for the raspberry leaves.

By Mr. Sowler: Flitcroft is known in the town, as agent or assistant to Dr. Coffin, the herbalist. I never saw Dr. Coffin.

By Mr. Brandt: She has seen the coffin, but not the Doctor.—(Laughter.)

By Mr. Sowler: I did not give the child the medicine sent on the Friday night. I gave it a pennyworth of "white wine *pick*" [emetic], which made the child sick, the same as Flitcroft's medicine, but it could not vomit. I went to Mr. Challoner, druggist, on Saturday, and got half an ounce of castor oil and syrup of rhubarb, which I gave to the child at ten o'clock in the morning. It was very thirsty, and I gave it some hyssop tea, about half-past five in the afternoon. This was the last thing it had.

Alice Grundy, mother of the last witness, deposed as follows: I remember Flitcroft coming to see my daughter's child; he brought a bottle with him. I had three children ill at the same time, of scarlet fever; Flitcroft looked at them, and said, one was very ill, and would go off in a decline, if she

did not get some help.—(Laughter.) He said he would engage them at half-a-crown a piece.—(Laughter.) I did not approve of it. He sent a bottle for my eldest child, and I gave her part of it. As soon as the girl got it, she screamed and said, "Mother, it is burning my throat." It was part of what my daughter's young child had taken. After the girl took it, she became more red in the face, and I had no more of his stuff, but sent for a medical man, and my children got well.

By Mr. Sowler: Flitcroft is known as the agent of Dr. Coffin. I never saw Dr. Coffin, but my son heard him lecture in the Temperance Hall, and was in a great passion at him.—(Laughter.)

Susannah Greenhalgh gave the following testimony:—I am the widow of George Greenhalgh, who died on the 16th of January last, aged twenty-five years. He left work on Thursday, the 7th of January, and the next day he brought home a bottle of medicine, which he took every four hours. At first he thought it did him good, but the next Tuesday he was much worse. On Wednesday he was bedfast, and sent for Flitcroft, who came and saw him in bed. He ordered me to get a vinegar cloth, and apply it, with a bottle of hot water, to my husband's feet. He also told me to come to his house for some medicine, which he said was to sweat, and pick, and purge my husband. I went to his house and received two powders, one of which was green, and the other buff. He charged me fourpence for them. Of the green powder, my husband was to take nearly a teaspoonful, mixed in warm water, with sugar to sweeten it. The buff one was to be mixed, two teaspoonfuls in a gill and a noggin of warm water, of which he was to have not quite a teaspoonful every twenty minutes. This my husband took twice, but would have it no more. He grew gradually worse, and died on the 16th of January. Margaret Rogerson was at our house, and gave part of the powders to Finnigan, the police-officer. A man named Grady died in the same street, but Flitcroft did not tell me he was attending him.

By Mr. Sowler: My husband thought the medicine did him good the first day or two. Flitcroft told my husband he must not go to work, for he was not strong enough. He went, however, on Tuesday, and worked three quarters of a day, and on Wednesday he was bedfast.

Margaret Rogerson said: I saw the husband of the last witness in bed on the Thursday. He appeared to be in great pain. He told me had been taking some of Dr. Coffin's medicine. I said to him, "George, I believe it is killing thee;" and he replied that he would take no more. He was very thirsty. Some of the powders that were left I gave to Finnigan, the policeman.

Mrs. Leach, wife of John Leach, beerseller, said: About two months ago I had an attack of rheumatism. I consulted Flitcroft, and he sent me a powder and a bottle. He came to the house and saw me. I took the powder. It was very warm, and I would take no more. I took one glass of the bottle, and no more.

By Mr. Sowler: I cannot say that the medicine did me either good or harm. I got better, but it was Dr. Chadwick that cured me. I have seen the defendant's sign; the words upon it are, "James Flitcroft, vendor of herbs, from America; licensed to sell tea and coffee."—(Great laughter.)

Martin Finnigan, sergeant of the borough police, examined by Mr. Brandt: I am acquainted with Ellis Flitcroft, the "vendor of herbs, from America." I first knew him five or six years ago, when he joined the police force. He is a bricksetter by trade. I received some powders from Margaret Rogerson, which I gave to the coroner.

By Mr. Sowler: I am the coroner's officer, and it is my duty to look after evidence when an inquest is to be held. I lodged the information against Flitcroft, under the direction of Mr. John Gaskell, the public prosecutor. All the witnesses, except Mrs. Leach and Mrs. Grundy, were examined by the coroner.

Thomas Mewburn, sergeant of police, said: I apprehended Flitcroft on the 28th of January, and read the warrant over to him. He said he had no certificate, and did not require one; that he was not an apothecary, as he only dealt in herbs and plants.

Mr. Taylor, borough coroner, produced the powders given to him by H. Finnigan, and said that they had been examined by Mr. Denham, surgeon.

Cross-examined by Mr. Sowler: I have not taken any active part in getting a case against Flitcroft. I may have said something to Mr. Harris on the subject. I do not remember saying to him that I had found out some old law that would put Flitcroft down. The clause in the Apothecaries' Act, under which Flitcroft is indicted, is not old, and I have known it for several years.

Mr. Denham, surgeon, said: I made a post-mortem examination of the body of Robert Bartley. The child died of inflammation of the lungs. I made the examination under the direction of the coroner. Inflammation of the lungs is a medical case. George Greenhalgh's was also a medical case. The green powder produced by the coroner is lobelia, generally called Indian tobacco. It is a medicine, and inserted in the materia medica. It will operate, in small doses, as an emetic; in large doses, as a purgative; and in very large doses, as a narcotic poison. It would be more injurious from not producing vomiting. The buff powder consists of capsicum, or Cayenne pepper, apparently mixed with some spices. In cases of inflammation it is injurious. It is a medicine unfit for a child of seventeen months old under any circumstances. It would produce great thirst. It is a medicine, and in the materia medica.

By Mr. Sowler: In small doses, capsicum will increase the circulating power. In cases of great debility it is not an improper medicine. Lobelia has been introduced into the Pharmacopœia, if I recollect rightly, since 1819. It is a vegetable production, and a native of the United States of America. Capsicum is also a vegetable production. Druggists and grocers, I believe, are in the habit of selling it in lozenges.

By Mr. Brandt: The great mass of medicines are derived from vegetables.

By the Recorder: The druggists sell these things to persons who go and ask for them. They do not go out and prescribe. This closed the case for the prosecution.

Mr. Sowler then addressed the jury on behalf of the defendant. He denied that Flitcroft had acted as an apothecary within the meaning of the act of parliament. The cases cited by his learned friend were of a totally different nature from this. The parties held themselves out to the world as apothecaries; but in this case the facts are just the reverse. It was clear that Flitcroft did not profess to be an apothecary, but merely a vendor of certain American herbs. His client, therefore, had not been sailing under false colours. He sold medicinal herbs, and persons who purchased them knew that they were herbs. The poor people, unable to obtain the assistance of a surgeon, went to him for medicinal herbs, because they knew that he was the agent of Dr. Coffin. The parties who went to Flitcroft knew very well that they were purchasing Dr. Coffin's herbs; and when Flitcroft called upon them, it was not as an apothecary, but as an assistant to Dr. Coffin, the herbalist. The question was—Did Flitcroft, as assistant to Dr. Coffin, and administering his herbal preparations, act as an apothecary? He would prove that Flitcroft was the agent of Dr. Coffin, or rather, his assistant, and that there were vegetable prescriptions given in Dr. Coffin's book, which Flitcroft and others were able to follow. Mr. Sowler then called:—

William Chippendale, who deposed as follows:—I am an assistant to Dr. Coffin, of Manchester. He is the author of a work on herbal treatment. [Mr. Sowler here asked the witness to read the title of the pamphlet, but Mr. Brandt said, "No, no, we want no quackery here." An attempt was also made to hand it up to the recorder, but the learned gentleman smiled, saying, "No, thank you, I don't want it."] Flitcroft was appointed assistant for Bolton in November last. Since then he has been at Manchester two or three times a week, and has done different jobs that we have required of him. He has to administer the pepper and lobelia according to the prescription in Dr. Coffin's book. In difficult cases he comes to Manchester to obtain Dr. Coffin's advice. There is not a single mineral used in our practice: only herbs, roots, and barks.

Mr. Brandt: Only "herbs, roots, and barks." But I suppose you can make 1000 prescriptions from these?

Witness: Yes, perhaps we can.

Mr. Brandt: Where did Dr. Coffin get his degree?

Witness: In America.

Mr. Brandt; And why is your master not here?

Witness: Because he is engaged in Manchester with his patients.

Mr. Brandt then addressed the jury in support of the prosecution. He said the answer attempted to be set up by his learned friend was one of the most extraordinary he (Mr. Brandt) had ever heard. It was attempted to be shown that this bricklayer and ex-policeman was an assistant to Dr. Coffin, and that as such he was entitled to prescribe and administer medicines to those who might consult him! Why, if this were the case, Dr. Coffin or Dr. Death might have assistants in every town and village in the country, provided he could

find ignorant people to pass off his "herbs, roots, and barks." But if Flitcroft had really been appointed an assistant, why was Dr. Coffin not here to produce the appointment? Here we have a man treating inflammation of the lungs as scarlet fever. He goes to a house where there are four children apparently in the jaws of death; he does not suggest that a surgeon should be called in, but goes on prescribing till one of them dies, and the answer is, that he did not prescribe as an apothecary, but as an agent to a herbalist! The simple question for the jury to decide was, did Flitcroft act as an apothecary? That he had done so there could be no doubt; and he left the matter with the utmost confidence in the hands of the jury.

The Recorder, in recapitulating the evidence, said that Flitcroft was indicted for acting as an apothecary, not having a certificate entitling him to do so. The question was, not whether the medicines had been properly prescribed, but whether, in prescribing them, he acted as an apothecary. The intention of the act was to prevent unskilful persons from acting as apothecaries, to the danger of her majesty's lieges. The 14th section prohibited any person from practising as an apothecary without a certificate, and that Flitcroft had not a certificate was admitted by himself. His statement was, that he only practised in herbs, and did not, therefore, require one, and the question for the jury was, whether, in law, he did or did not practise as an apothecary. There was a section in the act imposing a penalty, if the parties had thought proper, but it was equally open to them to proceed, as they had done, by indictment. The learned Recorder then proceeded to read the evidence, making such comments as he thought necessary; and in conclusion, he remarked, that their duty was to dismiss all other considerations from their minds, and decide whether or not Flitcroft, in attending the parties and prescribing for them, had acted as an apothecary within the meaning of the act of parliament. —The jury retired about one o'clock, and returned into court at a quarter past two, when the foreman pronounced a verdict of guilty against Ellis Flitcroft.—Mr. Sowler applied for an arrest of judgment, on the ground that Flitcroft ought to have been charged under the 20th section of the act, as an assistant.—The Recorder said, an indictment would not lie upon the 20th section. The prohibition was in the 14th, and upon that the indictment must be founded. When an act of parliament prohibited a person from doing a certain thing, parties offending must be indicted on the prohibitory clause, and not upon those providing punishment.—Mr. Brandt read an extract from Archbold, confirming the opinion of the recorder. He also stated that, as the object of the prosecution was to show parties what the law really was, they had no desire to ask any very severe punishment against Flitcroft. The Recorder then sentenced Flitcroft to one month's imprisonment in the New Bailey.—*Manchester Guardian.*

## FATAL QUACKERY AT HALIFAX.

Another case of death from quack medicines has just occurred at Halifax, in which a most respectable member of our profession, Mr. Joseph Hodgson, of that town, met his death accidentally, in consequence of assisting at the post-mortem examination of the victim to quackery. We are given to understand that the quack in this case was another agent for the sale of "Dr." Coffin's medicines. We print the following particulars from the *Halifax Guardian* of April 10th, 1847:—

"It is, to-day, our melancholy duty to record in our obituary the death of Mr. Joseph Hodgson, of this town, surgeon, which took place under circumstances of peculiarly painful interest. He had been professionally called in, on Sunday, the 28th ult., to attend a man near King Cross, whom he found to be in a dying state. It was proved before a coroner's jury that the man had been only a few days ill, and had applied to a Quack at Highroad Well, whose medicine he had been taking up to the time of Mr. Hodgson's visit. And as the man had apparently died in the prime of life, and the body presented a remarkably strong and athletic appearance, a post-mortem examination was directed to be made. In this examination Mr. Hodgson was assisted by his brother, Mr. T. Hodgson, and Dr. Inglis. Every organ of the body was found in a natural state, with the exception of a structural disease of long standing in the chest, the result of previous inflammation. The blood, however, was found fluid, as is the case in death by lightning, or by some of the vegetable poisons. The venous system was largely congested, which appeared to be the immediate cause of death. Had proper medical assistance, therefore, been called in at an earlier period, the man might have been saved, and the fearful consequence we have now to record would have been averted. At the time of making the examination, Mr. Hodgson had a slight eruption on the back of his right hand. Here the animal poison from the dead body was absorbed. The usual consequences presented themselves with fearful and fatal rapidity—a rapidity, however, that he alone beheld with firmness and resignation. He was a man of high religious feeling, to whom death, though it came thus unexpectedly, came not without preparation. On Thursday, at noon, he calmly yielded up his spirit, and fell a victim primarily to his professional pursuits; but indirectly also to that tampering with human life to which so many lives are annually sacrificed."

## INQUEST ON THE PATIENT OF A HOMŒOPATH.

On Friday, March 19th, an inquest was held at Birkenhead, before Henry Churton, Esq., Coroner for Cheshire, touching the death of Thomas Hilliar, an infant, aged ten months. It appeared from the evidence of a domestic in Mr. Hilliar's family, that the deceased was ten months old; had been rather a delicate child; and had suffered from occasional attacks of cold. On the Wednesday week previous, he was seized with a cough, shortness of breathing, fever, &c., and a rash had broken out on his body two or three days before. On the following Friday, Dr. Norton first visited the child, and on the following Sunday, ordered him to be taken to New Brighton, for change of air. The child, becoming worse, was brought back to Birkenhead on the following day, and expired between three and four o'clock on Tuesday morning. On the evening before the decease, Dr. David Macrorie, of Liverpool, was called in, who deposed, that at that time he found the patient labouring under symptoms of acute bronchitis, and apparently moribund. Mrs. Hilliar said to him, "Doctor, I suppose you would not like to meet Dr. Norton." This he declined to do, "knowing," as he stated, "from the nature of Dr. Norton's practice, that it would be quite useless to do so." He, however, afterwards met Dr. Norton, as he was leaving the house, and had some conversation with that gentleman, regarding the nature of deceased's illness. He stated, "I thought, from that conversation, that Dr. Norton had the same opinion as myself, as to the nature of the child's illness; I recollect telling him, I thought the child should have lost blood in the early stage of its illness.

Mr. Arthur Browne Steele, Surgeon, Birkenhead, deposed to having made a post-mortem examination of the body of deceased, as follows:—"The body, externally, was that of a fine healthy child. On opening the chest, I found a considerable effusion of fluid in the pericardium, and also some deposition of recent lymph, indicating inflammation of the pericardium. The mucous membrane lining the bronchial tubes presented signs of acute inflammation throughout its whole extent, more particularly in the smaller branches. There was a considerable quantity of muco-purulent secretion, filling the minute ramifications of the bronchi. A large portion of the inferior part of the left lung was hepatized, from pneumonia or acute inflammation. The right lung was in a similar condition, but not quite so extensively diseased.

"The immediate cause of deceased's death was acute bronchitis: the pneumonia also contributed, in some measure, to the fatal result. The morbid appearances found in deceased's body were all of recent date. The duration of deceased's disease must have been much less than a month, and most likely not more than a few days."

Dr. Norton, who was present, in reply to a juror, said he was a member of the College of Surgeons of London, and a licentiate of the University of Aberdeen, and he stated, that he did not wish to establish the case as one of chronic disease, but denied the existence of acute inflammation. He also considered it quite right, in fact advisable, to send the child to New Brighton on Sunday, (a circumstance which had caused much animadversion.)

The coroner, (a medical coroner?) in his charge to the jury, remarked, that "Dr. Norton, who attended deceased, although a regularly educated practitioner, pursues a peculiar mode of treatment called homœopathy, and had no doubt as much faith in his system as other medical men have in theirs; but they must not forget that the system called homœopathy is not sanctioned by the heads of the profession, or by the hospitals, in London, or any other part of the united kingdom; and when it was considered that such men as Sir Benjamin Brodie, Mr. Lawrence, Sir Astley Cooper, and other men of the greatest eminence, were of opinion, that homœopathic

treatment was such as ought not to be adopted, it was, he thought, necessary to consider how far it was justifiable to pursue that treatment. Dr. Norton had not described the kind of treatment he had adopted in this case, further than that he administered remedies according to the principles of his system; but he (the coroner) understood they (the homœopathists) did not usually bleed, and that they used no mercury or tartar emetic, except in very small doses. He (the coroner) quite agreed in the observations of Dr. Macrorie and Mr. Steele, that in cases of acute bronchitis the most prompt and powerful remedies were required, as well as in inflammation of other tissues of the body; and he thought, that unles ssuch means were adopted, the lives of individuals must be jeopardized by the treatment of Dr. Norton. Dr. Norton had endeavoured to explain his view of the nature of deceased's death, which wholly differed from that of Dr. Macrorie, corroborated as that gentleman was by the post-mortem examination. He thought the jury would agree in the opinion, that the child died from acute bronchitis. Whether they accompanied their verdict by any reference to homœopathy was a question entirely for their consideration."

The jury returned a verdict of "Died by the visitation of God."

It was stated, during the inquiry, by some of the friends of deceased who were present, that Mr. Hilliar had lost two other children by the same complaint, although they were attended by routine practitioners; and Dr. Norton has published a letter, wherein he alludes to this statement as having been given in evidence. Nothing of the sort, however, appears on the depositions taken at the inquest, and on inquiry it turns out that Mr. Hilliar, previous to his having resorted to homœopathic practice, lost one child from dysentery under the care of a routine practitioner, and the other child died of hooping-cough, or some chest affection, after the father's conversion to homœopathy.

## Correspondence.

### ETHER-VAPOUR AND OXYGEN.

*To the Editor of* THE LANCET.

SIR,—In reply to the observations of Dr. Gardner, in the last number of THE LANCET, in reference to the above subject, I have merely to state—1st, that when I wrote the "Pamphlet on the Inhalation of Ether," I inserted the entire paper of Dr. Bigelow, as read before the Boston Medical Society, and published in the *Boston Medical Journal*, and subsequently in your own, in which no mention is made of oxygen. 2ndly, I was not aware that Dr. Jackson had recommended, as I believe for the first time, the inhalation of oxygen in cases of asphyxia, until I saw it alluded to in the last number of the *British and Foreign Medical Review*, which appeared after my letter had been forwarded to your office, and which I should have mentioned, in conjunction with some other experiments I have been making with hydrogen and oxygen, in some future number of your journal.—I am, Sir, your obedient servant,

JAMES ROBINSON.

Gower-street, Bedford-square, April, 1847.

### ON OXYGEN, AS A CORRECTIVE OF THE SECONDARY EFFECTS OF ETHER IN SURGICAL OPERATIONS.

*To the Editor of* THE LANCET.

SIR,—It appears quite clear, from the experiments of Mr. Robinson,—to whom the profession is much indebted for his zeal in the application of ether to the practice of surgery,—that the inhalation of oxygen, subsequent to the use of ether, will remove any apprehension of secondary consequences.

Every suggestion by which this corrective agent may be conveniently applied must be particularly interesting at the present time. With this view, I have pleasure in proposing the ferrate of potassa, as offering unusual facilities for obtaining and employing pure oxygen, conjunctively with ether, in surgical operations.

There are several modes by which this substance can be procured:—

I. Those adopted by Fremy, its discoverer:—
1. By calcination: Take any quantity of the peroxides of iron and potassium, and subject to calcination in a crucible.
2. By ignition: Subject to ignition a mixture of potassa and oxide of iron.
3. By heat: Take nitrate of potash and iron filings in fine powder, and subject to a glowing red heat in a crucible.

II. That adopted by Trommsdorff:—
Take finely pulverized iron filings, two drachms; pulverized nitrate of potash, four drachms: mix, place it in an eight or ten ounce crucible, heated to a glowing red, still standing on red-hot coals; and when combination takes place on one side, shown by the evolution of light and white fumes, remove it from the fire. As soon as the deflagration of the mixture has ceased, scrape out the mass on to a cool plate by means of an iron spatula.

The product is a dark reddish-black mass, forming a cherry-red solution with water, which quickly undergoes decomposition, depositing sesqui-oxide of iron, and evolving pure oxygen. The latter is the preferable process. It should be preserved in stoppered bottles.

In the use of this, it is only necessary to drop a piece of the substance into a common inhaler half filled with water, or into a basin, with an inverted funnel placed over it.

Braunston, Northamptonshire, April, 1847. THOMAS CATTELL.

### THE CYCLOPÆDIA OF ANATOMY.

*To the Editor of* THE LANCET.

SIR,—Another Part of the "Cyclopædia of Anatomy" has at last made its appearance, after a gestation of about fourteen months.

This work, as your readers are aware, was commenced in June, 1835, and was to be printed "upon superfine paper," and completed in about twenty Parts. The work has now reached twenty-eight Parts, after the lapse of nearly twelve years. Here is a pretty specimen of the faith kept by the editors of works published in Parts with their subscribers and the public!

But in addition to the annoyance of delay in the completion of a work like this, the subscribers are made the sport of the editor. In a note prefixed to this Part, the editor says, "he finds it impossible to complete the Cyclopædia, as it was originally proposed to do, in three volumes. * * * He proposes, therefore, to make a fourth volume with the remaining Parts, which will not, he hopes, exceed six in number." This note is dated April, 1847; and I feel convinced that it must have been written on the *first* day of that month; for if Dr. Todd seriously believes that he will ever live to publish six more Parts of that work, he makes a fool of himself; and if his subscribers are credulous enough to believe him, they are also first of April friends of his.

For my own part, I shall leave my own early portion of Dr. Todd's work to my youngest boy, with the hope, that in his life the doctor's executor, or successor, may bring it to a finish.—I am, Sir, your obedient servant,

AN OLD READER OF THE LANCET.

### DR. JEFFREYS AND MATICO.

*To the Editor of* THE LANCET.

SIR,—In your leader of THE LANCET for last Saturday, you have thought proper to mention "Matico and Jeffreys" in a manner not very flattering to my feelings, or, what is of far more importance, that of accuracy. I quite agree with you that the sale of matico has been too often advertised, both in other journals as well as in THE LANCET; and I have, about a fortnight since, written to Mr. Keating to that effect, which I should have done a few months ago had not declining health prevented me, and which still exists. I quite agree with you that the frequency of its appearance as advertised borders close upon a feeling of such quackery as it has been my aim, for now more than half a century in practice, to carefully avoid; and when you assert that it is a want of "morality," and a wish for "gain," which is the spring of the action, I have merely to say that all the pecuniary advantage which I have had from it is not one half of what I have had to pay, at a dead loss, for printing—a subject better known by you than by your respondent, THOMAS JEFFREYS, M.D.

Liverpool, April, 1847.

*** We did not accuse Dr. Jeffreys of a desire for "gain," or question his "morality." As it appears, Dr. Jeffreys is injuring the profession without benefiting himself. Could he not assume the mastery over his own pamphlet? If Mr. Keating advertises matico to a quackish extent, let him not be allowed to use up Dr. Jeffreys as a pendant. The Doctor's letter seems to have produced little effect; for we see the advertisement appears this week as usual.—ED. L.

## THE INQUEST AT GRANTHAM.

*To the Editor of* THE LANCET.

SIR,—As the late inquest held upon the body of Ann Parkinson, at Grantham, in Lincolnshire, whose death was caused, both according to the evidence and the verdict of the jury, by the inhalation of ether, is calculated to strike a certain amount of terror into the minds both of the public and of the members of the medical profession, a few remarks, in order to dispel as much as possible any unnecessary alarm that this case may have created, will not, I imagine, be deemed superfluous, especially when we consider that one of the greatest blessings that has ever been bestowed upon the profession is in danger of having its fair fame undeservedly tarnished. The case under consideration presents several points of interest to all those who are desirous of carrying out to their fullest extent the delightful effects of the inhalation of ether. In the first place, every professional man will admit that Mrs. Parkinson was a fit subject to be operated upon under the influence of ether. This point need not be discussed, as it is too self-evident.

The second point involves a question—viz., Was the preliminary exhibition of the ether judicious? Certainly it was judicious, had it been conducted differently; for it appears that the three inhalations to which she was subjected so soon succeeded one the other, that the patient had not sufficient time during the intervals to recover from each operation. From the first inhalation until the final one, when the tumour was extirpated, four days only were allowed to elapse, and yet was Mrs. Parkinson subjected to the influence of ether three times. Now, it is well known that ether is not eliminated from the system for three or four days after its full exhibition, and therefore, during that time, the system must, to a certain extent, be under its influence more or less. A friend of mine has related to me a case in which the exhaled breath of a patient who had been etherized, smelt strongly of that vapour three days after the operation: we are, then, naturally led to conclude, that Mrs. Parkinson, when the tumour was extracted, was under an unusual state both of vascular and nervous depression; and from which, owing to the delicate health in which she had been for several months previously, she had not power enough to rally.

We have next to consider the operation of the extirpation of the tumour itself, which, from the evidence of the medical man, appears to have taken up twenty-five minutes, an unusually long time. This prolonged suffering would in itself, I opine, produce a great and serious shock upon the system independent of the depressing effects of the ether. We now come to the last great feature in this most important case, and that is, the after treatment; and in considering this point, the question naturally presents itself—Was this judicious and safe? After the operation, the indication certainly was a stimulating plan of treatment, in order to arouse the vital energies to their due action, and thus to counteract the depressing influence of the drug under which the unfortunate patient had been put. From the reported evidence this indication certainly was not carried out to its fullest extent. Thin gruel and tea was ordered by the surgeon in attendance, who also prescribed a little ammonia—a feeble stimulant indeed in such a desperate case. This is all that was done. Now it is probable, I think, that had an opposite mode of treatment been observed,—had wine or brandy been administered with a bountiful hand, Mrs. Parkinson would have had the chances of surviving in her favour.

With regard to the post-mortem appearances, they were interesting and important; for it appears that the immediate cause of death was congestion of the anterior lobes of the brain, which was most probably asthenic. This morbid appearance of the brain may account for the paralysis which occurred before death. The heart was found flaccid and flabby: this must have been the effect of former ill health. Now this morbid state of the muscular structure of the heart was certainly one cause why reaction never took place.

In offering these remarks, I do so, not with the intention of criticizing the mode of treatment adopted in this case, but to show that had the ether been more judiciously administered, the patient would in all probability have not fallen a victim to its effects. This affair will undoubtedly cause a great deal of alarm in the public mind; and it is with the view of showing that this case ought not to act prejudicially against the administration of ether for alleviating pain, that I have troubled you with these remarks. This case will, I have no doubt, act beneficially in the end, inasmuch as it will make practitioners more cautious both in administering the vapour of ether and in treating the effects of the inhalation.—I am, Sir, yours obediently,

SCRUTATOR.

## Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted Members of this Institution on Friday, the 9th instant—viz., Messrs. Ernest Powell Wilkins, Newport, Isle of Wight; Edward Lund, London; Charles Jones Gibb, Newcastle-upon-Tyne; Richard Jones Brackley, Northamptonshire; Claud Mackechnie, St. Kitts, West Indies; William Edward Hayman, Judd-street, Brunswick-square; Richard Budd Painter, Broadway, Westminster; John Hauston Prosser, Clonmel; and Walter Battershill Gill, Leominster, Herefordshire.——Monday, April 12th: Messrs. James Smith Ayerst, Gravesend; George Newell Ediss, Landport, Hants; William Philip Harrison, Sheffield; Thomas Edis, Queen's Elms, Chelsea; George B. Barrow, Southport, Lancashire; Frederic Robinson, London; James Henry Richardson, Toronto, Upper Canada; Oliver Pemberton, Birmingham; Frederick Acret, Toronto, Upper Canada; Edwin Cotton Cottingham, London; and Richard James Hansard, London.

COLLEGE FELLOWS.—At a meeting of the President, Vice-Presidents, and Council of the Royal College of Surgeons, on Wednesday last, Messrs. Francis Toulmin, of Clapton, Middlesex, and Frederick George Reed, of Hertford, having previously undergone the necessary examinations before the Court of Examiners, were admitted fellows of this institution. Both gentlemen were members of the College, the diploma of the former bearing date August 7th, 1827, and the latter, January 4th, 1839, by which it will be seen that they underwent the senior examination. We understand that two members of the College were not so fortunate as to obtain the object of their ambition. Only four gentlemen presented themselves.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination and received certificates to practise, on Thursday, April 8th, 1847.—Frederick Mason, Walcot Parade, Bath; Charles Astley Walters, Stockport, Cheshire; Charles John Gibb, Newcastle-on-Tyne; Charles William Izod, Fladbury, Worcestershire; Thomas Sympson, Lincoln; Henry John Waterland, Thealby; John Lloyd, Cerrigydwdion; John Jones Parrish, Dudley; Samuel Osborne Habershon, Rotherham, Yorkshire; Howard Frederick Johnson, Birmingham; John Packer, London; Richard Branwell, Penzance, Cornwall; John Willan, Kirby Lonsdale; Joseph Marshall, Upwell, Norfolk; Simon Caldcleugh, Durham; Samuel Clewin Griffith, Gower-street.

MANSLAUGHTER OF A LUNATIC.—On Tuesday last, two men, late keepers in the Grove House Lunatic Asylum, at Bow, were committed to take their trial, for the manslaughter of a lunatic, named William Rank. The prosecution was conducted on behalf of the Commissioners of Lunacy. It appeared, from the evidence, that the lunatic was in a state of violence, had been severely beaten by the prisoners, and then confined in a cell, where he died. On a post-mortem examination being made, by Mr. Palmer, the medical superintendent, numerous bruises were found; the fifth, sixth, seventh, eighth, and ninth ribs were all fractured; and the broken end of the fifth rib had perforated the pleura. The unfortunate patient died of effusion into the pleural cavity, caused by the injuries he had received.

POOR-LAW APPOINTMENTS.—HALIFAX UNION: APPOINTMENT OF MEDICAL OFFICER.—The Board of Guardians of the Halifax Union will, at the meeting to be held on Wednesday, the 21st April inst., appoint a medical officer for the township of Ovenden, in the said Union, in consequence of the resignation of Mr. Jordan, the present medical officer, who is leaving the neighbourhood. Salary £30 per annum.—Applications to be made to Mr. Barstow, Solicitor, Halifax, Clerk of the Union, of whom any further information as to the necessary qualification and the duties of the office may be obtained.

By order of the Board of Guardians.

Halifax, April 9th, 1847.

HALIFAX.—*Monday:* Before G. Pollard, Esq., and R. Wainhouse, Esq.—The several parties who had been selected and summoned to serve the office of parochial constable for the ensuing year attended for the purpose of being sworn in. The only paid constables appointed are—For Skircoat: John Pearson, formerly in the Manchester police; salary £50 a year. For Ovenden: John Nicholson, formerly of Huddersfield; £60 a year. The magistrates recommended all townships to follow the example of Skircoat and Ovenden, and give a salary sufficient to induce a man to devote his entire time to the duty of a constable. *It will be noticed that the medical officer for Ovenden is offered £30 per annum, while the constable is worth twice as much!*

British Lying-in Hospital.—On Thursday, April the 8th, Dr. Henry Davies was elected Consulting Physician; Dr. Robert Lee, Physician in Ordinary; Mr. Benjamin Brookes, Principal Surgeon. There is now a vacancy for Physician or Junior Surgeon to the Out-Patients of this Hospital.

## CORRESPONDENTS.

We request our correspondents to continue to forward such quacks' bills, notices, and advertisements, as they may from time to time discover.

The able remarks of *Dr. Hearne* (Southampton) on ether-vapour, and the case of Mrs. Parkinson, shall appear next week.

*X. X. X.*—In 1815. The indictments will be sustained.

A portion of *Mr. Tuson's* clinical reports of operations performed at the Middlesex Hospital, under the influence of ether-vapour, shall be published in the next Lancet.

*A Friend.*—Yes. We are glad of it; the knaves will now unmask themselves. It is likely that the whole gang will be indicted for conspiracy and perjury.

*H. L.*—A notice on the subject appeared in The Lancet of March 20th, p. 319. The period is now uncertain.

*J. J. R.* should address a letter to the registrar of the university.

*J. S.*—He is not entitled by law to any fee in the cases which he has described. The question does not admit of a doubt.

*A Subscriber.*—Such situations are to be obtained. Probably the best method of securing one would be to advertise for it in one of the medical periodicals.

We are obliged to *Mr. J. St. J. G. Parsons* for his suggestions. It is probably now too late to incorporate any of them in the Bill; besides, most of them are so good, that if they were introduced, they would bring down upon the measure a very hostile feeling from the corrupt institutions.

*S.*—The separate charges awarded by the Poor-law Commissioners for cases of midwifery, fractures, and operations, were considered to be advantages bestowed on the medical officers of unions. It certainly was not intended that there should be any diminution of salary in consequence of the change, but, on the contrary, that there should be an increase of gain. The payment of a portion of the salaries out of the consolidated fund was not made for the purpose of in any way affecting the payments of the medical officers. It was made simply with the object of assisting the agricultural interest.

*Newton's Principia.*—The entire work may be obtained, as published by Tegg, as "Principia à le Seur et Jacquier," in two vols, 8vo, *1l. 5s.* There are some books more read than others; for few persons wade through the entire work, which is purely mathematical. The sections as edited, with notes by Carr—viz., 1, 2, 3, are published by Baldwin at *10s. 6d.* Sections 1, 2, 3, 9, 11, edited by Evans, are published by Rivingtons at *6s.* Carr's edition is the more known, and is valuable on account of the notes.

*A Naval Surgeon* writes to complain, that in the fever districts in Ireland, the inspecting officers of the Board of Works grossly fail of their duties, and even run away from their posts. He argues strongly that naval or military surgeons should be appointed to such posts, and combine their medical skill with the executive duties. Other correspondents write to complain that naval surgeons should be so occupied, because it may tend to cast imputations on the resident medical men. There appears to be a strong feeling of this kind among our Irish medical brethren; but there can be no doubt that the duties of many of the posts, which are peculiarly the province of the profession, but which are now filled by captains, commanders, and military officers of different grades, could be better performed by physicians and surgeons, with more benefit to the poor, and with economy to the government.

*Ye ken wha.*—Our correspondent must really excuse us. We are not competent to recommend the decorations, pictorial or professional, of his consulting and waiting rooms. Our business is to furnish other vacancies than those of walls and picture-frames.

*Birmingham.*—The offensive handbill shall, without fail, be gibbeted as it deserves.

*Dr. F.*—The letter of Dr. Fairbrother having been published in the daily newspapers, it would be a deviation from our usual practice to place it in our columns, amongst the original communications.

*Mr. W. Dickinson.*—There are no settled charges (that is, there is no fixed scale of charges) which apothecaries are entitled, by law, to make; and there is no scale of the kind published, either in The Lancet or elsewhere. But it has been decided, in the superior courts, that legally-qualified apothecaries are entitled to charge reasonable sums for visits and attendance, as well as for medicines.

*Fides.*—We are obliged by the excellent and flattering letter of our correspondent, and assure him that the Registration Bill will be pushed on as steadily and unflinchingly as the forms of Parliament and the state of public business admit. We quote the following from his letter:—

"By this post, I send you the *Manchester Guardian* of Wednesday, containing a report of the trial and conviction of a bricklayer for practising as an apothecary, and am sorry to add, that this county swarms with ignorant pretenders, who, without any qualification, undertake the responsible duties of medical practitioners, and in many cases have the audacity to style themselves doctor or surgeon, thereby inducing their dupes to consider themselves under the treatment of regular graduates in medicine, or members of a college of surgeons. This Coffin,—whose name, by-the-by, is ominous of the grave,—about eighteen months ago, made a tour through this and the neighbouring towns, distributing circulars, and placarding the walls with announcements that he would, in four lectures, teach 'every man to be his own doctor.' The bait was eagerly seized; hundreds of credulous people thronged with gaping mouths, greedy to swallow the most preposterous statements, and with itching ears drink in the most fulsome abuse of medical science, and slanderous ascriptions of dishonourable motives to the conduct of the faculty. I was informed, by parties who gave me an account of the mob-orations, that at the conclusion of each he publicly proffered his services, and pocketed several fees, by confident promises of curing the most hopeless diseases. Each succeeding day, he called from house to house, (attended by a servant, or accomplice, carrying a bag,) and representing that he himself had, in a short time, made a handsome fortune by the regular practice of medicine; but that now, he was influenced solely by the desire of doing good; yet, as drugs were costly, and travelling expenses great, it was indispensable he should charge accordingly. I remember, among others, he called upon a young man suffering from phthisis: the symptoms of the case were well marked, and denoting the last stage; yet he unhesitatingly assured the patient of perfect restoration to health in a fortnight, on the condition of being paid a certain sum beforehand. It is hardly necessary to say, that when the promised time arrived, the quack was far enough away, gulling other dupes, and consoling himself with his plunder, and the assurance, that if his victim were Coffin'd, 'the dead tell no tales.'"

*E. Hennell, M.B.*—The paper has been duly received.

*No Simon Pure.*—Our sole wish to learn the name of our correspondent was to obtain some substantial grounds for attacking to some purpose the villanous system his communication appears to lay bare.

*Dr. Haygarth.*—The altered circumstances of the profession alone prevented the insertion of the paper in question. We fear, after this lapse of time, it will be impossible to return it to the author.

*Dr. Hilbers,* (Norwich.)—The communication respecting the practice of this homœpathic quack, who certainly does not puff himself in infinitesimal doses, has been received, and shall be duly turned to account.

*Dr. Barnes.*—A great press of matter prevented the publication of Dr. Barnes's letter, replying to Dr. Radford, in our last, and the same reason has caused us to withhold it in the present. We may state that Dr. Barnes courteously assures Dr. Radford that his aim was not to give Professor Simpson any merit really belonging to Dr. Radford, and that he did not intend to treat the matter controversially at all, but merely to illustrate the principles of practice in placenta prævia by the cases he detailed.

*Dr. Allnatt.*—The publication of the note in reply to Dr. Dick would probably lead to further controversy. Dr. Allnatt made some strictures on the opinions and practice of Dr. Dick, to which the latter has replied; and here the matter, as a subject of discussion, ought, we conceive, to end. We may state, that Dr. Allnatt disclaims all intention of being discourteous in his remarks relating to Dr. Dick's paper.

*Spring Session* is indefatigable. We admire his eye for quackery and humbug.

*Mr. G. L. Cooper.*—The letter respecting the excellent alteration in the rules of the Bloomsbury Dispensary, relating to the admission of syphilitic patients, shall be inserted in our next.

*M.D.*—We are not accustomed to publish letters on professional subjects which are first printed in the public newspapers. It is a mode of publication, by professional gentlemen, of which we strongly disapprove, and it forms, to a considerable extent, a portion of that disgusting system of quackery which we are resolutely resolved to extinguish.

*Mr. Henry Sharp* is thanked. He will see that we have availed ourselves of the report. These quack convictions ought to spread like wildfire.

*An Old Subscriber.*—The first qualification would enable the holder to register as a general practitioner; the second as a physician.

*Inquirer.*—We never recommend medical works to patients: we may remark that Mr. Guy is quite unknown to the profession as a writer.

We have to acknowledge the receipt of the *Manchester Guardian* from two anti-quackery friends.

*** We continue to receive accessions to our collection of medical handbills, &c. They indeed offer a sad evidence of the state of the profession, and the necessity which exists for stringent regulations respecting qualified and unqualified persons.

Communications have been received from—Dr. Millford; Dr. R. Dick; Mr. Garlick; Mr. E. Tuson, F.R.S., (clinical notes of cases;) Dr. Hearne, (Southampton, formerly House Surgeon University College Hospital;) Mr. Lambert; Mr. Abraham, (Tower Hamlets;) Mr. John Barlow, (Vet. Surgeon, Edinburgh Veterinary College;) Mr. W. Smith, (Bristol;) Mr. W. Self; Mr. Hyett, (Cheltenham;) Dr. Dick; Ye ken wha; Philalethes; A Looker-On; Birmingham Subscribers, and A Hater of Quacks and Quackery; Scrutator; Mr. Cattell, (Braunston;) Mr. D. Mackinder, (Andersonian Institution;) Dr. R. Chambers, (Colchester;) Dr. G. Hennell, (Southampton;) Mr. Henry Rogers, (East Grinstead;) Mr. Badcock, Brighton, (with pamphlet;) Dr. Johnstone, (with pamphlet;) No Simon Pure; Dr. Nesbitt, Northampton, (with report of the Northampton Lunatic Asylum;) Dr. Orpen, (Birkenhead;) Fides, (Burnley;) Dr. Ormerod; A Subscriber from the commencement; Spring Session; An Old Subscriber; Mr. G. L. Cooper; a Well-wisher to the Profession; Inquirer; a Naval Surgeon; Dr. Haygarth, (Lindfield;) &c.

MEDICAL PRACTICE.—TO BE DISPOSED OF, in a manufacturing but highly respectable, picturesque, and very flourishing neighbourhood, in a Midland County, an old-established PRACTICE, averaging £500 per annum, and capable of very considerable increase. No agent need apply, nor any one who is not possessed of the means of entering upon the duties immediately. Frivolous inquiries cannot be attended to.—Apply by letter only, 984, Midland Counties' Herald office, Birmingham.

TO MEDICAL ASSISTANTS.

A SURGEON is in immediate want of a duly-qualified ASSISTANT, to Dispense and Visit. Apply personally between Nine and Eleven A.M., to Mr. Grove, Wandsworth, Surrey.

TO SURGEONS.

TO BE DISPOSED OF, A MEDICAL PRACTICE in Derbyshire, realizing more than £300 per annum; population more than 5000; no other medical man within five miles; established twenty years.—For particulars apply to X. Y. Z., post office, Burton-on-Trent, Staffordshire.

TO CHEMISTS AND DRUGGISTS.

TO BE DISPOSED OF, a neatly fitted up SHOP in the above line, situate within an easy distance of town, and in one of the most pleasant parts of the county of Essex. Coming in moderate; rent and taxes under £30 per annum. No good-will required.—Apply for reference to Mr. S. Maw, 11, Aldersgate-street, London.

WANTED TO PURCHASE, by a fully-qualified Surgeon, the Succession to a COUNTRY PRACTICE, averaging from £300 to £500 per annum, and with good introduction; a distance within two or three hours' ride of town preferred; or the advertiser would not object to a PARTNERSHIP with an elderly gentleman who would be likely soon to retire. The most satisfactory references will be given and required.—Apply by letter only, pre-paid, to A.B., care of Mr. Astle, 2, Cloak-lane, Queen-street, Cheapside, London. None but principals will be treated with.

MEDICAL.

A GENTLEMAN of respectability, a L.A.C., is desirous of engaging himself as VISITING ASSISTANT to a General Practitioner, for three months, with a view of becoming a Partner at the expiration of that period.—Address, Medicus, 7 Maze-pond, Southwark.

A GENTLEMAN, fully competent to attend Midwifery and General Practice, wishes to obtain a Situation as an ASSISTANT to a Medical Practitioner.—Address to W. W., care of Mr. Twinberrow, Chemist, &c., Edwards-street, Portman-square.

FOR DISPOSAL, a MEDICAL PRACTICE, with Retail attached, in a good thoroughfare and respectable neighbourhood, adjoining the New-road; established some years; the present proprietor being about to retire into the country. Full value given for the premium required.—Apply by letter, prepaid, to M.R.C.S., 5, Thavies-inn, Holborn.

A B.M. and M.R.C.S.L., residing in Devonshire, has a VACANCY for TWO PUPILS. Every branch of the profession taught, and the fee moderate.—Address A. Q., THE LANCET Office.

TO SURGEONS AND CHEMISTS.

TO BE SOLD by Valuation, and a small sum for goodwill, a DRUG BUSINESS, in the northern suburbs, established several years. May be much extended by a professional man, or one who understands counter-prescribing. (Hitherto it has only been conducted by an assistant.) Returns average from 12s. to £1 per diem, according to the season. The shop is elegantly fitted, house large, and convenient for letting, and pleasantly situate.—Apply personally to Mr. Congreve, Chemist, Vauxhall.

TO HUMAN AND COMPARATIVE ANATOMISTS.

MESSRS. J. C. and S. STEVENS will sell by Auction at their Great Room, 38, King-street, Covent Garden, on Wednesday, April 21st, at Twelve o'clock, the remaining MUSEUM of an eminent Dentist, consisting of Specimens of Comparative and Human Anatomy in Skeletons and Skulls of Monkeys, Tigers, Lions, Reptiles, Preparations in Spirits, Negro and New Zealand Skulls, Morbid Bones, &c. Also a Specimen of a female Chimpanzee, with the Bones, Muscles, and Skin preserved, some Teeth of the Hippopotamus and Walrus, a Crocodile, twelve feet long, and a few Medical Books, &c. On view the day prior, and Catalogues had.

RESIDENT APOTHECARY TO THE KENSINGTON DISPENSARY.—The office being now vacant, candidates for the appointment, who must be Licentiates of the Apothecaries' Company, London, and not more than twenty-eight years of age, are invited to send in testimonials, as to qualifications and character, on or before THURSDAY, the 22nd instant. The emoluments are a salary and allowances, 100 Guineas per annum, with house, &c., rent and taxes free.—Particulars may be learned at the Dispensary House, Kensington, where testimonials are to be forwarded, addressed to the Honorary Secretary.

April 8th, 1847.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's-buildings, Holborn.

A GENERAL MEETING of the Governors of the above Institution will be held at the Dispensary as above, on TUESDAY, the 4th day of MAY, at Twelve o'clock precisely, for the purpose of electing a PHYSICIAN. Candidates for the appointment must be Fellows or Licentiates of the Royal College of Physicians in London, qualified to practise in London, and not practising in any other branch of the profession.

The Committee will meet at the Dispensary on the evening of TUESDAY, the 27th day of APRIL instant, at Eight o'clock precisely, at which Meeting the Gentlemen desirous to become Candidates are requested to attend, and produce their testimonials for examination.

By order of the Treasurer,

19, Ely-place, Holborn, April 13th, 1847. JOHN GALSWORTHY, Hon. Sec.

NUMBER ONE, SAINT PAUL'S CHURCHYARD.—The best COFFEE, whether choice old mountain Mocha or Jamaica, 2s. per pound; coffee mellow in ripeness and richness of flavour, 1s. 6d. and 1s. 8d.; good strong, full-flavoured coffee, 1s. 2d. and 1s. 4d.; inferior kinds, from 9d. upwards. These are the prices of some of our coffees, but as much is being daily said and written on the price and quality of coffees, we will endeavour to show the present market value of a few of the principal sorts:—

| | Price per cwt. for raw coffee. | | British duty & add 5 per cent. | Selling prices at "Number One" for Roasted Coffee. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Per Cwt. | | | Per Pound. | | |
| | s. | s. | d. | s. | d. | s. d. | s. | d. | s. d. |
| Jamaica.. .. .. | 28 | to 70 | 4 | 84 | 0 | to 144 8 | 0 | 9 | .. 1 3½ |
| Good to finest.. | 75 | .. 130 | 4 | 149 | 0 | .. 224 0 | 1 | 4 | .. 2 0 |
| Ceylon .. .. .. | 40 | .. 38 | 4 | 107 | 4 | .. 130 8 | 0 | 11½ | .. 1 2 |
| Good to finest.. | 60 | .. 96 | 4 | 133 | 0 | .. 177 4 | 1 | 2½ | .. 1 7 |
| Berbice and Demerara .. .. | 30 | .. 80 | 4 | 83 | 8 | .. 156 4 | 0 | 9½ | .. 1 4½ |
| Dominica and St. Lucia .. .. | 30 | .. 75 | 4 | 133 | 0 | .. 151 8 | 0 | 9½ | .. 1 4½ |
| Mocha .. .. .. | 50 | .. 100 | 6 | 144 | 8 | .. 224 0 | 1 | 3½ | .. 2 0 |
| Costa Rica .. .. | 33 | .. 60 | 6 | 121 | 4 | .. 156 4 | 1 | 1 | .. 1 4 |
| Java .. .. .. | 36 | .. 54 | 6 | 128 | 4 | .. 140 4 | 1 | 1½ | .. 1 4 |
| Cuba .. .. .. | 37 | .. 80 | 6 | 128 | 4 | .. 182 0 | 1 | 1½ | .. 1 7½ |

By the above list it will be noticed that we supply the public retail, no only at wholesale prices, but we may say at merchants' prices, which, being ourselves merchants, we are enabled to do, and give them every advantage. —DAKIN and Compy., tea-merchants, Number One, St. Paul's-churchyard.

## SOVEREIGN LIFE ASSURANCE COMPANY,

No. 5, ST. JAMES'S STREET, LONDON.

TRUSTEES.

Sir A. Brydges Henniker, Bart. | Henry Pownall, Esq.
B. Bond Cabbell, Esq., M.P. | Claude Edward Scott, Esq.

Assurances on Lives, and Annuities, both immediate and deferred, granted on favourable terms.

A new plan of Accumulative Assurance, by depositing, instead of paying, Premiums.

H. D. DAVENPORT, Secretary.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

The Council of the National Institute having observed an application for the introduction of a Medical Registration Bill into the House of Commons, the Members are hereby informed, that any Bill for amending or altering the laws of the profession will obtain the immediate and most earnest attention of the Council, and that the Council will take the earliest opportunity to make a Report on the Provisions of the Bill in question, and if necessary, convene a General Meeting of the Members of the Institute, in order that their opinions may be expressed on the subject.

By order of the Council,

Hanover-square Rooms, Hanover-square, April 13th, 1847. GEORGE ROSS, Sec.

LIVERPOOL NORTHERN HOSPITAL.—A JUNIOR HOUSE-SURGEON is WANTED for this Hospital; Salary £60 per annum, with Board &c. Candidates, being Members of a College of Surgeons and Licentiates of Apothecaries' Hall, London, will please to send in their Applications, with Testimonials, addressed to the Committee, on or before MONDAY, 3rd May next, at Twelve o'clock, and to attend personally at that time.

B. HEYWOOD JONES, Treasurer,
Liverpool, 13th April, 1847. Bank, Brunswick-street.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—A SPECIAL GENERAL MEETING of the Members of the Society will be held at No. 17, Bloomsbury-square, on THURSDAY, the 22nd of APRIL instant, at Twelve o'clock at noon precisely, for the purpose of taking such steps as may be necessary for obtaining the introduction into Parliament of "A Bill for Regulating the Qualification of Chemists and Druggists throughout England and Wales."

By order of the Council,

GEORGE WALLER SMITH, Sec.

PAUPER LUNATIC ASYLUM FOR SOMERSETSHIRE.—Persons desirous of becoming Candidates for the Joint Appointment of RESIDENT MEDICAL OFFICER and SUPERINTENDANT of the above Asylum, are requested to transmit their Testimonials (addressed to the Committee of Visitors of the Pauper Lunatic Asylum for Somersetshire) to the Office of Mr. EDWIN LOVELL, Clerk of the Peace, Wells, Somerset, on or before Wednesday, the 12th day of May next.

Candidates are required to be between the ages of Twenty-seven and Forty-five; Graduates in Medicine of any University in the United Kingdom, Licentiates of the College of Physicians in London, or Members of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, or Licentiates of the Company of Apothecaries; and their Testimonials must state their past medical career, and the extent of their experience, if any, in the treatment of the Insane.

The Salary will be £350 per annum, payable quarterly, with a residence at the Asylum, free from rates and taxes, and with coals, candles, and the usual rations, or a fixed sum in lieu thereof.

It is desirable that the Person appointed should enter upon his office as soon as possible.

The Asylum is calculated for the reception of about 350 patients.

It is particularly requested that there may be no canvass, either personally or by letter, made to the Committee of Visitors, but testimonials may be sent to them.

EDWIN LOVELL,
Clerk of the Peace, and Clerk to the said
Wells, 5th April, 1847. Committee of Visitors.

## CHARING-CROSS HOSPITAL MEDICAL SCHOOL, WEST STRAND.

The Summer Session of Lectures will commence on MONDAY, MAY 3rd, 1847.

BOTANY—Dr. WILLSHIRE.—Monday, May 3rd, at Nine o'clock A.M.

FORENSIC MEDICINE—Dr. CHOWNE and Dr. GAVIN.—Tuesday, May 4th, at Three P.M.

HOSPITAL PRACTICE—Medical and Surgical, Six Months, £10 10s; Full Period, £15 15s. Both Medical and Surgical, £26 5s.

Further particulars and Prospectuses to be had at the Hospital.

April, 1847. JOHN ROBERTSON, Hon. Sec.

## THE QUEEN'S COLLEGE, BIRMINGHAM.

The SPRING SESSION will commence on MONDAY, the 3rd of MAY next.

The INTRODUCTORY LECTURE will be delivered by Professor G. B. KNOWLES, at One o'clock.

The system of study pursued at this College constitutes a complete course of Collegiate, Medical, and Surgical Education.

The Lectures qualify for the B.A., M.A., M.B., and M.D. Degrees at the University of London, and for the Diplomas of the Royal College of Surgeons of England, and Society of Apothecaries, without any residence elsewhere.

GENERAL LITERATURE AND SCIENCE.—LATIN AND GREEK: The Rev. G. Richards, Pemb. Coll., Oxon., Resident Classical Tutor.—MATHEMATICS AND NATURAL AND EXPERIMENTAL PHILOSOPHY: The Rev. J. Taylor, St. John's College, Camb., Resident Mathematical Tutor.—BOTANY, MATERIA MEDICA, AND CHEMISTRY: Edmund W. Day, M.R.C.S., Resident Medical Tutor.—GERMAN: J. Mayland, B.A.—FRENCH: J. I. O'Flanagan.—DRAWING: Charles Docker.

THEOLOGY.—THEOLOGY AND MORAL PHILOSOPHY: The Rev. G. Richards and the Rev. J. Taylor.

The above Courses are delivered in the College Halls.

MEDICINE AND SURGERY.—GENERAL AND SURGICAL ANATOMY: William Sands Cox, F.R.S.—DESCRIPTIVE ANATOMY AND PHYSIOLOGY: Langston Parker, F.R.M.C.S.—PRACTICAL ANATOMY: David Bolton, M.R.C.S.—MATERIA MEDICA AND THERAPEUTICS: Jas. Johnstone, M.D., F.R.C.P., and G. B. Knowles, F.L.S.—CHEMISTRY: George Shaw.—MEDICINE: John Eccles, M.D.—SURGERY: William Sands Cox, F.R.S.—OPHTHALMIC SURGERY: Richard Middlemore, F.R.C.S.—MIDWIFERY: Samuel Berry, M.R.C.S.—FORENSIC MEDICINE: John Birt Davies, M.D.—BOTANY: G. B. Knowles, F.L.S.—HYGIENE: John B. Melson, M.D., F.C.P.S.—CLINICAL MEDICINE AND SURGERY: Professors Johnstone, Eccles, Davies, Melson, Wright, Cox, Knowles, and Parker.

The above Courses will be delivered during the Winter Session in the Theatre of the College.

It will become necessary that those who wish to become Resident Students should make an early application, as only a limited number of rooms has been provided.

Application to be made for any further information which may be required, whether as to the details of the Study in each year, the rooms, the Dietary, the Lectures, Scholarships, Prizes, the Hospital Practice, or any other matters regarding the general system, or the working of the several departments of the College, to the respective Professors.

Dr. BIRT DAVIES, the Honorary Treasurer, 25, Newhall-street, is authorized to receive all fees from Students.

WILLIAM SANDS COX, Dean of the Faculty.

Library, Queen's College, Birmingham, April 7, 1847.

## ANDERSON'S UNIVERSITY, GLASGOW.

Lectures on the following branches of Medical Science will be delivered during the SUMMER SESSION, commencing on Tuesday, May 4th, 1847:—

PRACTICAL ANATOMY—Dr. M. S. BUCHANAN.—From Ten A.M. till Two P.M. Fee £1 1s.

PRACTICAL MEDICAL CHEMISTRY—Dr. PENNY. Ten o'clock A.M., three months' course. Fee £2 2s.

BOTANY—Mr. BELL.—Eight o'clock A.M., three months' course. Fee £2 2s.

ANATOMY, DEMONSTRATIVE AND SURGICAL—Dr. M. S. BUCHANAN.—One o'clock P.M., three months' course. Fee £1 1s.

The University Museum, a most magnificent collection of specimens, including more particularly those of Zoology, Geology, Mineralogy, and Antiquities, is open to all students attending the University. A valuable medical library is also attached to the medical school. The facilities for the prosecution of Dissection and Operative Surgery are unlimited; and the ample accommodation for the above purposes of late provided by the Directors, is not surpassed by that of any other medical school in the kingdom.

Certificates of attendance on the above courses are received by the Universities of Oxford, Cambridge, London, Aberdeen, and St. Andrew's; by all the Royal Colleges of Surgeons in Great Britain and Ireland; by the Faculty of Physicians and Surgeons of Glasgow; by the Army, Navy, and East India Boards; and by the Apothecaries' Companies of London and Dublin.

## THE WELLINGTON SURTOUT, a new LIGHT REPELLENT OVER-COAT for the SPRING.

—Registered 6 and 7 Vict., cap. 65.—PATRONIZED by H.R.H. PRINCE ALBERT, the ROYAL FAMILY, His Grace the COMMANDER-IN-CHIEF, the PRINCIPAL NOBILITY, and OFFICERS of the GUARDS.

This gentlemanly garment, cut without the usual seams at shoulders, so as to improve the figure, and which (owing to its elasticity) fits equally well, either as an over-coat or a LIGHT SUMMER FROCK, is made of a peculiar cloth, manufactured in the West of England, expressly for this coat, of double twist warp and weft, and finest Saxony wool. It is guaranteed to endure and maintain its primitive appearance at least twice the time of ordinary cloth, however good the quality, as it does not wear white or rough, and although repellent, is perfectly porous. The sleeves are lined with a rich durable silk, so that the coat slips on and off easily, and, owing to its softness, lightness, and elasticity, the wearer experiences perfect ease and freedom when the coat is buttoned.

The WELLINGTON SURTOUT commends itself to all who desire a quiet, elegant, gentlemanly appearance: it is kept in every size and leading colour, ready for immediate wear, price two guineas and a half, net cash on delivery. Every genuine coat has a stamp bearing the royal arms, with the name and address of the patentee, JAMES FOUGERE, 6, CONDUIT-STREET, REGENT STREET, and 11, POULTRY, near the Mansion-house, London.

## SCOTTISH WIDOWS' FUND & LIFE ASSURANCE SOCIETY.—(Founded A.D. 1815, and constituted by Act of Parliament.)

The Right Hon. the Earl of ROSEBERY, K.T., President.

At the thirty-third Annual General Court, held in Edinburgh on the 2nd of March, 1847, the Hon. Lord COCKBURN in the chair, the Manager read various statements, showing, inter alia,—

That the amount of insurances effected during the year ending 31st December, 1846, was £447,200, and the number of policies, 617; being on an average of about £730 for each policy.

That the average amount of insurances effected annually during the last ten years had been upwards of half a million.

That the capital arising from the accumulation of the annual premiums was, at the same date, £1,805,860 0s. 9d., having increased during the year to the extent of upwards of £121,000.

That the annual revenue was, at the same date, £266,364 13s. 7d., having increased during the year to the extent of upwards of £17,400.

That the claims upon the Society, in consequence of the death of members, during the year 1846, amounted to £103,910 16s. 3d., of which £20,280 3s. 3d. consisted of bonus additions—the number of deaths being eighty-two. That, large as these sums were, however, and numerous as were the deaths, it had been ascertained by an approximate calculation, that they were only in the ratio of 54 per cent. of what might have been expected according to the bills of mortality, which form the basis of all the Society's tables.

Lord COCKBURN, after special reference to the results shown in the above statements, thus concluded his address to the Court:—"Now, these are facts to which we are entitled to look forward, not merely with hope, for nothing is more delusive than hope, but with hope which is not only confident but rational, (hear, hear.) I have only to add, that enormous as these sums are, and dealing though we have been with hundreds and thousands of interested individuals, we have never, since we began, had occasion to enter a court of justice, (applause.) We have not had a single litigation since the Society began its labours. We have invested sums the very mention of which staggers our conceptions, and this in periods of great public trouble, when great shocks were given to the stability of almost every kind of security; and yet we have not lost by a single bad investment. I can say nothing that can add to the force of these facts. Words would be perfectly idle. It seems to me to be impossible that any intelligent or reflective mind can avoid contrasting the quiet and steady progressiveness of this Society with other modes of laying out money, in which there is often no gain at all, or in which the gain of one man is the loss of another, (hear, hear.) That cannot happen here. These are waters upon which every man who casts the bread of his prudence is certain to have it returned at the time at which those who are dearest to him stand in the greatest need of it, (applause.) I dare say you have often observed that the best part even of the best discourse, always consists in the practical improvement, (laughter.) I now come to my practical improvement, which is just this:—I suppose all of you have a taste for these bonuses. I am mean enough to confess that I have. (Laughter.) Well, how do you intend or expect that they are to continue to be paid? Why, solely by increasing our business. The Directors cannot go on adding two per cent. to our policies every year unless we enable them to do so by additions to our business. And how are we to increase our business? These gentlemen perform their duty by making the Society flourish. We have individually a duty to perform also. Can all of you say that during the last year you have endeavoured to bring insurers to this Society? I am afraid that there are many hundreds, if not thousands, to whom no such reflection has ever occurred. I am, therefore, particularly anxious to take this opportunity of impressing upon you, as you value your own interests, to say nothing of the interests of those to whom you may address yourselves, the expediency of suggesting to others the advantages and even the duty of life insurance. I do not presume to ask you to act as solicitors for this Society. But I do presume to recommend you to urge all your uninsured friends to leave a position generally so full of risk. You may recommend them further to take the best office they can find; and if they find a better than this, I can only say that they must be miraculously fortunate.—(The Hon. Chairman sat down amidst much applause.)

Sir JAMES M. RIDDELL, Bart., then moved the appointment of the gentlemen to fill the vacancies in the Direction.

The Rev. W. K. TWEEDIE having seconded the motion, it was unanimously agreed to.

Lord MONCRIEFF then moved the appointment of the Hon. Bouverie F. Primrose, as Trustee, vice Wm. S. Moncrieff, Esq., deceased.

ALEXANDER BLAIR, Esq., Treasurer of the Bank of Scotland, having seconded the motion, it was unanimously agreed to.

The Hon. Mr. PRIMROSE, who was present, accepted the appointment.

CHARLES BAILLIE, Esq., advocate, then moved a vote of thanks to the Directors, extraordinary and ordinary, to the Trustees, and office bearers, for their conduct during the past year.

Professor ALISON having seconded the motion, it was unanimously agreed to.

Sir ADAM HAY, Bart., moved a vote of thanks to the Chairman, which was received with acclamation; and the Court thereafter adjourned.

Full reports of the proceedings may be had, on and after the 15th instant, and all information required by those desirous of joining the Society, on application at the head office, or at any of the Society's agencies.

JOHN MACKENZIE, Manager.
WM. GEORGE, Chief Clerk.

Head Office, Edinburgh, 5, St. Andrew-square.
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HUGH MC. KEAN, Agent.

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# Report

ON THE

PROGRESS OF KNOWLEDGE REGARDING THE

# STRUCTURE OF THE SYMPATHETIC NERVE,

AND THE

# NATURE OF ITS CONNEXION WITH CEREBRAL AND SPINAL NERVES.

By T. WHARTON JONES, F.R.S., &c.

*Bichat indicates the true nature of the Sympathetic Nerve.*

§ 1.—Formerly the great intercostal or sympathetic nerve was considered merely a continuation of the fifth and sixth cerebral, reinforced by additions from the spinal nerves. In opposition to this view, Bichat advanced the doctrine that the sympathetic nerve constitutes an independent system. Of this system, which he called *organic*, he considered the ganglions the central organs, and maintained that the cords of communication between it and the cerebral and spinal nerves are not mere roots, but consist in part of branches sent from the sympathetic to the cerebral and spinal nerves.

*Retzius, Müller, and Remak, point out anatomical facts, observable by the naked eye, or with the assistance of a magnifying glass, accordant with Bichat's doctrine.*

§ 2.—This doctrine received assent from various quarters; in this country, for example, it was ably advocated and extended by Dr. Copland; but anatomical facts, having a precise corroborative bearing on it, do not appear to have been made known until 1827. In a paper in the *Isis* for that year,* Professor Retzius, of Copenhagen, pointed out, in the nervus trigeminus of the horse, the existence of grey fasciculi of fibres distinct from the white, and appearing to have their origin in ganglions. Subsequently, Professor Müller† and Dr. Remak‡ made observations to the effect that grey cords from the sympathetic ganglions join cerebral and spinal nerves, and proceed to be distributed peripherally with them, without, however, immediately mingling with their white fibres; but, on the contrary, keeping distinct for a considerable extent of their course.

§ 3.—The fact, on the other hand, that the white branches of communication between the spinal and sympathetic nerves are derived from the former, and after joining the latter, are traceable past its ganglions, and for considerable distances, separate and distinct from its proper grey fibres, was shown by Retzius,§ Remak,‖ and Cruveilhier.¶

*Remak fails in his attempt to determine the microscopical characters of the proper fibres of the sympathetic nerve.*

§ 4.—The facts which have now been related are observable by the naked eye, or with the assistance of a magnifying glass, and are so far indisputable; but whether the grey fasciculi consist of, or contain, true nervous fibres with distinctive microscopical characters, and really originating in the ganglions, remained a question. The solution of this question was attempted by Remak.

§ 5.—In the first place, Remak successfully disproved Valentin's** opinion that the grey appearance of the branches of the sympathetic depends on the presence of ganglionic globules, and showed that it, in fact, depends on the fibres themselves;†† but in pointing out the microscopical characters of the fibres he was not so successful.

§ 6.—He described the fibres as not tubular, that is, not enveloped in a sheath, but naked; extremely pellucid, as if gelatinous; much more slender than the generality of primitive nervous tubules, and almost always presenting longitudinal lines on the surface; and readily resolving themselves into very delicate threads. Remak thus evidently confounded two different kinds of fibres—viz., the true sympathetic nervous fibres, and the fasciculi of extremely fine, clear, nodulated fibrils, (from about $\frac{1}{12000}$th to $\frac{1}{13000}$th of an inch thick,) which appear to form, like cellular tissue in other organs, a sort of stroma for the proper elements of the structure. The consequence of this mistake was, that the non-nervous nature of the latter fibrils having been speedily detected, and the former not having been at the same time duly distinguished, both were confounded together in the same suspicion.

*Volkmann and Bidder point out the true sympathetic nervous fibres.*

§ 7.—The fact of the existence of grey fasciculi of communication between the sympathetic, on the one hand, and the cerebral and spinal nerves, on the other, is of importance only inasmuch as it is indicative of the passage of fibres from the sympathetic to the cerebral and spinal nerves; but the existence of true nervous fibres, with distinctive microscopical characters, in the grey fasciculi, and originating in the ganglions, having been rendered doubtful, the speciality of the sympathetic system was like to have been altogether denied, and the old thesis maintained, that the nervous fibres of the sympathetic are all derived from the cerebral and spinal nerves. The microscopical investigations of Volkmann and Bidder, however, have supplied conclusive proofs that besides fibres derived from the cerebral and spinal nerves, the sympathetic does contain fibres, and these its most numerous fibres, which have an independent origin in its own ganglions; and that, moreover, the cerebro-spinal nerves contain a considerable number of these same fibres, which they receive from the sympathetic.

§ 8.—According to Volkmann and Bidder, the true sympathetic nervous fibres are distinguished by their fineness, (their diameter being constantly about half as great as that of the cerebro-spinal nervous fibres,) their paleness, the absence, under all circumstances, of a double contour, the very small quantity (or absence; see *Nervenphysiologie*, in *Wagner's Handwörterbuch*, p. 592) of curd-like contents which they exhibit when decomposed, and their yellowish-grey colour when they lie in bundles.*

§ 9.—In another place,† Volkmann observes:—"Our sympathetic fibres are not identical with those which Remak has described and delineated as organic nervous fibres. Remak's organic fibres appear, in the figures drawn by himself, ten times finer than cerebro-spinal nerves, and as presenting, when magnified two hundred times, no appreciable diameter. Our sympathetic fibres, on the contrary, are only two or three times thinner than cerebro-spinal fibres, and present, when magnified two hundred times, a diameter of one twenty-eighth of an inch. According to Remak's description, his organic fibres correspond in diameter with the finest cellular fibrils; they here and there swell out into nodules, (Remak's "Observationes, &c." § 6,) and even have a great tendency to branch (loc. cit., § 9, and description of the second figure,) peculiarities, neither of which are ever presented by our sympathetic fibres.‡

§ 10.—By the characters above described, (§ 8,) the fibres of the sympathetic nerve, according to Volkmann and Bidder, are, at the points of junction of the latter with the spinal nerves, traceable, some "towards the spinal cord, others towards the periphery. The proportionate numbers passing in each direction vary in the different places of connexion. From the branches connecting the sympathetic with the eighth and ninth spinal nerves of the frog, for instance, scarcely any sympathetic fibres proceed centrally; yet these are the largest of the branches which are commonly described

* Quoted in Müller's Physiology, by Baly, vol. i. p. 717, 718, second edition, 1839.

† Physiology, by Baly, vol. i. pp. 717, 718, 1720, and British and Foreign Medical Review, Oct. 1838, p. 412.

‡ Müller's Physiology, vol. i. pp. 720, 721, 722; Observationes Anatomicæ et Microscopicæ de Systematis Nervosi Structura, Berlin, 1838; and British and Foreign Medical Review, April, 1839, p. 501-2.

§ Ut supra. ‖ Ut supra. ¶ Anatomie Descriptive.

** British and Foreign Medical Review, October 1838, p. 412.

†† British and Foreign Medical Review, April 1839, p. 501.

* Quoted in Mr. Paget's Report in the British and Foreign Medical Review, for July, 1842, from Volkmann and Bidder's paper in Froriep's Notizen, for March, 1842, entitled Verhältniss des Nervus Sympathicus zu dem übrigen Nervensysteme beim Frosche, &c. The author of this report finds the true sympathetic nervous fibres pale, finely granular, beset here and there with oval nuclei, and about one-four-thousandth of an inch in breadth. The difference between them and the cerebro-spinal fibres is most marked in the mammifera.

† Article "Nervenphysiologie," in Wagner's Handwörterbuch. See also Die Selbständigkeit des Sympathischen Nervensystems durch Anatomische Untersuchungen nachgewiesen von J. H. Bidder und A. W. Volkmann. Leipzig, 1842.

‡ Volkmann farther continues, in a note:—"Remak has in many cases really seen the true sympathetic nervous fibres, and has, therefore, in his investigation of the intimate structure of the cerebro-spinal nerves, (Müller's Archiv. 1836, p. 145; see also the British and Foreign Medical Review, for October, 1838, p. 408,) made many perfectly correct observations on the admixture of thin and thick fibres in the nerves. But Remak has, on the one hand, taken the thin, that is, the true sympathetic fibres, for medullary or white fibres, in the process of development, and, on the other hand, represented as the proper sympathetic fibres, elements of the nature of cellular tissue merely, and has thereby greatly embroiled the subject of the sympathetic. The fifth part of Müller's Archiv. for 1845, which has just come into my hands, contains a paper by Remak, in which he admits that his fibres are *altogether different* from those which Bidder and I describe as the true sympathetic fibres, but he still holds his fibres to be the true sympathetic nervous elements, and maintains, in order to secure currency to his opinion, their identity with the sympathetic fibres, admitted by Purkinje. I, however, know from Purkinje, by letter, that he views the sympathetic only as the *carrier* of the nodulated tissue (species of formatio granulosa) described by Remak."

as the *origins* of the sympathetic system from the spinal cord. On the whole, the sympathetic, at these points of junction, always gives more fibres than it receives. It must therefore have some source of fibres of its own; and this source is found to be chiefly in the ganglia, both spinal and sympathetic, (specially so called,) and in a less degree, in the cord itself."*

*Origin of the sympathetic nervous fibres in ganglions.*

§ 11.—Remak described his organic nervous fibres as originating in the corpuscles of which the ganglions are specially composed. He was therefore of opinion that the sympathetic ganglions are the *true centres of the organic nervous system.* This opinion of Remak, however, seeing that he had failed in distinguishing the true sympathetic nervous fibres, cannot be admitted as having greater weight than the same opinion as enunciated by Bichat, except in so far as the former had successfully traced grey fasciculi from the ganglions as above mentioned, § 2.

§ 12.—That the sympathetic nervous fibres have their origin in ganglions, Volkmann adduces, amongst others, the following proof:—"By means of the microscope," says Volkmann, in the places already referred to, "I succeeded in showing, that in the frog the cords of communication between the sympathetic and spinal nerves are divided into two fasciculi, of which one proceeds towards the root of the spinal nerve, but the other towards its periphery—nay, in the three last nerves of the frog, it was found that the fibres of the cord of communication went almost all, and not unfrequently wholly, to the periphery. From this it is already evident that fibres spring from the sympathetic, and reinforce the cerebro-spinal nerves." * * * "But," continues Volkmann, "an important discovery of Bidder's completes the proof. In a letter to me, my friend says that the transparent septum of the auricles in the frog's heart affords the opportunity of examining branches from ganglions, which contain so few fibres that their absolute number may be sometimes counted. Bidder repeatedly satisfied himself, that in one branch of a ganglion there were more fibres than in the other,—e.g., in one seven, in the other five.†

§ 13.—That the nervous fibres which come from the ganglions have actually their origin in the ganglionic corpuscles, the observations of Helmholtz, Will, Hannover, and Kölliker, have combined to prove.‡

*Drs. Sharpey and Todd allege, that* Discoveries *in regard to the structure of the sympathetic, and the nature of its connexion with the spinal nerves, are contained in Mr. Beck's paper on the "Nerves of the Uterus."*

§ 14.—The following extracts from the *Philosophical Transactions*, Part ii. 1846, contain all that is said by Mr. Beck on the subject of the structure of the sympathetic nerve, and its connexions with the spinal nerves:—

"*The Great Splanchnic Nerve and Semilunar Ganglion.*

"The great splanchnic nerve is said to be formed by branches which come from the sixth, seventh, eighth, and ninth, and sometimes tenth, thoracic ganglia. These branches, after passing forwards and downwards, unite at the side of the dorsal vertebræ, and constitute the nerve, which, after piercing the diaphragm, ends in the semilunar ganglion. If the branches said to come from these ganglia be examined, it will be seen that this is only their apparent origin, and that they are branches of the intercostal nerves. The branches of communication between the spinal nerves and the thoracic ganglia consist of two distinct portions, marked by difference in colour, consistency, and distribution. One portion, the smaller of the two, is soft, semi-transparent, and of a light-brown colour. It leaves the posterior border of the thoracic ganglion, and joins the spinal nerve about one-eighth of an inch anterior to the giving off of the white portion; a grey communicating cord also passes between the thoracic ganglia. This ganglionic mass (?), when first exposed in the recent dissection, was of a deep red-brown colour, which quickly faded to a light-brown by the action of the water in which it was examined. The other portion, about one-half larger than the former, is firm, of an opaque, pearly-white colour; it passes to the anterior surface of the ganglion, and divides into two portions. One of these portions joins with a similar part, sent down from the ganglion next above, and then goes out in a curving direction, on the side of the dorsal vertebræ, to contribute in the formation of the splanchnic nerve. The other half of this branch of the intercostal nerve turns down, constituting a part of the intercommunicating cord between the ganglia, to the ganglion next below, and there joining with a similar portion from the intercostal nerve on a level with this ganglion, passes forwards to join the other branches which form the splanchnic nerve. Each branch sent to the splanchnic nerve contains branches from at least two intercostal nerves—viz., from the nerve on the level with its apparent origin, and from the nerve next above it. This arrangement of the nervous fibres is very apparent in the recent dissection, from the marked distinction which exists in colour and consistency between the grey and white portions of the so-called trunk of the sympathetic.

"The splanchnic nerve formed by the branches of the intercostal nerves is a single round cord, which increases in size on the addition of each branch. About an inch below the junction of the last branch it separates into two parts, and upon one of these a ganglion is formed, similar in appearance to those found on the posterior *branches* (roots?) of the spinal nerves. About an inch below this ganglion, the two portions of the splanchnic nerve interchange some fibres, which form a small plexus. This plexus terminates in several fasciculi, which, surrounded by a common cellular envelop, pierce the diaphragm, and end in a collection of ganglia at the side of the cœliac axis."—pp. 214, 215.

"*The Lesser Splanchnic Nerves.*

"These nerves having suffered some injury in the removal of the preparation from the body, I cannot decidedly give their origin; but they appear to be derived from the intercostal nerves in the same manner as the greater splanchnic."—p. 216.

"*The Ganglia at the Root of the Inferior Mesenteric Artery.*

"These ganglia, after receiving the terminal branches from the superior aortic plexus, and branches from the three lumbar ganglia, furnish the nerves accompanying the inferior mesenteric and superior hæmorrhoidal arteries, and send from their lower border branches, which form the inferior aortic plexus. The branches supplied by the lumbar ganglia are branches of the spinal nerves, derived in the same manner as those constituting the greater splanchnic nerve. These branches pass over the lumbar ganglia, and becoming associated with gelatinous fibres, end in the ganglia at the root of the inferior mesenteric artery; in the same way as the branches passing over the thoracic ganglia form the splanchnic nerve, and end in the semilunar ganglion."—p. 217.

"*The Analogy which exists between the different Collections of Ganglia.*

"From the foregoing facts it will appear that a great analogy exists between the collections of ganglia at the cœliac axis, at the superior hæmorrhoidal artery, and at the pelvic plexus. The same elements exist in each—viz., tubular nervous fibres, derived from the spinal cord, and gelatinous nervous fibres, derived from the ganglia; the size of the ganglia being in apparent relation to the quantity of gelatinous fibres required for the nerves distributed from these points. The constitution of the nerves which come from these ganglia differs according to the size of the ganglia. Those distributed to the bladder and vagina differ from the nerves sent to the uterus, intestines, &c., in containing a much larger amount of tubular nervous fibre."—pp. 218, 219.

§ 15.—What discoveries these statements contain, and how far they justify the Report of Drs. Sharpey and Todd, the reader will judge for himself. The author of this Report has already expressed his own opinion. Here he would only farther observe, that Mr. Beck's paper and the Report on it by Drs. Sharpey and Todd, are altogether deficient in that knowledge of the real nature of the intimate constituents of the grey nervous fasciculi of the sympathetic, and of their connexion with the ganglions, which, in the early part of this Report, (§ 7,) was shown to be a necessary preliminary to the correct appreciation of the import of the fact of the existence of grey branches of communication between the sympathetic and spinal nerves. Mr. Beck's observations, in fact, comprise nothing but what is observable by the naked eye, or with the assistance of a magnifying-glass. The grey nervous branches are spoken of without any distinction of their constituent fibres, and as if there had been no question of their real nature. Twice or thrice, indeed, in the paper, those fibres are

* Mr. Paget's Report in the British and Foreign Medical Review for July, 1842. See also, farther, on the subject, the Abstract of Kölliker's Essay, Die Selbständigkeit und Abhängigkeit des Sympathischen Nervensystems, Zurich, 1844, in Mr. Paget's Report in the British and Foreign Medical Review for July, 1846.

† An additional and still more decisive proof than this adduced by Bidder, is offered by the "ganglion cæcum," which the author of this report recently discovered in connexion with one of the ciliary nerves of the dog, and described briefly in The Lancet for Nov. 14, 1846.

‡ See Mr. Paget's report in the British and Foreign Medical Review for July, 1846, p. 271. The result of the observations of the author of this report is to the same effect.

loosely referred to under the name of "gelatinous nervous fibres," as if that name had been anything more than a mere conventional and provisional name applied by Professor Henle to the constituent fibres of the grey nerves, whilst the true nervous fibres were as yet undistinguished from the fasciculi of nodulated fibrils, and whilst it was a matter of doubt whether the grey fasciculi of the sympathetic were nervous at all.

§ 16.—In short, we have in Mr. Beck's paper an extremely imperfect reproduction of what had been previously, though still imperfectly enough, done by Dr. Remak on the subject. (See above, §§ 2 and 3.)

*The Notes and Supplement to Mr. Beck's Paper.*

§ 17.—It is not much better, (in one point much worse,) as regards the additions made to Mr. Beck's paper, in the form of Notes and a Supplement, subsequently to the occasion when the author of this Report called the attention of the Royal Society, at one of their evening meetings, to the subject, and, without effect, appealed to the members of the Physiological Committee present for information regarding the discoveries which it had been proclaimed were contained in Mr. Beck's paper. The Notes are dated May, 1846, and the Supplement, (professing to be a description of the plates, *though nothing on the subject of the structure of the sympathetic nerve is represented in them,*) July 6th, 1846.

§ 18.—In these additions, something is said regarding the mode of connexion of the grey communicating branches with the spinal nerves, on which subject, *contrary to the allegation in the Report of Drs. Sharpey and Todd, nothing whatever had been said in the original paper;* and the statements regarding absolutely grey and white branches of communication, so much insisted on in the paper, and in the Report on it, materially modified. Microscopical observations regarding "gelatinous fibres," and their origin from ganglionic corpuscles, are also now spoken of, but neither descriptions nor figures are given of what was actually seen.

§ 19.—In the note at page 216, the only place where Volkmann and Bidder's labours are referred to, an attempt is made to put them in the wrong, by representing them as saying, that "tubular fibres" (by which name Mr. Beck means the white, thick fibres of cerebral and spinal nerves) originate in ganglia. It has been above seen that the fibres, the origin of which, in the ganglions, Volkmann and Bidder labour to prove, are those which they call their "true sympathetic fibres," and which they have shown to differ very materially from the white cerebro-spinal fibres, without insisting much on their tubular or non-tubular structure. The author of this Report, however, begs to seize the present opportunity of insisting on their tubular structure.

§ 20.—That the true sympathetic nervous fibres are tubular, and that they have contents, the author of this Report has satisfied himself by the following demonstration, and he believes others will satisfy themselves on repeating it:—Carefully, and without pressure, cut off, with a fine sharp knife,—an iris-knife, for example,—under the simple microscope, a small portion of a grey fasciculus, (for example, any of the small, exclusively grey branchlets to be found coming from any sympathetic ganglion, or the grey fasciculus constituting the pedicle of the small *ganglion cœcum* above referred to in the note to § 12;) and having covered it with a thin plate of glass, place it under a power of two or three hundred diameters. By now exerting pressure on the thin plate of glass over it, fine, pale, curdy contents, in very small quantity, will be seen to ooze out from the cut ends.

George-street, Hanover-square, April, 1847.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

### MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

It is of interest to consider the abdominal complications of fever in another point of view—namely, in relation to the symptoms manifested through the nervous system. We have already alluded to the few cases in which the symptoms seemed to be referrible at once to the nervous system, albeit dissection could not show any appreciable disease of the nervous centres; here the symptoms observed during life, or the examination of the body after death, pointed so clearly to abdominal disease, that it seems just to consider the nervous symptoms, such as they were, as secondary to the abdominal lesion. In the first case, the symptoms, though sufficiently striking, claim to be called nervous in hardly a higher sense than we use the term to designate hysteria.

#### FEVER, WITH NERVOUS SYMPTOMS; THE STRESS OF THE DISEASE ON THE ABDOMEN; RECOVERY.

Case 52.—Frances G——, aged twenty-two; admitted May 11, 1846; Mary back ward. Small stature; dark complexion; face anxious; tongue coated; skin hot and dry, without any rash; bowels much relaxed; has thirst, anorexia, delirium, and watchfulness, with some cough, of two days' duration.

*History.*—A servant, generally healthy, but the catamenia irregular; has been ailing for a fortnight, and during the last week all her symptoms have been aggravated, which she attributes to having put on damp clothes; but she had nothing definite to complain of till two days ago, when she was suddenly seized with diarrhœa, accompanied by pains in the loins and abdomen, and soon followed by delirium, with some degree of stupor. Ordered, to have eight leeches applied to the abdomen; to take five grains of compound mercury-and-chalk pill every six hours.

Fourth day.—The leeches drew freely, and relieved the pain in her abdomen. The diarrhœa was suspended for awhile, but has returned. Tongue clean and dry; pulse 120, small and soft. She had passed no urine since admission. She had some hours' sleep last night, and now is quite coherent, though her memory seems deficient. Ordered to continue.

Fifth day.—Little sleep; face dull; tongue clean and dry; pulse 120, small and soft; bowels still much relaxed; urine scanty, passed with difficulty; skin warm and perspiring, still without rash; she has a little cough, with some pain on the right side of her chest. Ordered, to continue the pills; to take four ounces of wine, and one pound of beef, for tea, daily; to have a blister-plaster applied to the abdomen, and to be cupped to three ounces on the right side of her chest.

Sixth day.—Slept well. She complains now of no pain, only of extreme thirst; tongue clean, dry; one liquid, light-coloured evacuation; urine passed freely. She lies in the oddest and most constrained positions, crying, and calling out hysterically. Ordered to continue.

Seventh day.—Restless in the early part of the night, but had some good sleep subsequently; bowels not open; abdomen full and tolerant on pressure; tongue clean and moist, but sordes collecting about the teeth; pulse 120, small and soft; she still cries and moans, and, however placed, always assumes some constrained uneasy posture. Ordered to take ten minims of dilute hydrochloric acid thrice a day.

Eighth day.—She had little sleep, constantly awaking with thirst during the night; tongue clean, dry, and chapped; bowels once open, the motion a little relaxed; skin dry and harsh, still without rash. She lies on her back, high up in the bed, with frequent (36) noisy respirations, complaining of rising in the throat, with occasional flushing of the face, and some pain in her right side. Ordered to continue: to take two grains of mercury with chalk, and ten minims of tincture of opium, to-night; to have a blister-plaster applied to her right side.

Ninth day.—Good sleep; less pain in her side; tongue dry, clean; pulse 120, small and soft; one loose evacuation; abdomen full, tolerant of pressure. Ordered to take five grains of mercury with chalk to-night, and to continue.

Tenth day.—Some sleep; tongue paler, rather moist, a thin cribriform fur running along the edges; pulse 108, small and soft; bowels much relaxed, the evacuations passed in bed; she had a little retching this morning; her face is no longer flushed; and she lies in an easy posture. Ordered to take ten minims of dilute hydrochloric acid, with four minims of tincture of opium, thrice a day.

Eleventh day.—Slept well; is free from all pain, and lies easily in bed; tongue moist, with a thin pasty fur, the fissures still remaining; pulse 124, small, soft; skin warm, dry, and harsh; two or three natural evacuations passed in bed; abdomen full, rather tender. Ordered to discontinue the hydrochloric acid, to reduce the daily amount of wine, and to take six grains of compound mercury-and-chalk pill to-night.

Twelfth day.—She lies dull and heavy, complaining of thirst; tongue clean, rather moist; bowels still relaxed, the motions passed in bed; the abdomen full and tolerant; skin hot, harsh, and dry; pulse 114, small and soft. Ordered, five grains of compound ipecacuanha powder thrice a day, and to continue.

The next day her bowels still continued to be relaxed.

On the fourteenth, she had passed the previous night with little sleep, delirious; tongue moister; pulse 120, small and soft; bowels less relaxed, the motions still passed unconsciously; skin cool, harsh, slightly moist.

Fifteenth day.—Little sleep, wandering at night; face flushed; skin warm and soft, profusely perspiring, covered with abundant miliary rash; pulse 120, small and soft; bowels relaxed after taking beef-tea; the motions still passed unconsciously. She is more cheerful, more sensible, and her appearance in every way improved.

Seventeenth day.—Sleep still disturbed; pulse 108, small and soft; tongue clean and moist; bowels regularly open, the evacuations natural in character, and not passed in bed; skin moist; the miliary vesicles have all disappeared. She has less thirst, with some return of appetite, and complains only of a little cough.

There only remains to remark, during her rapid convalescence, slight desquamation on the twentieth day, and on the twenty-sixth day, frequent vomiting of a clear fluid, accompanied by some return of the hysterical symptoms which she had exhibited during the early part of the fever. On the twenty-ninth, she had several alternations of heat and cold, for which she was put on the daily use of quinine; and no further note occurs till her discharge, towards the latter end of June.

The simple coincidence of hysteria with fever may seem to have small claims on our attention, less, indeed, than it would attract under the name of nervous excitement, which is illustrated in the next following fatal case. The symptoms of hysteria are mostly merged in those of intercurrent acute disease, and though they may appear as modifying or aggravating those symptoms, yet they rarely are recognisable, as in this case, simply as hysteria, the cause of which is to be sought in the mental impression produced by the acute disease itself. Of the treatment of hysteria it is not here the place to remark. Frivolous as the subject may seem, it is one which will at times require the best skill in the management, both of mental and bodily diseases, on the part of the practitioner. But, in connexion with the above case, there are two facts that should never be lost sight of. First, the possibility, in any acute disease, of the symptoms of that disease being much modified by this excitable nervous condition; or, what is more important, as less likely to be observed, the continuance, in an hysterical form, of those symptoms which have hitherto required active depletory measures. The second fact is, the frequent dependence of the above order of symptoms on serious organic disease in an early stage. The practice of a large hospital, where the same patient applies from time to time, and especially hysterical patients, who apply at the earliest period for the relief of their ailments, real or fancied, supplies abundant evidence of the truth of this remark.

Of the fever itself, independent of this nervous complication, there is little to say more than has already been remarked in other cases where there was equally little reason to doubt that the stress of the disease really lay on the abdomen, judging from the symptoms during life, or as in the following case, from the changes discovered after death. This is worth perusal, as well on account of the illustration it affords to the present subject, as of the morbid changes which exactly represent the form of intestinal disease specifically referrible to typhus.

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### FEVER, WITH NERVOUS SYMPTOMS; DEATH ON THE ELEVENTH DAY; ULCERATION OF THE BOWELS.

Case 53.—William R——, aged twenty-four; admitted July 1st, 1846; Matthew front ward. A fine, strong, healthy-looking man. Tongue thickly furred, and coated with clammy mucus; pulse 108, jerking; skin warm, slightly moist; bowels once open this morning. He lies restlessly on his side, till roused to give an answer, when he speaks in a thick, unintelligible voice, becomes flushed in the face, and very excited, talking about a fall that he had three days ago.

*History.*—It is learned from his friends that he is a carpenter, that he has been very intemperate, and that the fall occurred four years ago. He has had diarrhœa for a week, and vertigo, with more or less of his present symptoms, for the last three days.

Ninth day.—He slept well; pulse 104, small, soft, jerking; tongue drier, with a thinner and less clammy fur; four light-coloured, relaxed, yellow evacuations; skin warm and perspiring, without rash; respirations 40, irregular. He has some pain in the head; his articulation is still difficult. He says that he cannot breathe for pain at the pit of the stomach.

Tenth day.—No sleep; he is quite unconscious, and all his evacuations pass under him in bed; face profusely perspiring, his hand trembling; tongue with a clammy fur; pulse 108, small and soft.

Eleventh day.—Sleepless; moaning all night, attempting to talk; bowels much relaxed. He lay thus till nine A.M., when he turned pale, and died quietly.

*Body examined, seven hours after death.*—Limbs all very rigid; blood generally fluid; no rash, and no marked sugillations on the surface of the body. The brain was perfectly firm and healthy; there was a little reddish fluid in the lateral ventricles, and much fluid blood escaped on the division of the vessels at the base. The lungs were healthy, saving a little congestion posteriorly. The stomach contained some dark, olive-green fluid, with a few sepia-coloured shreds. There was a little dotted injection about the cardiac end, and a few small follicular ulcers, to which the dark shreds hung. The small intestines were healthy, except the lower two feet, or more, of the ileum. In this space, going downwards, first came a number of pale elevations, such as the presence of a flattened mustard-seed beneath the mucous membrane might give rise to; then, the tops of these presented a vascular ring, with a pale centre; and then, a little way further on, there was distinct evidence of softening in this central spot. And now, there appeared broad, dusky-red patches, dotted with little follicular openings, occupying the exact limits of Peyer's patches, generally thickened, with an elevated fungous rim running round the patch. The mucous membrane, a little lower down, was so intensely injected, that, for a short distance, the thick rim was almost the only means of discerning the patches, till, further on, a crack appeared in one or two of these, displaying a slough beneath the yet living mucous membrane. The mucous membrane was now much thickened, so as to contract the calibre of the bowel; its surface uneven; the deep injection relieved occasionally by a white crack; and just on the ileo-cæcal valve, a large piece of the mucous membrane itself had separated, leaving a rough, granular surface exposed. This was the extreme degree of the lesion; next, in the colon, came enlarged solitary glands, with vascular rings and white tips; and these were followed by simply enlarged glands, without any injection, less numerous and less affected, till they died away in the descending colon. The intestines contained light-yellow, half-solid fæces. The mesenteric glands were enlarged, soft, mottled with red and white. Liver large, pale. Spleen eight inches long, dark, rotten, so as to fall in two on being taken from the abdomen. Kidneys healthy.

Nothing has been said, in the narration of this case, of the treatment adopted, for my notes do not accurately represent throughout what it was, only sufficient to show that, during the two first days at least that he was under observation, there was nothing done to prevent us from correctly ascribing the symptoms at once to the disease.

The few words of a note which can recall any remarkable condition to the memory, are insufficient to give to others the full idea intended by those words. His condition, when roused to give an answer, was very striking; he perceived clearly that his tongue failed to express all he desired, and as he attempted to supply the deficiency by the wildest gesticulations, his appearance resembled that of a person under the excitement of drink; but he thought correctly, only he could not express himself, and he saw that he could not; only his memory failed him. And this was his condition for two days, till excitement was exchanged for coma, and then he died.

The account of the dissection states, that bloody serum was found in the lateral ventricles of the brain. But where the rest of the organ was found perfectly healthy, and the blood all fluid, there is reason to suppose, that this colour arose merely from accidental staining. Or, even assuming that this staining resulted from an action taking place during life, it seems more natural to refer the cerebral symptoms either to sympathy with the abdominal disease, or to the fever generally, than to refer them to a cause which had left no further traces of its action than a little discolouration of the serum of the ventricles.

The appearances in the small intestine have been so fully detailed as to need little further remark. They presented the complete history of a typhus ulcer, commencing with the simply thickened Peyer's patch, followed first by the separation of the sub-mucous deposit, to which this thickening was for the most part referrible, through a simple crack in the mucous membrane, and lastly, by the sloughing of the membrane, which had been undermined to this extent.

## MIDDLESEX HOSPITAL.

### CASES OF FRACTURE OF THE NASAL BONES.

Reported by J. HENRY ROGERS, Late Acting House-Surgeon.

THE nose, from its exposed position, is not unfrequently injured by blows or falls, the cartilages being separated from the bones, or the bones themselves fractured. Although fracture of the nasal bones, being necessarily the result of direct violence, is generally attended by considerable tumefaction and disfigurement from effusion of blood, it is seldom that any serious consequences result from such an accident. Occasionally, however, it happens, that blows on this organ, which may perhaps have occasioned but slight external injury, are followed by symptoms indicative of inflammation of the brain or its investing membranes. This arises from the connexion between the septum of the nose and that portion of the floor of the skull formed by the cribriform plate of the ethmoid bone. A blow on the nose may force up the septum, and fracture this delicate plate of bone. The possibility of such an occurrence is alluded to by most systematic writers on surgery, but is usually spoken of rather as an accident which might happen, than as one which is likely to be met with in practice. Within the last few months, four cases of injury of the face, with fracture of the nasal bones, have been admitted into the Middlesex Hospital. Three of these cases have terminated fatally, from inflammation of the membranes of the brain; and in all three there was found fracture of the cribriform plate of the ethmoid. In two of these fatal cases, the visible injury done to the nose was so trifling, that fracture of the ossa nasi was not suspected during life. The danger in these cases is not to be estimated by the amount of external injury. It is dependent, not on the degree of force producing the injury, but on the direction in which that force is applied. The nose may be completely crushed by a blow acting laterally or from above, and the cribriform plate escape uninjured; but a much slighter blow, so applied as to drive the septum directly upwards, may fracture the cribriform plate from which it depends, and the result may be death from inflammation of the membranes of the brain. It is probable that accidents of this kind are much more frequent than is generally suspected, as, from the nature of the lesion, it is very likely to be overlooked in the hurried manner in which post-mortem examinations are frequently conducted.

The cases are related in the order in which they occurred.

#### FRACTURE OF THE NASAL BONES, AND OF THE CRIBRIFORM PLATE OF THE ETHMOID; INFLAMMATION OF THE MEMBRANES OF THE BRAIN; DEATH.

CASE 1.—J. T——, a stableman, aged thirty, of intemperate habits, was admitted late on the evening of the 15th of December, having just before been kicked in the face by a horse. He walked as steadily and answered as rationally as could be expected of a man who had evidently been drinking pretty freely. He had a vertical, irregular, lacerated wound, completely dividing the upper lip on the left side, and over the frontal sinus, a little to the left of the median line, was a cut about an inch in length; the bone beneath was denuded, and a portion of it driven in and partially detached, so as to admit the point of the little finger. No other injury, with the exception of some apparently slight bruises, was detected at this time. The patient, who seemed somewhat flushed and excited, apparently from drink, was sent to bed, the wound in the lip united by a suture, water-dressing applied to the forehead, and he was ordered a full dose of calomel and jalap. On the following day he complained much of pain in the head, which was still unrelieved on the 17th, although the bowels had been freely opened. The face was now much swollen, but without any redness, the skin being unusually pale. The eyelids were completely closed from œdema. Ordered two grains of calomel every six hours.

Dec. 18th.—Still complains of pain in the head, but the face is less swollen. About the middle of the day he began to talk incoherently, and attempted to get out of bed; towards night he became worse, being more muddled and confused, and his pulse, which had been quick, was now slow, but with some degree of power, and very irregular, both in time and force. He was at this time perfectly quiet, lying on his back. It was observed, that the right hand, which had been raised from the bed to admit of the pulse being felt, retained its position after the support of the surgeon's hand had been withdrawn. The arm was now fully extended; it retained its position. The left arm was now tried; it also retained any position it was made to assume. Both arms were kept elevated and fully extended, for some minutes, in various positions, no attempt being made by the patient, who remained perfectly passive during these experiments, to move the limbs; but after a time he drew his arms under the clothes, and curled himself up in the bed, in the position of a patient with concussion of the brain. During the time the arms were extended, there were slight convulsive twitches of the muscles. As the motions were reported to have been extremely dark and offensive, and as there was considerable power in the pulse, a strong dose of purgative medicine was ordered immediately.

19th.—He had not slept, and had been very restless, rambling a good deal, and frequently attempting to get out of bed. The bowels had acted freely, and the motions were more natural in appearance. He was in the morning much clearer in his intellect, answering questions quite rationally. The pulse was again regular, but weak. Omit calomel. To take porter and beef-tea. Towards the evening the delirium returned, and he became so noisy and troublesome, that it was necessary to remove him from the ward into a private room. At eleven P.M. he was bathed in a most profuse sweat; his face coloured, but not flushed; his breathing short and hurried; his pulse excessively quick and feeble; his tongue dry, and coated with reddish-brown fur. He was incessantly talking, but scarcely made any attempts to get out of bed. As, from the present symptoms and the previous history of the patient, this was considered as a pure case of delirium tremens, he was ordered a pint of porter, with half a drachm of the liquor opii Indiensis, (Jeremie's solution of opium,) which, after a good deal of persuasion, he swallowed. No effect appears to have been produced by this dose; he continued talking during the remainder of the night, and until about seven o'clock on the following morning, when he became much quieter, and in about half an hour after expired—four days and a half after the accident, and about forty hours after the first appearance of delirium.

21st.—The body was examined thirty hours after death. The face was considerably discoloured from bruises. On reflecting back the skin covering the upper part of the face, a small portion of bone was found driven in over the frontal sinus, on the left side, corresponding to the wound in the integument. A small quantity of sero-purulent fluid was found in the cavity of the arachnoid. Beneath the arachnoid, which was thickened and opaque, was a purulent deposit covering the entire surface of the brain and cerebellum. The substance of the brain was healthy, but more than usually vascular; the veins on its surface were extremely tortuous. On removing the dura mater, the cribriform plate of the ethmoid bone was found to be fractured and driven up, and a fissure extended backwards through the sphenoid bone to the right anterior clinoid process. The ossa nasi being now examined were found to be both fractured. This had not been discovered during life. The viscera of the chest and abdomen were not examined.

#### FRACTURE OF THE OSSA NASI, WITH CONSIDERABLE CONTUSION; RECOVERY.

CASE 2.—W. H. B——, a cabman, aged about thirty; admitted Dec. 24th. Had been laid up for several weeks with some disease of his chest. The first day he resumed his work, he was thrown from his seat, and fell on his face. There was no wound, but the face was much bruised, particularly about the nose, which was greatly swollen and discoloured. On taking hold of the nose, it was found to be perfectly moveable, the movements being accompanied by distinct crepitus. Although the bony supports of the nose were so extensively fractured, there was but little displacement, and nothing required to be done to maintain the parts in a proper position. The patient was kept in bed on low diet, and cold lotion was applied to the face. No unfavourable symptoms occurred; the swelling gradually subsided, and he was discharged a few weeks afterwards, retaining but slight traces of the accident. This case, which may be taken as an example of the ordinary fracture of the ossa nasi, is recorded, from its affording an instructing contrast with the previous one. In Case 1, the apparent injury done to the nose was so slight as to escape detection during life; but the force, though producing such slight external injury, has been so applied as to drive up the bony septum of the nose, and break in fragments the delicate plate of bone which separates the cavity of the nose from the membrane of the brain. In Case 2, the visible injury was considerable, but was confined to the vault of the nose, and the accident was followed by no symptoms indicative of internal injury. The septum either yielded, or the force was not applied in such a direction as to drive it up against the cribriform plate.

LACERATED WOUNDS OF THE FACE AND SCALP; EXTENSIVE FRACTURE OF THE BONES OF THE FACE; FRACTURE OF THE CRIBRIFORM PLATE OF THE ETHMOID; DEATH.

CASE 3.—A powerful, muscular man, aged fifty-four, was brought to the hospital, Feb. 25th, at five P.M. He had been riding on the shaft of his cart, close by the hospital, but being drunk, he had slipped off, and the wheel of the cart, from the statement of those who accompanied him, passed over his head. He did not appear to be at all stunned, or to suffer any pain or inconvenience, and walked with a firm step from the surgery into the ward. On examination, it was found that there was a semilunar flap of scalp, about four inches across, torn up on the upper part of the head, a small portion of bone being divested of its periosteum. There was a lacerated wound on each side of the median line, over the root of the nose. The wound on the right side, much the largest, extended down to the bone, exposing the margin of the orbit, and was prolonged to the free border of the upper eyelid, dividing, however, merely the skin covering the lid. The point of the finger introduced into this wound could be passed out into the orbit beneath the roof, which was divested of its periosteum. The eye was not burst, but blood appeared effused in its interior, and the sight was destroyed. The wound on the left side, at the inner extremity of the brow, was much less extensive, but extended to the bone, which was felt to be fractured into the frontal sinus. On the left cheek there was an irregular cut along the centre, and another straight cut extended along the line of junction between the nose and the cheek. There was also a deep cut at the lower part of the wing of the nose on the same side. The ossa nasi and the ascending portions of the superior maxillary bones were felt to be fractured. The flap of scalp, which bled but little, was easily brought into position, and retained by strapping. The wounds on the face were united by sutures, and lint, dipped in cold water, was kept continually applied to the face. The oozing of blood from the numerous wounds was for some hours very considerable—a good deal passed backwards into the mouth; but by continuing the application of cold, it was, about four P.M., completely checked.

Feb. 26th.—Doing well; no bleeding; no complaint of pain; pulse rather quick; thirsty. Ordered an aperient, to be followed by salines, with antimony.

27th.—Passed a good night; slight symptoms of erysipelas appeared about the face; pulse much weaker. Omit salines; wine, four ounces; beef-tea. In the evening much the same; but complained of pain in the right shoulder. Had not previously complained of pain there, or, indeed, anywhere else. The shoulder was examined; but no bruise or other injury was detected.

28th.—Appeared going on very favourably during the day, and when visited late at night, was sleeping soundly, but he had been dull, and had not spoken during the evening. About two A.M. on the following morning, a change suddenly took place; he woke up, and his breathing became very laborious, noisy, and hurried, each inspiration being accompanied by a loud snorting sound. It was difficult to make out the seat of this first sound, and impediment to the entrance of air. At first, it was conjectured that the larynx was the part in fault, but on raising the patient up in bed, so as to place him nearly in the sitting posture, his breathing became much freer, and less hurried, and it was now found, that the noise during inspiration was in great part occasioned by the air passing through the wound over the left brow, during the respiratory movements, the nose being probably closed by clotted blood. On holding a candle near the wound, which communicated with the frontal sinus, the flame was observed to be drawn towards the wound in inspiration, and during expiration the air rushed out with such force as nearly to extinguish the light. At this time, he appeared perfectly insensible, and incapable of speaking. Although he was kept supported in the same position, the difficulty of breathing again came on in the course of a few hours; he became gradually weaker; and died at half-past seven A.M., about five hours after he was first seized with difficulty of breathing, and three days and a half after the accident.

*Examination of the body, thirty hours after death.—Head:* The nasal bones, the nasal spine of the frontal, and the ascending processes of the superior maxillary bones, were broken across and driven downwards, so as to completely detach them from the frontal bone. On the right side, the external angular process of the frontal bone was broken off; the malar bone completely separated; and the zygoma fractured. The soft parts were much contused, with considerable effusion of blood, particularly into the substance of the right temporal muscle. The flap of the scalp was not united, but there was pus between it and the bone. There was considerable vascularity of the whole surface of the membranes of the brain, with slight extravasations of blood, especially on the inferior surface of both the cerebrum and cerebellum. Yellow, fœtid pus was spread over the surface of the arachnoid, covering the right hemisphere; and greenish-coloured lymph was found in the pia mater, beneath the arachnoid, on the left side. The brain was firm and vascular; a moderate quantity of clear serum was contained in the ventricles. On removing the dura mater, which was entire, the cribriform plate of the ethmoid was found to be completely shattered.—*Neck:* A considerable extravasation of blood was found in the cellular tissue beneath the skin, on the anterior and right side of the neck, extending inwards to the root of the tongue. The larynx, trachea, and œsophagus, appeared quite healthy.—*Thorax:* Heart and pericardium quite healthy; right lung much congested, and œdematous; left lung united to the walls of the chest by numerous old adhesions; the lower lobe breaking down under the fingers in the attempt to remove it; its tissues much softened, infiltrated with dark blood, and very fœtid; in a state of incipient gangrene; it floated in water. This condition was confined to the lower lobe; the upper appeared healthy. On examining the right shoulder, where he complained of pain on the evening of the 27th, no external mark of injury was observed; but pus was found in considerable quantity in the bursa beneath the deltoid, extending down over the long head of the biceps, but external to the proper sheath; there was no pus in the cavity of the joint. The left shoulder and both knee-joints were examined, but they appeared quite healthy. The viscera of the abdomen were also quite healthy.

FRACTURE OF THE NASAL BONES AND OF THE CRIBRIFORM PLATE OF THE ETHMOID BONE; INFLAMMATION OF THE MEMBRANES OF THE BRAIN; DEATH.

CASE 4.—Thomas T——, aged forty-eight, came to the hospital in the afternoon of March 22nd, stating that he had just before fallen from a height of eight or ten feet. There was some ecchymosis around the left eye, and a small lacerated wound over the margin of the orbit, but no fracture could be felt. As he was said to have been stunned for some minutes after he fell, he was, as a measure of precaution, taken into the hospital, although at the time of his admission there were no symptoms indicative of any injury to the brain. At night he complained of pain in the chest, and of some difficulty in breathing, but this he stated to be a complaint he had been subject to for years. He was ordered a dose of calomel and colocynth.

On the following morning, the 23rd, there did not appear to be much the matter with him, but about the middle of the day he complained of feeling cold and chilly, and the nurse gave him an additional blanket; soon after this a great change took place in his appearance, his countenance became vacant and void of expression, and his breathing hurried; he could not speak, and there was a slight twist of the mouth. To take calomel, six grains; colocynth, ten grains; to be cupped on the temples to ten ounces. At night appeared to have derived no relief from the cupping; was sitting up in bed; countenance still vacant, but there was no paralysis; he took no notice when spoken to, and did not attempt to speak; pupils not dilated, but insensible; pulse feeble, skin perspiring. A turpentine injection was ordered. A catheter was introduced and a considerable quantity of urine drawn off.

24th.—No great change appeared to have taken place. He still continued sitting up in bed, not speaking, and taking no notice of anything passing around him; the pupils rather dilated; the pulse very feeble and rather quick: he was sick occasionally in the course of the day; there was no paralysis, but some degree of rigidity in the right arm; the catheter was still required. The head was shaved and a blister applied to the vortex. As there was great difficulty in getting him to swallow any medicine, some croton oil was given him on a little sugar. He continued getting gradually weaker, without any marked change of symptoms, until half-past three A.M. on the morning of the 25th, when he expired, sixty hours after the accident. According to the nurse's account, he "died very hard," struggling a good deal, and foaming at the mouth.

*Examination of the body, eleven hours after death.*—There was no injury of the scalp or of the vault of the skull; no injury of the frontal bone beneath the wound. On removing the dura mater, lymph was found in large quantity spread over the whole upper surface of the brain beneath the arachnoid. On cutting into the brain, which was rather less firm than natural, pinkish in colour, and very vascular, the lymph was found to dip in

between the convolutions. A small portion of the substance of the brain at the posterior part of the right hemisphere, the point opposite to the wound on the left brow, was bruised and infiltrated with blood. The ventricles were filled with a considerable quantity of yellowish serum, containing numerous floating flocculi. The lining membrane of the ventricles was much injected. On removing the brain, a large quantity of sero-purulent fluid was found in the base of the skull. The medulla oblongata was very soft. There was a slight effusion of blood over the whole of the inferior surface of the left hemisphere. Puriform lymph thickly covered the whole of the inferior surface of the cerebellum, and was slightly spread over its superior surface. On removing the dura mater, there was found fracture of the cribriform plate of the ethmoid, and of the adjoining parts of the frontal bone. The fracture extended backwards through the anterior part of the sphenoid to its body. On reflecting the skin covering the root of the nose, the ossa nasi were found broken across at the upper part; and on pushing the nose upwards, the movement was communicated through the septum to the fractured cribriform plate. There was extensive emphysema of both lungs; the other viscera were healthy.

## Original Papers.

# ON ETHER-VAPOUR, ITS MEDICAL AND SURGICAL USES.

By JOHN GARDNER, M.D.,

EDITOR OF LIEBIG'S LETTERS, AND LECTURES ON ORGANIC CHEMISTRY.

(*Continued from p.* 354.)

*Further information relative to the discovery.—A paper by Dr. C. T. Jackson.—Preparation of ether.—Mode of employing it.—Oxygen, an antidote.—First experiment.—Discovery slumbers six years.—Dr. Morton's inquiries.—Comparative claims of discoverers.—Another alleged fatal case.—Physiological Action of Ether-Vapour.*

After my former paper on ether-vapour was sent to the press, the *Boston Advertiser*, of the 10th of March, reached this country. In it is contained the following paper, from the pen of Dr. C. J. Jackson, which, at first sight, seems to present some discrepancy between the statements of the two discoverers. A very slight examination, however, will show that the discrepancy is only apparent, whilst it adds some interesting points to the history of the discovery itself. It appears, that when Dr. Morton visited Dr. Jackson, to seek some assistance in the research he was conducting for an agent to obviate pain in the extraction of teeth, the latter had some knowledge of ether being such an agent, but he had allowed the facts he had observed to lay dormant for five or six years, merely mentioning them to friends, as something curious, but not sufficiently satisfied in his own mind as to be able to induce a student to employ it. At this stage, the matter might have slumbered for ever, but for Dr. Morton's bold experiments, at his own peril; and for his more just appreciation of the value of the great truth, thus *casually*, as it were, placed before him. But it was precisely that truth which he had long been earnestly seeking. Dr. Jackson's paper, which merits the most careful perusal, is entitled,

"*Remarks on the Preparation of Ether.—Mode of Employing it in Operations, &c.; with an Account of the Original Discovery. By C. J. Jackson, M.D.*

"We are aware that ether ranks in the pharmaceutic books and dispensatories as a diffusible stimulant, and that its fumes or vapour produce intoxication, of short duration; but it was unknown, until my experiments were performed, that it rendered the body insensible to pain, and threw the mind into a pleasant reverie or dream, so as to disregard the tortures of the knife and cautery; inasmuch that, so far from recommending its inhalation, all the authorities strenuously advised against breathing it, as 'fraught with danger.' Perhaps there may be danger in the prolonged inhalation of the ordinary ethers of pharmacy, which are liable to be impure. We know that commercial ethers may contain sulphurous acid gas, acetic, formic, and aldehydic acids; the three latter being produced by absorption of oxygen from the air.

"The presence of a considerable proportion of alcohol in these ethers causes them to produce mere intoxication, followed by headach, and prostration of nervous energy.

"Although others may have experienced these effects, still the higher stage—viz., perfect insensibility and unconsciousness of pain, was never reached; and the thin veil which concealed this discovery from the world, had not been raised, until my experiments were instituted.

"A short description of the best processes for preparing ether to produce the effects which I proposed to attain, will not be irrelevant.

"The basis of all the ethers is an hypothetical radical, called ethule, which is represented by the formula $C_4 H_5$ and symbol Ae. Pure sulphuric ether is regarded as an oxide of ethule, and is represented by the formula $C_4 H_5 O$; its symbol is, therefore, Ae O. It is prepared by decomposing highly rectified alcohol by means of sulphuric acid or oil of vitriol. Five parts of alcohol, of ninety per cent., are mixed with nine parts of oil of vitriol in a vessel of copper or iron, placed in cold water, so as to cool the mixture. The action of sulphuric acid on alcohol is catalytic; bisulphate of oxide of ethule is formed, which, by elevation of the temperature, and brisk ebullition, is decomposed, and the oxide of ethule passes over in vapour; the sulphuric acid remaining with a portion of undecomposed alcohol, the water which passes over in vapour no longer uniting with the ether. Alcohol is repeatedly added to the sulphuric acid, which would decompose an indefinite quantity of it, were it not diluted by the water introduced, ten per cent. of which is conveyed to it by common alcohol.

"The distilled liquid is next to be treated with an alcoholic solution of potash to neutralize the acids, and to render it slightly alkaline. It should then be redistilled in a water-bath, and the operation is to be arrested as soon as the ether has attained a specific gravity of 0·72 at 80° F. The specific gravity may be still farther reduced by allowing it to stand for some days over dry chloride of calcium, and then redistilling it in contact with that hygrometric substance. Its boiling point is at 96° F. It has a penetrating aromatic odour, and is highly inflammable. It should not change the colour of blue litmus paper.

"The pure vapour of ether as thus produced will not support respiration, and by excluding air from the lungs, would produce complete asphyxia. Therefore I inspired it in such a manner, that there was mixed with the vapour a sufficient quantity of common air to enable the lungs to perform their usual functions, but slightly disturbed by the etherial vapour; and I would caution all who may administer it in future, carefully to fulfil this important condition, so essential to success. In cases where alarming symptoms of asphyxia may occur from the accidents of improper administration, or from impurities of the ether employed, and in those persons of highly nervous susceptibility, or of determination of blood to the brain, and pulmonary diseases, (though in the latter cases it may have been improper to administer it,) I have prescribed the inhalation of pure oxygen gas, which, acting on the blood, immediately renders it arterial, and this gas should be kept in readiness to meet any such emergency. It may be preserved in a gasometer, and be drawn off in a large India-rubber bag for use at any moment. The administration of the ether, with all the above-mentioned precautions, will produce the kind of insensibility required. Its production is immediate, of short duration, and the effect passes off in a very short time.

"In my first successful experiment, the conditions as stated above were fulfilled, though the mode of administration was of the simplest kind, it is true, but yet efficient. A folded cloth, saturated with the highly rectified ether, was placed over the mouth, the air being drawn freely through it, and the inhalation was continued until I lost all power over myself, and sank back in my chair in a state of peculiar sleep, or reverie. I experienced at first a sense of coolness, then of exhilaration and warmth, followed by loss of consciousness. But it was not until a subsequent trial that I became aware that this loss of consciousness was accompanied by insensibility to pain; and a severe bronchial irritation, produced by the inspiration of a large quantity of chlorine gas, was for the moment relieved, and the peculiar distress occasioned by that gas was not felt so long as I was under the influence of the ether, though as that passed off it returned. [This was *five or six years back.*—J. G.] I had several times occasion to mention these facts to my friends, and it is now a year since I urgently advised Mr. J. Peabody, who was associated with me as a pupil in chemistry, to inhale the ether vapour as a means of preventing the pain which would arise from the extraction of two of his teeth. He consented to try the experiment, and was preparing some ether for the purpose; but on consulting the works in which the effects of ether are mentioned, he found all the authorities arrayed in opposition to my views, and that they warned against its inhalation, as I have before stated, and he therefore did not complete the experiment.

"About the last of September, or early in October last, I

communicated my discovery to Dr. W. T. G. Morton, an enterprising and skilful dentist of this city, whom I occasionally advised, and who called at my laboratory to borrow an Indian-rubber bag, which he said he intended to fill with atmospheric air, and to cause a refractory patient to breathe it, hoping to act on her imagination, and induce her to allow him to extract a tooth. I dissuaded him from this attempt, and explained to him that I had discovered a process by which real insensibility to pain might be produced. I showed him sulphuric ether, and described the method of administering it, and also its effects on the system, assuring him, that if my directions were carefully followed, no danger would ensue. I advised him to try its effects on himself, in order that he might better understand its mode of operation. He followed my instructions, and was successful in the first trials, in the extraction of teeth unattended with pain, the results proving exactly as I had predicted. I also furnished him with a large glass flask, with a bent glass tube, as an extempore inhaling apparatus. I then proposed to him the trial of the ether in a surgical operation at the Massachusetts General Hospital, where it was administered by Dr. Morton, and proved successful; but some persons who witnessed the first operation doubted the entire freedom from pain, since the patient said he felt a scraping. I was therefore desirous of testing it in a capital operation, the severity of the shock being the best test with regard to the degree of insensibility. Dr. J. C. Warren politely consented to have the trial made, and its results proved entirely satisfactory, an amputation having been performed under the influence of etherial vapour, without giving any pain to the patient. Drs. J. C. Warren, Hayward, Townsend, and J. M. Warren, performed the first successful operations that are recorded. Since then, the most eminent surgeons in Europe, and others in this country, have confirmed, by numerous trials, the reality of the discovery. Occasional failures were to be expected, but they have mostly arisen from imperfect modes of administration, though some may be attributed to idiosyncrasies. Medical, as well as surgical science, will probably derive advantage from this new practice. It may be worthy of trial in tetanus and other spasmodic diseases. Intermittent headach I believe already to have been relieved by it, and the chills of intermittent fever may possibly be broken. The relaxation of the muscles effected by free inhalation of ether-vapour, may enable the surgeon to reduce dislocations, and dispense with the powerful force of pulleys, and other violent means of extension. Already it has found its way into the Royal Veterinary Colleges of France and England, where severe operations have been performed on horses, sheep, and dogs, without the manifestation of any pain or struggles in these animals. Even division of nerves has been performed on a horse, to which the ether had been administered; and, although the animal was in no way restrained, not a struggle was made, nor any sign of pain perceived. This precludes the idea of the effect being due to the imagination.

"How far this new practice may extend is yet unknown, but there cannot be any reason to believe that the limits of its application have been conceived."

Such of my readers as have themselves been engaged in original research will be best qualified to decide upon the respective merits of Drs. Morton and Jackson.

How many facts are known to all the world, pregnant with vast and wonderful import, while they are held as mere commonplaces! An illustration of this has just come under my notice. The application of coal to the purpose of lighting, by subjecting it to destructive distillation, and collecting and burning the gas, must have excited in the minds of thousands, as it did in my own, as long as I can remember, the impression that some day means would be found to separate the hydrocarbons from the superfluous carbon in a solid form—to make, in fact, a solid candle from coal. Liebig says, in his Letters, first series,—"It would certainly be esteemed one of the greatest discoveries of the age, if any one could succeed in condensing coal gas into a white, dry, solid, odourless substance, portable, and capable of being placed upon a candlestick, or burned in a lamp." This great discovery has been recently, to a great extent, achieved, and by an American: a candle has been made from coal, with every desirable quality, except that it is black; and very shortly, the means of artificial lighting will be obtainable at half the price of animal fats. But who is entitled to the honour of this discovery? The man of science, who did not accomplish his purpose, or the humble artisan, who took the hint and worked out the problem? There cannot be a question on the subject. But with respect to the new use of ether-vapour, Drs. Morton and Jackson have mutually bound themselves in the solemn obligation of an oath—that they are joint discoverers. Whilst there seems, in the two accounts, a faint indication of rivalry, it is obvious that they cannot henceforth be separated.

*Alleged Fatal Cases.*

The numerous papers, tracts, and treatises, with which the press at present teems, on the subject of ether-vapour, whatever else they may contain worthy of remark, certainly do not evince that general acquaintance with medical literature usually attributed to the profession in these days of improved systems of education.

What proportion of patients operated on have died since the use of ether-vapour has been known? We have at present no conclusive evidence to offer upon this point; but common report says the mortality has been far less than ordinary in all the metropolitan hospitals. I trust the hospital surgeons of London will not long remain silent.

It is a remarkable fact, that no case has occurred of mischief arising from ether-vapour, when administered to persons in health, although thousands, if not hundreds of thousands, have inhaled it since last December. We scarcely think a common dose of any drug could be taken so indiscriminately and universally, without same disastrous consequences..

In the *Medical Gazette* of last week, we have a paper headed "Another Case of the Fatal Effects of Ether in Operations." A child, aged eleven years, "became entangled in the machinery of a mill, in consequence of which he sustained a very severe compound fracture of the left thigh, with great laceration of the soft parts, and a simple fracture of the left thigh."

Amputation of one limb having been agreed upon, "we did not," says the writer, "entertain any fears of the patient's death, either from the injuries sustained or the intended operation." What is the value of this gentleman's opinion? Fifty per cent. is scarcely too high an estimate of deaths from amputations of the thigh. In the Edinburgh Infirmary, during four years, commencing July, 1839, "there were eight primary amputations of the thigh: all the patients died."

He proceeds:—

"The nervous system had certainly received a great shock; but as there had been but a trifling loss of blood,—as considerable reaction had been established,—as no vital organ had apparently been injured,—as the boy was quite sensible, and had shown great fortitude and patience under his severe sufferings, we all considered there was sufficient vital force in his system to support him under the operation. The question now arose, whether the inhalation of ether should be employed? After mature consideration we determined it should, and that we would use the apparatus we had at hand. As soon as the patient was brought under its influence, which was the case in about three or four minutes, Mr. Newman operated with his usual skill and judgment; but the patient's sufferings, on making the circular incision, were so severe, that the intelligent and humane clergyman of the parish, Mr. Martin, who personally waited on the boy throughout the operation, remarked that the remedy was quite a failure. The inhalation was now employed the second time for two or three minutes, and with decided benefit, as far as the entire suspension of suffering was involved, and the operation (in which the loss of blood was most trifling) was concluded. With its conclusion our difficulties and anxiety commenced; for our patient was in such a state of exhaustion and apparent intoxication, that we soon considered his life to be in danger; and our fears were but too fully realized; for in defiance of all the watchful attention it was in our united power to pay, he sank in less than three hours after the operation. The state of the brain during this period was peculiarly distressing. There were alternate manifestations of excitement and depression of the sensorial powers; at one time resembling delirium, at another like approaching syncope, and again like violent intoxication; and these alternate conditions continued until the poor boy died.

"On a review of the above case, I am not only induced to consider that the inhalation of ether partially failed in suspending pain, but I also attribute the death of the patient to its narcotizing effects on a nervous system previously depressed by great and extensive injuries."

In this conclusion I think no other man in the United Kingdom will concur. But many persons may be inclined to ask Mr. Eastment why he had not oxygen gas ready at hand, if the effects were so manifestly the poison of ether!

I must now dismiss this part of the subject with the remark, that it would be scarcely possible to place in the hands of the profession an agent having any decided influence on the human system, without more disastrous results than have flowed from the employment of ether. Suppose a new drug

having the power of opium, at once so universally administered, without the least precautions, without the least pains being taken to understand the agent, or to obtain information from those competent to act as guides, how many lives would be sacrificed! Should we therefore prohibit the therapeutic use of opium, or endeavour to excite prejudice against it?

*The Physiological Action of Ether-Vapour inhaled into the Lungs.*

The following inferences from my own experiments, combined with the information afforded by recorded cases, may require to be somewhat modified by a more enlarged experience, but they will certainly be found substantially correct.

1. Pure ether-vapour, unmixed with atmospheric air, produces asphyxia in the same manner as other irrespirable gases.

2. A mixture of ether-vapour and atmospheric air, inhaled into the lungs, produces effects which vary in different subjects, and at different times in the same subject.

3. The variation of effects in different persons depends less on peculiarities of constitution than on the mode in which it is inhaled. If any person, calmly, fully, and slowly, breathes the mixed air and ether-vapour through the double-valved apparatus, with large air-passages, a very few inspirations serve to produce its characteristic influence.

4. When the inhalation is effected through tubes of a large bore, with large valves, and the air passes into the instrument and over a large surface of ether, receiving no admixture of fresh air after it has passed the reservoir, and full, deep inspirations are taken, its influence is always *sedative*. In other words, when a large dose is given in a very short time, no stimulating effect is observed.

5. The stimulating effect of ether-vapour is always manifested when the vapour is much diluted with air—as, for instance, when a channel admitting atmospheric air is opened into the current between the mouth-piece and the reservoir of ether.

6. The phenomena of stimulation from ether-vapour are closely analogous to the effects produced by the inhalation of nitrous oxide gas.

7. The analogy between this agent and nitrous oxide gas does not extend to the sedative effects of the former.

8. Etherization is totally different to intoxication. No headach, sickness, giddiness, or other symptom of intoxication, follows the exhibition of the vapour of pure ether. The vapour of alcohol, when inhaled, intoxicates.

Upon this point, many persons have fallen into the vulgar error of confounding a mere analogy with identity. One writer asks, "Are the etherized patients simply dead drunk, or are they partly drunk, and partly asphyxiated?" In the leading articles of the *Medical Gazette*, on ether-vapour, drunkeness and etherization are assumed to be identical. This is a most admirable and efficient way of stopping the progress of science, or at least of throwing a stumbling-block in its way—an easy formula for rendering ignorance and conceit palatable. When the first experiments were in progress, on the inhalation of nitrous oxide gas, Davy, perceiving the analogy of its effects with those of wine, had recourse to the experiment of making himself drunk, in order to study the extent of the resemblance. For this purpose, he drank off, in eight minutes, a whole bottle of wine. "Whilst I was drinking," he says, "I perceived a fulness in the head, and throbbing of the arteries, not unanalogous to that produced in the first stage of nitrous-oxide excitement. After I had finished the bottle, this fulness increased; the objects around me became dazzling, the power of distinct articulation was lost, and I was unable to walk steadily. At this moment, the sensations were rather pleasurable than otherwise; the sense of fulness in the head soon, however, increased so as to become painful; and in less than an hour, I sank into a state of insensibility. In this situation I remained for two hours or two hours and a half. I was awaked by headach and painful nausea. The nausea continued after the contents of the stomach had been injected. The pain in the head every minute increased. I was neither feverish nor thirsty; my bodily and mental debility were excessive, and the pulse quick and feeble."

Such symptoms have never, so far as I know, been seen to flow from ether-vapour or nitrous oxide gas. From the effects of ether-vapour the recovery is most commonly instantaneous, especially if its full sedative effect has been induced rapidly. Sickness and giddiness very rarely, if ever, occurs. How many persons could be made mentally unconscious by wine or ardent spirits, and recover without sickness or headach!

9. Etherization bears a very close analogy to sleep. Dreams, partial consciousness, the dilated pupil, the eye drawn up beneath the upper lid, indicate sleep of the brain; these, together with sudden recovery, occur in both states. Narcotism produced by opium, henbane, and some other drugs, is somewhat similar, but yet specifically different, to etherization. The suspended functions of the nerves, whether at their extremities, or at the nervous centres, which are suddenly restored, more resemble sleep than any other known state.

10. The first traceable action of ether-vapour is on the extremities of the nerves.

11. Its action is local, affecting the periphery of the nervous system, reaching to the various parts of the entire system, not synchronously, but successively.

12. Ether-vapour affects the extremities of the nerves through the circulation, which it enters mingled with the blood. Its presence in the lungs does not prevent the separation of carbonic acid, nor the absorption of oxygen.

13. The colour of the blood is not affected by ether-vapour, when, at the same time, an abundant supply of atmospheric air is supplied. In this point it differs from nitrous oxide. Beddoes observed the blood flowing from a leech-bite become manifestly purple when nitrous oxide was inhaled.—"Davy's Researches on Nitrous Oxide, 1800." The colour of the lips remains a pure red under the full sedative effects of ether-vapour, and will be always so when the air-passages of the apparatus are of sufficient size. When its administration is accompanied with purpling of the lips, or darkening of the blood, the phenomena of asphyxia are mingled with those of ether.

14. Hence etherization is not asphyxia. The latter state induces insensibility. But were the two states identical, or if ether-vapour only acted by suspending partially the change of the blood from venous to arterial, the same effects might be produced by adding an equal proportion of *nitrogen* to the air inhaled,—this gas being simply inert.

15. The notion, that ether-vapour prevents oxidation at the extremities of the circulating system is untenable. Ether itself oxidizes readily. When passed through a percolator filled with wood-shavings, or when kept in sponge, it very soon manifests an acid reaction, passing into acetic acid. Ether-vapour does not prevent the protoxide of iron from passing into the state of peroxide. Moreover, the smell of ether pervades the person of those etherized, as if it found its way through the pores of the skin undecomposed. The peculiar odour of its oxidized products have not, so far as I know, been perceived in a single case.

16. Etherization renders the blood somewhat less fluid; hence, according to the French physiologists and surgeons, it assists the discovery of such small vessels as require tying in operations, and thus lessens the danger of secondary hæmorrhage.

17. The narcotizing influence of ether-vapour on the nervous system is an ultimate fact—a power of suspending a vital act, inexplicable on chemical or mechanical principles. The power of oxygen to remove it, is not opposed to this, although, at first sight, it would seem to point to, a chemical action.

18. Its first effect is manifested on the periphery of the sensitive nerves, beginning with those of ordinary or tactual sensation, then those of muscular sensation—i. e., those conveying a sense of resistance and heat and cold; thence it extends to the spinal cord. Afterward, the nerves of motion, and subsequently the brain and senses of sight, hearing, tasting, and smelling, become narcotized.

Dr. Snow thinks "that consciousness seems to be lost before sensibility to pain;" whereas numberless cases are recorded, in which the patient is talking during the whole period of the operation. Dr. Snow admits this, whilst he asserts that "this occurs only because consciousness has partially returned, before sensibility to pain is restored." But, in the cases alluded to, the patients never lost their mental consciousness, and yet felt no pain from the knife.

19. The hypothesis that the occasional shrinking, cries, and other apparent expressions of pain, indicate that the patient really feels pain, but forgets it on recovery, is certainly untenable. Those phenomena are simply reflex actions.

20. The successive effects of ether-vapour are more manifest in persons who less readily yield to its influence, or to whom it is administered slowly and gradually. If we experiment on an intelligent person, and agree on a system of signals to indicate their sequence, we find the fingers may be wounded, while the sense of resistance remains; the patient will use muscular exertions to signalize his loss of feeling, and retain his mental consciousness after losing muscular power, and even of speech. The recollection of this state—i.e., the interval between losing muscular and mental consciousness, almost immediately follows recovery.

In many cases, the successive steps in the phenomena are not separately perceptible; but in the study of mental states, we do not question the succession of phenomena, although highly favourable instances only present them in their proper order.

21. With great circumspection in the choice of apparatus, and the amount of ether-vapour administered, it is possible, in many cases, to operate on the patient without loss of mental consciousness. The nature of the operation will be the best guide in attempts of this kind. In other cases, in order to avoid inconvenience from the jerks and contractions arising from reflex actions, total insensibility is desirable.

22. The theory of etherization advanced above, affords us many striking and instructive analogies with the action of other well-known agents—belladonna on the iris, infusion of tobacco on the heart, the Wourali poison. The last, as is well known, paralyzes the respiratory system of nerves, and destroys life by suspending the act of breathing. If an animal under its influence be made to breathe by an artificial force, the respiratory nerves awake from their temporary lethargy, and the animal lives.

22. After consciousness has been fully suspended by ether-vapour, the several parts of the nervous system resume their functions successively. Music is heard before the patient sees, mental consciousness is restored before the sensibility to pain returns.

23. The action of ether-vapour on the ganglionic system, follows the sleep of voluntary and sensitive functions; the pulse is generally somewhat accelerated at first, especially when the vapour is very dilute; subsequently it lessens in frequency; ultimately, all parts of the system are reached, and life would be extinguished painlessly. This may be observed on small animals confined in ether-vapour.

Mortimer-street, Cavendish-square, April, 1847.

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ON THE

# USE AND ABUSE OF ISSUES, IN THE TREATMENT OF DISEASES OF THE JOINTS,

WITH A MORE EFFICACIOUS MODE OF EMPLOYING THEM.

By ANTHONY COLLING BROWNLESS, M.D.,
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From some years' attentive observation of diseases of the joints, I am convinced that, as a general rule, we have no local remedial agent equally efficacious with caustic issues, in the treatment of these cases, and that they may be applied with greater benefit than any other counter-irritant, in almost every form of chronic disease of the joints, (whether commencing in the synovial membrane, cartilages, or bones,) provided they be employed under those conditions, and at those stages of each particular form of disease, in which this class of remedies may be judiciously used; and provided also, that the mode of action of the remedy be rightly understood by the practitioner, in order that it may be applied by him in a manner calculated to produce beneficial results.

To say all one could wish on the subject of issues, and their employment in the diseases of the joints, would not only require more space than the ordinary length of a paper would permit, but would necessarily involve a consideration of the nature and treatment of the special forms of these diseases, which could only be done in a systematic treatise. My object, in the present paper, is to make some practical remarks on this remedy, which will, for the most part, apply equally to its use in all the chronic affections of joints, and which have at least the value of being founded on the observation of a large number of cases. After pointing out, therefore, what I conceive to be the too common abuses of issues, and the evil consequences resulting from those abuses, I will mention the manner of using this remedy, which experience has convinced me to be most efficacious, and which has impressed me very strongly, with its greater relative value, compared with other counter-irritants, and much earlier and more general applicability in almost all affections of joints, than is commonly attributed to it by many of the best authorities on these diseases. I will afterwards attempt to explain what appears to me to be the action and value of the remedy, when used after the plan which I advocate.

Issues are too commonly used in these cases in a manner which would lead one to suppose, that those who employed them belonged to the ranks of the humoral pathologists; they are often made of large size,* and kept open by foreign bodies placed in them, which occasion a profuse discharge of pus; and from what we read in some high authorities, it appears that it is for the purpose of procuring this discharge of pus that the issues are established, and that from it we are to expect the beneficial effects of this remedy. Now, when an issue is formed in a plethoric person, to relieve congestion of the brain, a free discharge of pus, kept up by means of it, will probably very well fulfil the intention for which it was employed; but in patients labouring under chronic affections of joints, and especially those of a scrofulous habit, the chylopoietic organs are commonly deranged in their functions, and the process of assimilation is much impaired, consequently, we find the system in a condition very ill capable of bearing any considerable drain upon it; and reason would indicate to us, that the establishing any such drain upon the general powers of the system, instead of benefiting the local affection, must be more likely to aggravate it, by tending to keep up or increase the very state of constitution, on which, in many cases, the local malady depends. What might rationally be inferred is certainly the fact, and I may confidently state, that in the treatment of chronic diseases of joints the use of large issues, kept open with peas or other foreign substances, and from which there is a continual and often very profuse discharge, is certainly most injurious, instead of beneficial, weakening the powers of the patient, and thereby oftentimes destroying the chance of a desirable termination of the disease, which depends so much, in scrofulous cases, especially on improvement of the general health.

But besides the evils resulting from the drain upon the constitution, there is another, which arises from the manner of procuring the discharge, and which is little less objectionable. Peas and foreign bodies, inserted into issues for the purpose of keeping them open, frequently excite very considerable constitutional disturbance, and this, it is to be remembered, in a state of the system in which all sources of irritation should be sedulously avoided. No one who has had any practical acquaintance with the matter can deny the suffering and constitutional disturbance to which this mode of keeping issues open often gives rise; and when the general state of the constitution, in the majority of cases of diseased joints, is considered, we have sufficient evidence that the irritation thus caused must be highly injurious to the patient. Some may think that the irritation attendant upon the introduction of peas or other foreign bodies into issues subsides in a few days, and that afterwards no more inconvenience is experienced from them. But the latter supposition is not the fact; for although after a few days the pain and irritation may probably subside, if the patient be not of peculiarly irritable constitution, yet this is by no means for a permanency; for it is well known that ulcers vary according to the state of the general health, and issues are not exempt from the changes that other ulcers undergo under similar circumstances. Thus, if we watch issues kept open for a length of time, we find them not infrequently presenting the character of irritable ulcers, with jagged, undermined edges, a thin bloody discharge, and excessively painful, the slightest touch causing the patient much suffering. In some persons, and under particular states of the constitution, we find them presenting a phagedænic appearance. No one will, I think, deny that the presence of foreign bodies in ulcers of this kind must be a source of much irritation to the constitution generally. In some of the cases where great discharge has been kept up from large issues, these ulcers and the general system act and react upon each other with most mischievous results; the drain upon the system induces an enfeebled and irritable condition of it; this state of the constitution reacts upon the ulcer, causing it to secrete less, and become bleeding and painful, which again reacts for evil upon the general system. The great difficulty sometimes experienced in closing ulcers, the remains of large issues of long standing, may be mentioned as a proof of the weakened and irritable state of the constitution, to which they not infrequently give rise. I need hardly say that issues followed by such results as I have mentioned above must be very hurtful instead of beneficial. I believe that in the treatment of diseased joints, the keeping issues open by foreign bodies placed in them is never either necessary or judicious, and frequently most injurious. Although I have been speaking of caustic issues, the same objections will hold good in reference to issues made in any other way. Many persons are fond of forming an issue by placing peas in the excavation of a tartarized antimony pustule, or on a blistered surface, and keeping them down by means of a piece of sheet lead. I

* I have lately seen, in Pitcairn's ward, St. Bartholomew's Hospital, a man with ulceration of the cartilages of the knee-joint, who, when previously in another of our metropolitan hospitals, had had two issues made for the cure of his disease, in quick succession, on either side of the joint, each issue being of the size of an ordinary man's hand. I mention this, however, not as a common, but as a most unique mode of treatment.

have seen excessive pain and irritation of the absorbent system produced by such proceedings, and therefore cannot too strongly condemn the practice; for the same reasons, where issues are needed in the treatment of diseased joints, I should never think of establishing them with the scalpel and peas, although I have had but little experience in this kind of issue. The objections to the use of foreign bodies in issues will apply equally where the eschar is formed by the moxa, and peas are introduced when the slough has separated—a practice which, I am informed, is adopted in one, at least, of our metropolitan hospitals.

Of the evils resulting from the use of foreign bodies in issues I have no doubt; and to prove that the practice is a common one I think I need only refer my readers to the article on issues in Mr. Samuel Cooper's "Surgical Dictionary"—a work so highly and deservedly esteemed as an accurate summary of surgical opinions, both past and present, that its evidence must have weight. After a very full description of the management of issues by the insertion into them of beans, peas, or beads, as the general and most approved plan, and describing the best mode of retaining them in their places, and keeping the issue open by pressing on them with sheet-lead and a bandage, Mr. Cooper adds—"Sometimes, however, the method of applying the caustic from time to time is preferred to the use of peas, on the ground of greater efficacy;" showing very clearly that the use of issues without peas is quite the exception to the rule as regards the profession generally. To show also the general use of large issues, I may quote the same author, who, speaking of the treatment of scrofulous disease in joints, says—"Such issues are commonly made on each side of the diseased joint, and of about the size of half-a-crown," which are to be kept open with peas, &c. Another passage in the article "Moxa" shows the opinion, which is general, of issues not benefiting until after a discharge is established from them. It is the following:—"Issues and setons produce but little instantaneous effect; their efficacy therefore depends on the irritation and discharge daily kept up." And again, in the article "On Diseases of Joints," when speaking of counter-irritant remedies, Mr. Cooper remarks—"We must therefore impute a great degree of efficacy to the maintenance of a purulent discharge from the vicinity of the diseased part."

Sir Benjamin Brodie's great experience, however, leads him to take a different view of the action of issues, for which I will refer my readers to page 147 of the fourth edition of his "Observations on Diseases of the Joints;" and the manner of employing the remedy to which this distinguished surgeon gives the preference, confirms the usefulness of the plan which I am about to mention, although I differ from him as to the mode of action of this remedy.

I would recommend, instead of using the remedy in the manner which I have condemned in the foregoing paragraphs, a method which, as I shall presently attempt to explain, seems to have reason on its side, and of the great value of which I have fully satisfied myself by experience.

Issues should be made of moderate size, and before the effects of the one first made are lost by the process of repair of the ulcer being completed, another should be made at a distance from the former, so as to act upon another part of the joint affected, (for here I may be allowed to mention that this is frequently required in joints of considerable size, an issue on one side of a joint often relieving the side to which it is applied, but seeming to have little effect on the part of the joint remote from it.) Before the ulcer made by the last-formed issue is nearly healed, a fresh portion of skin should be destroyed by the caustic, and again and again should this proceeding be repeated, varying its position around the joint; and thus should a regular diversion from the diseased part be kept up.

There may be reasons in some cases for not carrying out this plan to the letter as regards the destruction of fresh portions of skin on each application of the caustic. In such cases, or where the patient has great objection to it, a new plot of skin need not be destroyed on each occasion that the caustic is used, but Sir B. Brodie's plan of frequently rubbing the old sore with caustic may be adopted; but, as a general rule, I do not consider it so efficacious as the destruction of a fresh portion of skin, nor is the benefit so lasting, and, consequently, the caustic requires to be much oftener applied than where fresh skin is destroyed. Undoubtedly the latter is attended with more pain; but its duration is short, and it is not followed generally by the irritative consequences of blisters and some other counter-irritants, or, I may add, of issues kept open by peas and pressure. Scars may be regarded as one inconvenience arising from this plan; but if we can obtain greater benefit to diseased joints by the application of the caustic to fresh portions of skin, the scars appear to me to be of trivial importance even in the case of the fair sex; for the joints commonly the seat of disease are, for the most part, clothed, or at any rate may be kept so without any great drawback to the personal charms of any young lady.

The introduction of peas or other bodies for the purpose of keeping issues open I would in no case recommend. If from any cause it be judged fit to keep open the same issue, let it be touched with caustic, but not kept open even in this way for any great length of time, or it will become comparatively useless.

During the treatment of a very considerable number of cases in which I had the opportunity of employing issues in this way, I found it to be the most efficacious mode of using them; and the principle, although not carried so far, has been fully confirmed in my mind, in a very extensive field for observation, by watching attentively, for several years, the patients under the care of Mr. Vincent, in St. Bartholomew's Hospital.

It is very rarely that this admirable surgeon keeps open an issue by peas, &c.; he does not certainly, as a general rule, destroy a fresh portion of skin when a former issue is healing—sometimes, perhaps generally, applying the caustic for a few times to the previous issue before destroying another portion of skin to form a new one; but the plan he adopts is in the main the same as I have recommended; for he uses moderate sized issues, seldom keeping them open with peas, and, consequently, frequently applies the caustic either to the old sores, or to the skin, to form new ones; and the happy results of his excellent practice have quite confirmed me in my dislike to the common, or, as it is called, "most approved," mode of employing this remedy, and in the value of its application in the manner which I am now recommending.

I conceive it is by the use of the remedy in this way that we may reasonably expect, and do obtain, the greatest amount of benefit from it in these cases, because it is not plethora we have to combat; our object is, not the conversion of as much blood as possible into excrete matters; the lowering the constitutional powers will only render the local malady more active; but we have a morbid and excited action of the vascular system in the diseased part; we wish to modify this action, to moderate this undue excitement, by inducing Nature to make a call upon the vascular system, which shall be at once sudden, urgent, and sufficiently durable. We wish (if I may be allowed so to speak) to give Nature a more useful field for her workmen, something better to do; we wish to change the sphere of her action by leading her from a diseased to employ herself in a healthy part, and by ourselves destroying a portion of healthy tissue, engage her powers in the processes of healthy restorative action, instead of in those of morbid changes and disorganization; and we would desire to do this with the least possible expenditure of the powers of the system generally, and in such a manner as is the least likely to produce constitutional irritation.

Patients experience the benefit of an issue very soon after it is made, if any benefit will be derived from it at all; long before any discharge is established from it. As soon as ever the call is made for the repair of the injury, we see the effect of the remedy. It is for us to keep up this effect, by again applying the caustic, before any ground is lost in the treatment of the disease, by the demand upon the vascular system becoming less urgent by the approach towards completion of the reparative process. By destroying fresh portions of skin we are able to make the demand more imperious, and the effect of our application more lasting.

I suspect parts may become habituated to local remedies as well as the constitution to general ones, so as to be little affected by them after long continuance; and if one may judge from experience, we may suppose such must be the case sometimes with old issues (although they may be large) which have long been kept open with peas; so that if they do not become the source of real evil, by inducing irritation, and the impairment of the constitutional powers, which I think is most frequently the case, we cannot expect much benefit from them.

The very striking benefit almost always experienced immediately after the destruction of a fresh portion of skin by the caustic, with the continued improvement of the joint during its continued reapplication after the proper intervals, according to the principles I have already explained, and, *cæteris paribus*, the little benefit generally felt from the long continuance of the same issue, especially if it be not frequently rubbed with the caustic, are to my mind quite conclusive as to the advantage of the first-mentioned plan.

I have sufficiently contrasted this mode of employing issues with the common method; I will only add a few words on its value compared with some other counter-irritant remedies in general use.

Blisters are very liable, in many constitutions, to produce irritation, both constitutional and of particular organs, and not infrequently considerable general fever, as well as swelling and pain of the part to which they are applied; the same disadvantages may be mentioned as more or less belonging to successive blisters—blisters kept open with savine cerate, the use of the ointment of tartarized antimony, and other counter-irritant remedies. I have had no experience in the use of setons in diseases of joints, but should suppose they were apt not infrequently to produce considerable irritation, and were liable, in several respects, to the same objections as issues kept open with foreign bodies. Looking carefully, therefore, at the ordinary effects of these various counter-irritants, I see all are liable at times to produce considerable constitutional disturbance, and according to my experience, much more frequently than caustic issues used in the manner I have proposed. The question then suggests itself—Have they any advantages over issues in effecting a cure of these diseases? or may they be used when issues cannot?

With the exception of those cases where there is great swelling from effusion of fluid into joints, in which, as far as the effecting the absorption of the fluid, blisters certainly possess a peculiar efficacy, I would answer both these questions in the negative, because by none of these remedies have we the same durable influence over these diseases as by issues used according to the plan I have recommended, which fact, I trust, is sufficiently proved in the explanation I have given of their action; and again, because I conceive that, used in this way, they are less liable to produce constitutional irritation than any other counter-irritant possessing any marked degree of control over serious affections of joints, and therefore may at any rate be as safely applied whenever this class of remedies is indicated.

For these reasons I cannot but think that issues are too frequently left as the last resource, or their employment too long postponed for the trial of other less efficacious remedies, and that serious changes of structure are often allowed to take place before that is tried which has the greatest power of controlling these diseases.

I am obliged to speak thus generally, because, as I stated at the commencement, I cannot in this paper enter into the application of this remedy in the various forms of diseases to which the joints are liable; but this I may say, that, used in the manner previously suggested, it may be applied, not only with safety, but often with advantage, in almost every form of disease, as soon as counter-irritants of any kind may be judiciously admissible, and that the valuable time which is commonly lost in the application of other less efficacious remedies, from the fear of exciting too much irritation by the too early employment of issues in the ordinary way with peas, may, by this mode of using the remedy, be often made available for establishing the cure of the patient and the reputation of the practitioner.

Charterhouse-square, April, 1847.

## ON THE EFFECTS OF ETHER INHALATION IN REFERENCE TO MESMERISM.

By CHARLES RADCLYFFE HALL, M.D., M.R.C.S.E., Holmes Chapel.

A LADY, aged twenty-four, desired to have two teeth extracted, under the influence of ether. She was evidently in great alarm, although she suppressed the ordinary manifestation of it. Her pulse was 120; her face alternately flushed and pale; and altogether her manner was that of subdued mental excitement. The mouth-piece of the apparatus was allowed to remain in the mouth for a short time before the stop-cock was turned. The patient evidently supposed that the process was going on, and after breathing common air for about a minute, partially removed the instrument, and said "she was sure she should die." The mouth-piece being re-adjusted, the ether was turned on. The patient drew in one full inspiration, and not appearing to commence expiration, the apparatus was removed. The eyes were wide open, the pupils not upturned but dilated; the jaws separated, and the head perfectly motionless, resting against the back of the chair; the gums were lanced, and a large and fast molar tooth extracted, with the key-lever, from the lower jaw. This was done leisurely, and perhaps occupied nearly a minute. The head was not held, but it remained perfectly unmoved, and the jaw retained the same open position. There was not the slightest sound, nor the least movement on the part of the patient. A few seconds having elapsed, the lady closed her eyes and mouth, and became quite conscious. Her first remark was a question to the operator—"How did he know when to begin, as she had given no sign?" When the bleeding had nearly ceased,—probably in about four minutes,—the ether was again used. The patient was now less alarmed, and had expressed her fear only lest the ether should not prove so effectual on a second trial. Two inspirations were taken before the fixed gaze declared that the influence was sufficient. A decayed canine tooth in the upper jaw was broken, and only partially extracted. In about half a minute the patient came round, and was perfectly conscious; she had been aware of all that had passed, but had not suffered the slightest pain; she laughed, congratulated herself on the result, and was rinsing out her mouth, when her grasp of the tumbler slackened, her face became pale, and her head fell back; the pulse was frequent and very feeble; surface of the extremities cold. The patient was immediately laid on a sofa, with her head low, her face fanned, and her neck and forehead slapped with a wet towel. In a short time the said she felt well but very sleepy. She was now raised, and took a wine-glass two-thirds full of port wine, but kept her eyes closed, declaring her inability to do otherwise. On raising the eyelid, the pupil was large but responsive to light; the lid dropping again immediately, in a passive, lax manner. The patient had all the appearance of a person so excessively drowsy as to be incapable of noticing or replying unless forcibly aroused, yet quite able then to do so with accuracy. Her head fell, and she quietly slipped back again into the recumbent position. Common smelling salts had no effect. An earthenware bottle of very hot water applied to the back of the legs was unnoticed. A question, repeated several times loudly, was at last answered, always correctly, and with the additional expression of feeling great drowsiness. In this state of trance-like sleep, breathing without noise or effort, the patient remained about an hour. She now spoke more distinctly in answer to questions, and by degrees became attentive to those addressed to her in an ordinary tone of voice. She preferred having her head low, and always rolled it off the sofa-cushion, and bent it down to her chest. Her face was quite pale and statue-like, and her eyes closed during the ensuing two hours of conversation. At first, remarks intended to surprise and startle her were addressed, in the hope of exciting her mind. The answers elicited instantly showed, that so far from the patient being startled, her thoughts took up the cue of the remarks made. All anxiety as to the result being now removed by the momentary vivacity of her manner when speaking, and by the distinct intonation and marked emphasis with which she replied, the opportunity of observing some interesting psychical phenomena was irresistible. Without entering into details, it was evident that the mind was now at work in full force, but deprived of the guidance of correct consciousness. Memory was unlocked, reasoning acute, wit and humour in full play. To puzzle and confuse failed invariably, and met with a smart repartee. The same question, repeated after the lapse of an hour, was remembered distinctly, the patient inquiring why she was to reply twice to the same. Long pieces of poetry were recited correctly, and in excellent style; places graphically described, anecdotes admirably related, personal peculiarities quizzed, private character judged in a manner more pointed than complimentary, opinions discussed and arguments admitted, with a freedom as striking as in the present individual it is unusual. The suddenness with which a fresh suggestion appeared to change the entire current of thought—the perfect faith with which the lady seemed to believe she was addressing the party represented—the total absence of reserve in all her remarks, even when referring to personal matters upon which, when conscious, she would not have touched—were remarkable, and had evidently placed a very unusual power of penetrating into hidden thoughts in the hand of those around. The ladies present, and myself, were sufficiently convinced that the patient would unhesitatingly have divulged all her thoughts upon any subject suggested. Indeed, this extreme laying bare of the mind on each subject was the most striking of the phenomena observed.

At the expiration of about two hours, thus passed in conversation, the patient was told where she really was, and the circumstances which had occurred. She instantly understood where she was, but could not believe that she had undergone any operation, until her own finger was placed in the cavity left by the extracted molar tooth. She was bewildered by this, as she could not at all recollect the occurrence. She

could not maintain the eyes open, nor hold up her head. Placed upright, unless supported, she would have sunk down. She insisted that she was quite able to walk, but on making the attempt, it proved otherwise. She now appeared to be, for the first time, conscious that something unusual had happened to her—"she felt very strange;" and that her head was confused. She was removed to her own apartment, was restless, and suffered from headach during the night; scarcely slept, and awoke in the morning as if from a dream, the particulars of which she could not recollect. On being informed of the proceedings of the previous evening, she was amazed; and her vexation would probably have exceeded her amazement, but for the assurance of her friends who had been present, that she herself needed not to regret one of the many thoughts she had so strangely disclosed.

Was the apparent absence of correct appreciation of surrounding circumstances in this case genuine, or was it assumed, in order to gratify some mental craving for effect, so common a characteristic of hysterical girls? I am unable to furnish to the reader any proof which ought to satisfy him, but I am myself perfectly satisfied that nothing was feigned. The patient is neither nervous, hysterical, nor in delicate health; she is tall and stout, and strong both in body and mind. Her manner of expressing her opinion during her ether-dreaming, though free from the slightest immodesty, was far removed from the reserve which a knowledge of the presence of those around would have occasioned. Communications were unhesitatingly made, which, though proper enough under the circumstances *assumed* by the lady at the moment, would certainly have been withheld had she really known of the truth. But, whether feigned or real, an hysterical vagary or an ether-trance, the state induced was singular, and deserving of investigation. There was great impairment of volitional power; the dropped eyelids were evidently not spasmodically closed, but merely unraised by the relaxation of the voluntary elevator muscle leaving the sphincter palpebrarum without an antagonist. The head fell passively when raised, and the limbs were lax, and gave way. There was no deficiency of spinal nervous power, since a female friend, by tickling the patient under the arms, caused her to start and move the arms with an expression of displeasure. Nor was the power of the will over mental action diminished; opinions were stated with unusual decision. The expression of the countenance altered in exact accordance with the change of thought; language was more fluent and emphatic than usual; apprehension quick, and reasoning very clear and correct. Still there was nothing greater in all this than can be ascribed to perfect freedom from consciousness of the circumstances; and nothing more, probably, than the same individual could at any time display, if she thought proper, and could—which is doubtful—feel equally unshackled in sentiment in the presence of others. Assuming that consciousness was not complete, still it was quite perfect as far as it did exist. There was perfect consciousness of the tenour of the remarks addressed. The chief peculiarity seemed to be that all the ideas were induced by suggestion in the first instance; a fresh train never originated spontaneously, though the tenour of thought could be changed instantly by a fresh suggestion, or by mechanically altering the posture—i.e., suggesting by means of external sensation. Traction was not tried; prediction was asked for, and ridiculed by the patient. It was impossible to make the lady talk nonsense. In these respects, the case differs from many examples of Mesmeric trance. Nor does it approach in wonderfulness the superhuman manifestations of increased intellectuality, described by the Rev. Mr. Sandby and others. The only demand which it makes on our belief is, that by means of ether we may occasionally excite a condition of brain in which consciousness is not sufficient to control the mind; and in which the mind is rendered as acute as the nature of the person will admit of. Is this a state of mere intoxication? If we choose so to designate it, we must bear in mind, that in drunkenness, to the extent of suspending consciousness, the thoughts are not remarkable for their acuteness, the speech for its distinctness and fluency, nor the countenance for its intellectual expression. If intoxication at all, then, this is of a much more spiritual character than the common kind. Indeed, a moment's consideration will show, that to say of this and of similar instances they are "mere hysteria," "fits of intoxication," "boarding-school pranks," and so on, neither explains their nature, nor lessens their singularity. If we can almost at any time produce the given condition of mind in an individual who never at any other time thinks fit to manifest a similar state, the fact is worth noting by the profession, and by society at large.

After examining at considerable length the statements of the mesmerists, I was formerly led to conclude that all the ascertained and probable effects of mesmeric procedure depended on a peculiar state of the nervous system, which might be induced in a variety of ways, and not upon any imagined fluid given by the operator to his patient. That insensibility to pain, as the result of so influencing the nervous system, was "possible, but not very probable."* That the so-called higher phenomena of mesmerism were impossible and quite incredible. The discovery of the effects of ether has furnished additional data. We are now warranted in acknowledging that sensibility may be entirely suspended for a time by artificial means. We have a new field opened for the investigation of the action of the mind, but, so far, not a single fact to lessen our incredulity as to the sublime absurdities of clairvoyance and prevision.

Cheshire, March, 1847.

## ON THE ADMINISTRATION OF MERCURY IN SYPHILIS.

By HOLMES COOTE, Esq., F.R.C.S.E.

The treatment of syphilis by mercury, in the form of external applications, seems, from the writings of the physicians of the fifteenth century, to have been in vogue very shortly after the disease was recognised and described as the morbus Gallicus, between the years 1494-96. The fears, which had existed from very early times, as to the injurious effects which this mineral might produce upon the human frame, combined with the disastrous consequences following its reckless administration by uneducated itinerant quacks, deterred the profession from employing it internally, till about the middle of the sixteenth century, when it had been ascertained that guiacum, sarsaparilla, and other much vaunted remedies, were inefficient in controlling the progress of this dreaded malady. Since that time, so numerous are the authors who have recorded the results of their experience upon the subject, and so different are their conclusions, that a host of learned names can with readiness be brought forward to support almost every shade of opinion which exists at the present day. The favourable view taken by Astrue of the superior efficacy of mercury over all other known medicines in the treatment of syphilis, received support from John Hunter, who unfortunately went one step too far in maintaining the absolute necessity of its employment to arrest the morbid action of the venereal poison. Although it has been clearly proved, chiefly by the investigations of the army surgeons, that all syphilitic sores may be successfully treated by simple measures, and that the greater number will, if left to pursue their own course, heal in a short space of time, so implicitly has the doctrine of John Hunter been received by the profession, and so eagerly espoused by the public at large, that it will take some generations before this popular impression will pass away. The very great importance of clearly establishing the accuracy or the inaccuracy of the opinion which ascribes to mercury the wonderful property of eradicating and destroying a poison, by which the whole frame has become infected, cannot be better shown than by drawing attention to the consequences which naturally result, if this statement is founded in error. Let us suppose that a patient who has contracted syphilis, places himself, soon after the first manifestation of the disease, under the care of a surgeon, by whose direction he commences a course of mercury, under which the primary sore heals; the administration of the mercury is continued some weeks longer, and the patient is then pronounced free from all risk of secondary symptoms. Trusting to this opinion, he may unintentionally infect an innocent person, and even his own offspring. Whether the patient himself suffer from secondary disease, or whether he communicate it to others, it is the surgeon who receives the blame; and it is a singular fact, one which well illustrates the unsettled state of opinion upon this subject, that precisely the same set of symptoms will by one set of practitioners be ascribed to the fact of the mercurial course not having been pushed far enough, and by another, to the unfavourable influence of mercury upon the constitution.

For the elucidation of these important points, neither argument nor reference to authorities can be of material use. We must rely almost entirely upon the impartial observation and record of cases, which, watched for a considerable number of years, will afford us a ready solution of those difficulties by which we are now surrounded. Commencing in the year 1843, I took, with the permission of Mr. Skey, the particulars of fifty consecutive cases of patients suffering from severe

* The Lancet for May 3rd, 1845.

secondary or tertiary symptoms. Inquiring minutely into their histories, and often cross-questioning different members of the same family, I adopted every possible precaution against errors. From the list thus formed, I select the following, of which the remainder are but repetitions. In each case the number of attacks, both primary and secondary, from which the patients have ever suffered, is carefully mentioned.

Case 1.—Samuel H——; states, that four months ago he noticed, a few days after exposure to venereal infection, a series of small sores round the corona glandis. For two months he took a pill, containing mercury, twice a day; and he states, that during the whole period, the gums were more or less swelled and tender. The sores healed speedily, but the salivation was continued some weeks after their cicatrization, that he might be protected against the occurrence of secondary symptoms.

Oct. 25th, 1843.—He became out-patient, with syphilitic enlargement of the testicles, and an eruption of rupial spots over the whole body.

Case 2.—Henry B—— states that he contracted syphilis thirteen years ago, when he suffered severely from a large primary sore, which healed after a three months' salivation. A large cicatrix occupies the extremity of the glans penis and the orifice of the urethra.

Oct. 25th, 1843.—He became out-patient, with a large periosteal swelling of the left tibia, attended with severe nocturnal pains and two foul ulcers of the leg, formed by mortification of a portion of integument over two patches of sloughed cellular tissue.

Case 3.—Henry M—— was salivated over a period of four months, three years ago, for some slight primary affection, which has left no trace behind.

November, 1843.—He became out-patient, with an eruption, partly papular, partly tubercular, over the whole body, with sponginess of the gums, looseness of the teeth, fœtid breath, and constant flow of saliva.

Case 4.—William M—— states, that four months ago he suffered from a syphilitic sore, which healed under the influence of mercury. He took three pills a day for about four months. The gums were tender during the whole time.

Nov. 1843.—He became out-patient, with a periosteal swelling of the left tibia.

Case 5.—Charles G—— states, that twelve months ago he suffered from a syphilitic sore, accompanied by a bubo, for which he underwent a salivation, which was actively continued over a period of four months.

Nov. 1843.—He became out-patient, with a large phagedænic sore of the leg.

Case 6.—Elizabeth F—— contracted syphilis from her husband eight years ago. She placed herself under medical care, was salivated, and considered herself cured in about two months. A twelvemonth ago, she suffered from foul ulceration between the toes. Eight months ago, there appeared upon various parts of the body, especially upon the limbs, large spots of tubercular eruption, which exist at the present time.

Nov. 1st, 1843.—Rupial eruption over the trunk and limbs.

Case 7.—Sarah W—— has twice suffered from venereal sores. Upon both occasions, she became profusely salivated by mercurial inunction, which was continued for six weeks at a time.

Nov. 8th, 1843.—She became out-patient, with a large phagedænic sore at the left angle of the mouth, and pains in the limbs.

Case 8.—William B—— underwent a mercurial course for a small superficial sore of the glans penis, contracted four years ago.

Nov. 8th, 1843.—He is suffering from periosteal swellings of both tibiæ, and severe nocturnal pains.

Case 9.—Albert J—— has been twice salivated for primary syphilis. The last attack was five years ago.

Nov. 29th, 1843.—He became out-patient, with a node of the tibia.

Case 10.—Henry S—— contracted syphilis twelve months ago. A small sore upon the glans penis assumed, at the end of six weeks, a phagedænic aspect, and spread with great rapidity. Cicatrization ensued under active mercurial treatment, by which, however, he was much reduced in strength.

Nov. 28th, 1843.—He became out-patient, with phagedænic ulceration of the fauces, by which the uvula and part of the soft palate have been destroyed. There is the cicatrix of a large phagedænic sore upon the glans penis.

Case 11.—G. G—— states, that three years ago he noticed upon the glans penis a small sore, for which he took mercury in considerable quantity. For six weeks he had given to him three blue pills thrice a day.

Nov. 28th, 1843.—He became out-patient, with a large and irregular phagedænic sore of the left tibia, upon which the periosteum is thickened for a considerable extent. The right testicle is shrunk, and adheres to the scrotum, which is marked by a large and firm cicatrix.

Case 12.—Charles J—— contracted syphilis two years ago. He took pills for about two months, during which time the gums became swelled and very tender.

Dec. 1843.—He became out-patient, with phagedænic ulceration of the throat, and tubercular eruptions, with incrustations over the trunk and limbs.

Case 13.—George P—— states, that nine months ago, having contracted syphilis, he underwent a mercurial course, which was continued for six weeks. He took blue pills thrice a day, and rubbed in the strong mercurial ointment at night-time, but the mouth was never much affected. The sore, which was small and superficial, healed under this treatment, without leaving any visible cicatrix. He had been salivated thrice before for other primary venereal affections. About six months ago he suffered from rheumatic pains over the limbs, so severe as to incapacitate him from performing his duties as a soldier, and he consequently obtained his discharge.

Dec. 23rd, 1843.—He became out-patient, with tubercular eruption over the whole body, pains in the limbs, and effusion of fluid into the elbow-joint.

Case 14.—William S——, upholsterer, a married man, of very dissipated habits, has been twice salivated for primary syphilitic sores, which healed without leaving any visible cicatrix.

Jan. 1844.—He placed himself under medical treatment, having a bubo in each groin, and the imperfectly formed cicatrix of a large syphilitic sore upon the right elbow and forearm.

Case 15.—Matilda S——, wife of the preceding patient, contracted venereal disease from her husband, about two years ago. Not wishing to communicate to any one the nature of her complaint, she took, by her husband's direction, a great number of mercurial pills, and rubbed-in, freely, the strong mercurial ointment; under which treatment the gums swelled, and she suffered the miseries of a profuse salivation. They lived apart, until the surgeon, who had charge of the husband, pronounced his patient cured; when she, believing that the disease had long been eradicated from her constitution, left her friends, and returned to her husband, at his earnest request. Intercourse with the wife speedily produced in the husband two very painful buboes, of which that in the right groin burst; that in the left was opened, and discharged a quantity of thin yellowish-brown sero-purulent fluid, tinged with blood. The wife next complained of pains in the limbs, and tightness across the chest: then there appeared over the head, trunk, and limbs, a tubercular eruption, which assumed the characters so well known as distinguishing rupia prominens. She then became out-patient, January, 1844. The eruption disappeared, and she regained her strength, under the administration of sarsaparilla, iodide of potassium, quinine, and other suitable remedies: a profuse discharge, dependent upon ulcerations of the os tincæ, was arrested by their cicatrization. In May she went to the sea-side, where she resided with her family, in the enjoyment of perfect health. About the middle of September she returned to town, when she suffered from a most severe attack of rupia prominens, over the head, neck, and extremities; her face became shrunk and pallid; the spirits were depressed, and the appetite failed. Then large spreading phagedænic ulcers appeared over the scalp and face; the alæ nasi were soon destroyed; the upper lip was disfigured; portions of the scalp, with the hair, perished; and the cranial bones became exposed, in a state, partly of ulceration, and partly of necrosis. In January, 1844, she was a well-looking, healthy woman: in January, 1847, there was scarcely any trace of her former self.

Case 16.—Samuel S—— contracted, in April, 1842, some superficial venereal sores, for which he was treated by an experienced surgeon, who administered mercury, with every proper precaution, and in moderate doses: the gums were but very slightly affected. The sore healed readily, and he remained well for two years.

May 22nd, 1844.—He became out-patient, with large rupial spots over the whole body; some were in an incrusted state; others were spreading by phagedænic ulceration.

Case 17.—William S——, aged twenty-two, sailor, states, that eighteen months ago he contracted venereal disease, for

the cure of which he bought a box of pills at a shop. Of these he took, in a month, above one hundred; and found that the gums were become much swelled, and tender. As he was then obliged to set sail for a long voyage, he had then given to him another allowance of two hundred pills, which he was directed to take by instalments. Under this treatment his health suffered so severely, that he consulted the surgeon of the ship, who directed him to abstain from taking more mercury: he then soon rallied, and remained well for the rest of the voyage. Upon his return to England, where he landed in perfect health, he began to suffer from night sweats, loss of appetite and of strength. Soon afterwards there appeared, over various parts of the body, large rupial spots, the incrustations upon which covered phagedænic sores, varying in size from a shilling to a half-crown piece.

Case 18.—John M——, aged eighteen, contracted venereal disease six months ago, and underwent a mild mercurial course.

Feb. 1844.—He became out-patient, with papular eruptions over the whole body, nodes of both tibiæ, and pains in the limbs.

Case 19.—John W—— has suffered from primary syphilis four times, and upon each occasion has been severely salivated.

Jan. 10th, 1844.—He became out-patient. The back of the pharynx was occupied by a phagedænic ulcer, which had destroyed the uvula, and great part of the soft palate.

Case 20.—William T——, aged twenty-three, states, that ten months ago he noticed upon the dorsum of the penis a small ulcer, for which he consulted a neighbouring surgeon. Under mercurial treatment the ulcer became phagedænic, and for some time resisted all efforts to promote its cicatrization.

Jan. 10th, 1844.—He became out-patient, with large circular phagedænic sores upon both arms, and nodes of the tibia, accompanied with severe nocturnal pains.

The cases here related illustrate the different modes in which mercury is commonly administered in this country for the cure of syphilis.

Two of the patients (Cases 16 and 18) placed themselves, soon after infection, under the care of experienced surgeons, who treated the disease by a mild mercurial course.

In Cases 1, 3, 4, &c., the mineral was administered, also under medical superintendence, in larger doses, and its influence was kept up for a period varying from two to four months.

In Cases 14, 15, and 17, it was given in immoderate quantities by unqualified persons, who seem to have entertained the belief, that the greater the absorption of mercury into the system the more permanent and complete the cure. In every instance secondary symptoms ensued; in some, four months; in others, as many or more years after the cicatrization of the primary sore; and it is worthy of remark, that no patients suffered so severely as those who had the misfortune to fall into the hands of persons uneducated for so serious a responsibility, ignorant of the effects which they were producing, and perhaps reckless as to the consequences which might follow.

I do not intend here to enter upon the question as to the relative advantages of the mercurial and non-mercurial treatment of syphilis. That point must be settled by statistics of another kind, and of difficult attainment by surgeons in civil practice. I confine myself to the conclusion which these cases seem to warrant—namely, that whatever power mercury may possess in arresting the progress of syphilitic ulceration, or in removing some secondary affections, it is wholly inefficacious in eradicating the venereal poison; and moreover, that when carelessly administered it injures the general health, and is capable of exerting a most injurious influence, by which the subsequent symptoms resulting from the infection may assume an infinitely more formidable and intractable character.

Southampton-street, Bloomsbury-square, April, 1847.

## Reviews.

*Experimental Researches on the Food of Animals, and the Fattening of Cattle. With Remarks on the Food of Man.* By R. D. Thomson, M.D., Lecturer on Practical Chemistry, University of Glasgow. London: Longman and Co., Paternoster-row, 1846.

We may allow Dr. Thomson to state the scope of the present work in the words of his brief and modest preface,—

"The original object of the inquiry was to determine the relative influence of barley and malt in feeding cattle; but as the opportunity seemed a favourable one for investigating some scientific problems of great importance to physiology, and of extreme value in the physical management of man and animals, advantage was taken of it to extend the experiments so as to include these objects.

"It is well known to those who have been in the habit, of late years, of following the researches which have been undertaken to elucidate the nature of the growth of animals, that it is now generally agreed that the muscular part of them is derived from the fibrinous or nitrogenous ingredients of the food, while the source of animal fat has been disputed. The present experiments seem to demonstrate that the fat of animals cannot be formed from the oil of the food, but must be evolved from the calorifiant or heat-forming portion of the aliment, essentially assisted by its nitrogenous materials. By following out this principle, the author has been enabled to detect an important relation subsisting between the nutritive and calorifiant portion of the food, upon the determination of which, for the various conditions of animals, he considers the laws of animal dieting to depend. He has endeavoured to apply this law to various articles of human food, and he trusts that the basis has been laid for future researches, which may be directed to administer to the health and comfort of mankind, and of domesticated animals."—Preface, pp. v. vi.

The laws here referred to are stated at large in the sixth and ninth chapters of this volume. We shall briefly direct our readers' attention to a few of the deductions. The work itself must be consulted in order to enable the inquirer fully to understand the various important steps which have led to them.

"*Food divided according to its functions.*—Liebig, it is well known, divides the functions of the food into nutritive and respiratory. I have ventured to employ, instead of the latter term, the expression *calorifiant*, or *heat-producing*, so as to give a wider range through the whole system to the function of the unazotised food, than the more local term of respiratory would appear to imply. According to this view, all food is destined for repairing the waste of the body, and for the production of animal heat."—p. 160.

"*Law of ultimate composition of food in relation to its power of sustaining animal life.*—It may be looked upon as a rule with reference to nutritive bodies, generally speaking, that their power of sustaining the animal system depends, in relation to their ultimate composition, upon the amount of the carbon and nitrogen which they contain. Some have endeavoured to prove that it is the amount of carbon to which we are to look, in deciding upon the relative nutritive power of the food; while others have advocated the importance of nitrogen in forming such estimates. It seems, however, certain, from a careful study of all the facts, that such general rules cannot safely be adopted, since, in the case of oils, we have examples of substances containing much carbon, which are yet incapable of supplying the waste of the muscular substance of animals, and are therefore to be excluded from the rank of true nutritive principles; while again we have gelatine or jelly containing nearly as much nitrogen as muscular fibre itself, which has been proved to be incapable of supporting animal existence in the manner in which we understand that expression, when applied to beef or true muscular fibre."—p. 111.

"*Proportion of these elements to form a nutritive body.*—The relation of the two substances is nearly as 70 to 9 of their equivalents, represented by the formula 70 C, 9 N."—(p. 113.)

Thus we find that life may be sustained on pure albuminous tissue. Dogs have been supported by it for some months; and the American Indians, near the sources of the Missouri, subsist entirely on dried buffalo flesh; not the fat portions, but the muscular part; and during their subsistence on this dried "pemmican," as they denominate it, they are described by travellers who are intimate with their habits of life, as never tasting even the most minute portions of any vegetable whatever, or partaking of any other variety of food. Gelatine, or glue, seems to be an exception to this law in the nutritive category. We have no examples of animals being capable of subsisting on it; on the contrary, we have proof that animals, when restricted to this species of nutriment, become deteriorated in health. Dr. Thomson thus explains this apparent anomaly.

"When we reflect, that animals subsisting upon vegetable food contain an equal quantity of gelatine, as a constituent of their tissues, with those which have partaken of animal

food alone, we can scarcely fail to conclude, that gelatine, or glue, is a product of the alteration of albuminous matter, and a stage in its downward progress to the state of urea, or an ammoniacal salt, for the purpose of being removed from the system; and hence that it is not capable of forming the muscular, or highest order of animal matter."—p. 112.

We have not space to follow Dr. Thomson through his most instructive experiments as to the relative amounts required by animals of the nutritive and calorifiant articles of food. We can merely lay his results before our readers, and add a few of their practical applications to human dietetics. We must premise, that although the data here furnished are derived from the cow only; yet with certain corrections they are of universal application.

"The relation of the nutritive part of the food absorbed by the animal system in the preceding experiment is to the calorifiant portion as 1 to 8$\frac{1}{2}$th nearly. By comparing this fact, then, with the different varieties of human food, it is probable that some light may be obtained in reference to the differences in the relative proportion of these constituents. Milk, for example, the food of the infant mammalia, contains one part of nutritive to two parts of calorifiant constituents, and in the growing state of the animal the nutritive part of the food not only supplies the place of the metamorphosed solids, but an additional amount of it is required to increase the bulk of the individual; and as we have already stated that animal heat is generated by the change or degradation of the fibrinous tissues, it is obvious, that in the nourishment of infant life there is a supply of heat from the casein vastly superior to that afforded by fibrin to full-grown animals, because the amount taken in proportion to the quantity of calorifiant matter is much greater. If we refer, again, to the food which is generally employed by the inhabitants of this country—wheat and barley, we find, by a mean of experiments afterwards to be detailed, that the average amount of albuminous matter present in them is eleven per cent., while the quantity of starch and sugar existing in these substances may vary from seventy to eighty per cent.; thus affording the proportion of nutritive to calorifiant food, as one to seven, and upwards. Such food, it may be inferred, is fitted for the consumption of an animal which is not subjected to much exertion of the muscular system, and may be viewed as the limit of excess of the calorifiant over the nutritive constituents of the food. As the demands upon the muscular parts of the frame become more urgent, the proportion of the azotised to the nutritive constituents should be increased, and this may be extended until we arrive at the point *where the fibrinous matter is equal to the half of the calorifiant*, which is probably, in a perfectly normal physiology, the greatest relative proportion of nutritive material admissible.

"The proportion of the nutritive to the calorifiant constituents of food should therefore vary according as the animal is in a state of exercise or rest; and it is upon the proper consideration of such relations that the true laws of dieting depend."

Some carefully prepared tables, exhibiting the relative proportions of nutritive and calorifiant matter per cent. in various grains and vegetables, follow these remarks, but our space will not permit us to do more than indicate their importance to our readers.

As one of the deductions from these principles, Dr. Thomson denounces arrowroot and tapioca as the food of children. Whilst milk, which, as has been before observed, is the normal food of infant mammalia, contains one proportion of nutritive to two of calorifiant matter, arrowroot contains the latter in the ratio of twenty-six to one of the former. The following observations are therefore deserving of deep attention in prescribing the proper diet for infants:—

"When we administer arrowroot to a child, it is equivalent to washing all the nutritive matter out of bread, flour, or oatmeal, and supplying it with the starch; or it is the same thing approximately as if we gave it starch; and this is, in fact, what is done, when children are fed on what is sold in the shops under the title of farinaceous food, empirical preparations, of which no one can understand the composition without analysis. Of the bad effects produced in children by the use of these most exceptionable mixtures, I have had ample opportunities of forming an opinion, and I am inclined to infer, that many of the irregularities of the bowels, the production of wind &c. in children, are often attributable to the use of such unnatural species of food. It should be remembered, that all starchy food deprived of nutritive matter is of artificial formation, and scarcely, if ever, exists in Nature in an isolated form."—p. 170.

The administration of such articles of food as the preceding is therefore limited to cases where a sufficient amount of nutritive matter has been previously introduced into the digestive organs; or, secondly, when it is inadvisable to supply nutrition to the system, as in cases of inflammatory action.

"In such instances, the animal heat must be kept up, and for this purpose calorifiant food alone is necessary. This treatment is equivalent to removing blood from the system, since the waste of the fibrinous tissues goes on, while an adequate reparation is not sustained by the introduction of nutritive food."—p. 171.

We need not apologize to our medical readers for adding a remark or two on the formation of the fat and butter of animals; for although these topics are not necessarily allied to medicine, in the restricted application of the term, yet a higher appreciation of its objects will teach us a different lesson. No fact in the economy of animal chemistry can long be held as isolated or barren; it must tend to some useful analogy or mighty generalization. In the present age, the artificial distinctions and factitious boundaries which hedged in the various domains of knowledge are fast falling into merited desuetude, and no one thought or conclusion stamped by the signet of Truth can stand alone. It gathers round it kindred truths, and forms a new fellowship of wisdom. Perhaps, however, of all arts which adorn the human intellect, medicine is the most comprehensive. The affinities of organic and inorganic elements, the qualities of physical being, and the characteristics of that more subtle thing, the mind, all fall within its province, and link it to the realm of universal knowledge. No subject, therefore, is too high, nor any too humble, for our investigations. Conclusions which may at first sight appear to belong merely to the agriculturist, may render essential assistance to the physician. We therefore will endeavour to place the views of our author before our readers in the best imaginable manner—viz., by a series of short extracts from the work itself.

"It has been contended that the presence of oil, if not essential in the food, is at least very important in increasing the amount of fat deposited; while Liebig holds that oil may be possibly assimilated or converted into butter; but that the same product may result from the deoxidation of sugar or starch in the animal economy."—p. 60.

To determine, therefore, the origin of the oily matter secreted by animals, it is necessary to determine the amount of oil in the food. The first experiment was with grass. We pass over the intermediate processes, and simply extract the table of results.

| | lbs. |
|---|---|
| "Amount of wax in food of two cows for fourteen days | 57.3 |
| Amount of wax in dung | 6.3 |
| Amount of wax consumed by the cows | 51.0 |
| Amount of dry butter | 16.7 |
| Excess of wax in the food | 34.3 "—p. 62. |

This experiment, therefore, would certainly show, that the oil consumed by the cows greatly exceeded the butter and oil contained in the dung. But this experiment is by no means conclusive.

"The matter extracted by ether from grass, however, can scarcely be termed an oil, since it possesses all the characters of a wax; that is, a body which possesses a smaller amount of oxygen than a fat oil; certainly less than is contained in butter. It is therefore difficult to conceive a wax to obtain more oxygen in the system, and to be converted into an oil, where all the actions are calculated to remove oxygen, and not to supply it. Such an occurrence would be as probable as the addition of oxygen to wood by throwing it into a furnace. The production of butter from sugar by the action of casein, or curd, is, on the contrary, a process with which chemists are now familiar, and is therefore more readily admissible into physiological theories than the idea of the formation of butter from wax, since we are unacquainted

with any analogous example. The connexion between sugar, oil, and wax, is exhibited by the following formula:—

| | Carbon. | Hydrogen. | Oxygen. |
|---|---|---|---|
| 1. Sugar | 48 | 44 | 44 |
| 2. Fat | 44 | 40 | 4 |
| 3. Wax | 40 | 40 | 2 |

"In bees we have a well-demonstrated example of the production of wax from sugar; while fat, or the intermediate stage, is probably first produced in the body of the bee, and is then, by the loss of a small portion of carbon and oxygen, converted into wax, or the lowest state of oxidation in the animal system. The point, therefore, to which it is necessary to direct attention is, that we have instances in chemical physiology of substances being produced from others preceding it in the table, but that we are unacquainted with any phenomena of an inverse order; nor would such an occurrence be explicable upon the principles on which the animal system is understood to proceed. Taking all these circumstances into consideration, it appears that there are fewer difficulties in the way of supposing that the butter is formed from the starch and sugar, or albuminous matter of the food, than from the waxy matter which is present in such considerable quantities."—pp. 64—66.

The result of the grass experiment may therefore be pronounced as somewhat equivocal. With linseed and bean-meal the results, however, were perfectly conclusive. We must refer our readers to the elaborate tables in the Appendix, more especially Table I., (p. 188,) and shall content ourselves by extracting Dr. Thomson's final remarks on the subject:—

"The butter of the cows cannot possibly be produced from the wax and oil of the food, since the greater part of the wax of the food reappears in the dung, being expelled from the animal without change; while the butter and wax of the dung greatly exceed all the wax and oil of the food. From these circumstances it is very much to be doubted whether the wax of hay occupies any place in the production of the fat and butter of animals."—p. 135.

We had marked several other passages for extraction; but we have already exceeded our limits. We particularly recommend Dr. Thomson's observations on fasting to the revivers of the doctrines and practices of St. Anthony and St. Stylites. Amongst the defects of this volume we may hope to see corrected in some future edition, are, a great deficiency in general arrangement, a discursive style, and the absence of any index whatever. In a work on a subject so abstruse as animal chemistry, these are serious evils to the tyro. So much for the *corrigenda*. Meanwhile, our general opinion of the work may be inferred from our lengthened extracts. By the agriculturist and chemist it will be welcomed as one of the firstfruits of the immortal researches of Liebig, nor will it be less acceptable to that portion of the medical profession who desire to rescue dietetics from the sway of empiricism.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

April 13.—J. M. Arnott, Esq., F.R.S., President.

Cases of Hospital Gangrene and of Diffused Inflammation of the Cellular Membrane, which occurred in St. Bartholomew's Hospital in December 1846 and January 1847. Reported, from Mr. Lawrence's wards, by Holmes Coote, Esq., from Mr. Stanley's wards, by Luther Holden, Esq.

The authors of this paper considered the particulars of the cases narrated as interesting, on account of their illustrating forms of disease now but little known in this metropolis.

In Case 1, the gangrene was consequent on a punctured wound of the palm of the hand, in a stout man of intemperate habits; this was followed by inflammation, and pain up the arm, and on the fifth day an abscess formed on the back of the hand, which was opened; relief was thus obtained, but the discoloured integument gave way, and left an unhealthy ulcer. When admitted three days afterwards, the palmar and dorsal aspect of the hand each presented a foul wound, the latter surrounded by mortified integuments. These continued to extend, and a month after admission the whole back of the hand was reduced to a black slough. Under the tonic and alterative treatment adopted, these sloughs subsequently separated, and the general health improved, and it was ultimately necessary to sacrifice the middle finger.

In Case 2, death followed diffused inflammation and sloughing of the cellular membrane in both fore-arms. The accident which was the exciting cause of this mischief, was a fall on both hands, producing compound fracture of one fore-arm, and severe contusion of the other. Various abscesses formed, the whole cellular membrane of the fractured limb sloughed, and the patient ultimately sank on the eleventh day. The deeper parts in the vicinity of the wounds were found, after death, to be reduced to a soft, pulpy, and disorganized mass. This patient had occupied the bed next to that of the preceding.

Cases 3 and 4 occurred in individuals who were the subjects of operation for strangulated hernia, and both healthy young men. In the former, death supervened, from diffused inflammation and sloughing of the cellular membrane, accompanied by peritonitis and pleurisy; in the latter, gangrene made its appearance in the wound, which was nearly closed. The sloughs separated under the application of strong nitric acid, and the case terminated favourably. The employment of foul sponge, which had been used in Case 1, appeared to be the exciting cause of the mischief in this instance.

In Case 5, the gangrene followed a puncture in the hand, made to evacuate an abscess. The constitutional disturbance was very considerable in this case, but tonic treatment, and the application of strong nitric acid, ultimately effected a cure.

Case 6 closely resembled the preceding, and likewise terminated favourably.

In Cases 7 and 8, the gangrene followed punctures for the evacuation of abscesses on the hip and nates; in the former, the undiluted nitric acid was requisite to arrest the sloughing.

Case 9 was one of amputated thigh, in which, when the stump had nearly healed, and without any apparent cause, the small granulating surface remaining assumed a foul character, and an ash-coloured slough soon extended down to the bone. This separated after a week, and then the wound healed favourably.

In the last two cases, which resembled each other, gangrene attacked severally the ankle and foot, after a punctured wound was made in either for the evacuation of an abscess. Opium lotion, with nitric acid, (from twenty minims to one drachm to the pint,) was successfully employed in procuring a healthy action in the wounds.

The authors remark that hospital gangrene has not been witnessed for a great many years in St. Bartholomew's Hospital, and they seem disposed to attribute the occurrence of the malady in the above instances to the intensely hot summer, and the succeeding cold north-easterly winds with which the winter was ushered in. The disease was confined to three of the men's wards, at the north-eastern side of the quadrangle. There was little or no preceding constitutional disturbance, the first morbid symptoms being the suppression of the healthy, puriform discharge, and the appearance of a dusky-red inflammatory blush in the neighbourhood of the wound. Then the pulse became rapid and feeble, and within thirty-six hours the sore became converted into a buff-coloured slough, which rapidly extended to the deeper textures. The pain was, in many instances, compared to that of "burning by a red-hot coal." The only local remedy of any avail in arresting the progress of the disease was the undiluted nitric acid; opium, quinine, and a generous diet, were also prescribed. The authors further remark that they have ascertained that erysipelas prevailed extensively in other institutions during this same period of December 1846 and January 1847. Their view of the predisposing cause of the disease they consider to receive confirmation from the fact that a similar prevalence of severe weather preceded the malady when epidemic in University College in 1841.

These cases were illustrated by characteristic drawings.

The President had seen hospital gangrene only once during the last seventeen years in the Middlesex Hospital. These cases all occurred in one ward. In one case, the slough, as large as a saucer, was arrested in its progress, and recovery took place, under the local application of nitric acid. In another instance in which the slough was situated on the buttock, the internal use of opium, with the application of nitric acid, locally effected a cure. In the third instance the sore was of a phagedænic character, and recovered under the same treatment.

Dr. Budd said, that the inference to be drawn from the cases mentioned by the President was, that the spread of the disease, and its origin, depended more on the influence of local causes than the authors of the paper appeared to think, for

they attributed the disease to the effects of atmospheric influences affecting a large extent of surface. All, however, pointed to local causes, and its contagious character, and this might lead us to inquire whether we could prevent its spreading, by isolating the patients, and preventing them using the sponges or other apparatus of the affected persons.

Mr. Erichsen said, that in the early part of the year 1841, almost all the wounds in University College Hospital, whether the result of disease, of accident, or of operation, took on a sloughy appearance. The surface of the sore assumed a yellowish-grey, pultaceous aspect; there was little discharge, but a great tendency to hæmorrhage. The edges of the ulcer were sharp and defined, as if cut with a knife, and surrounded by a dusky-red areola. The ulcerative action extended farther in the skin by an eighth or a quarter of an inch than in the subcutaneous cellular tissue, exposing the muscles and bones, but not invading those parts. There was not much constitutional disturbance, not so much as might be expected, either before the invasion of the disease, or during its existence. There were no vesicles on the inflamed skin surrounding the ulcer. He (Mr. Erichsen) had at the time made inquiries in most of the West-end hospitals as to the existence of the same or any analogous disease, and had found that although hospital gangrene did not exist in any of them, erysipelas and external phlebitis had been very prevalent. Influenza likewise prevailed at the time to a great extent. He thought that in taking into consideration the prevalence of erysipelas, phlebitis, and influenza, at the time of the occurrence of the hospital gangrene at University College Hospital, and the existence of the same diseases to an unusual extent at the time of the present outbreak of that disease at St. Bartholomew's, that it was impossible not to look upon these diseases as having a common atmospheric origin, the peculiar form of the disease manifested depending upon local conditions or peculiarity of constitution of the patient. At University College Hospital, the disease had certainly not spread by contagion. No contact was allowed between infected patients. The cases occurred in a scattered manner in different wards, and in different parts of the same ward, not in contiguous beds; and no sponges were used by which infectious matter could be conveyed. It did not, either, arise from overcrowding of the wards, which were large, airy, well-ventilated, and contained comparatively few beds. He therefore attributed the occurrence of the disease to the influence of some peculiar atmospheric agency, manifesting itself in different ways in the form of erysipelas, phlebitis, influenza, or hospital gangrene, according to local or individual peculiarity. The treatment that had been found most successful was the application of strong nitric acid to the surface and edges of the sore, opium and bark internally, and a good diet. Under this plan he believed no fatal cases had occurred amongst from sixteen to twenty patients that had been attacked.

Mr. Holmes Coote observed, in reply to the remarks of Dr. Budd, that he was fully aware of the importance of inquiring whether local causes were concerned in the production of this very serious disease. He thought, however, that it would be difficult to refer the visitation to any circumstances connected with the construction or the internal arrangements of the buildings in which it occurred. On the other hand, it was impossible to deny how close was the resemblance between the general condition of the atmosphere during the past months, and that which, in 1841, preceded the appearance of the disease in University College Hospital. With the cessation of the extreme cold, the epidemic spontaneously ceased, and the aspect of the gangrenous sores assumed a more favourable character. Now it must be in the memory of all present, that after this apparent break in the year, there was an unexpected renewal of the bitter cold; and it is a singular fact, one deserving of attention, that with this unfavourable change there was a return of hospital gangrene in St. Bartholomew's Hospital. A woman, almost recovered from the effects of an operation performed by Mr. Skey for the relief of strangulated hernia, became suddenly feeble and uneasy; the wound, nearly healed, assumed the appearances already described in the paper just read, and in spite of the repeated application of strong nitric acid, there ensued a sloughing sore of enormous size. In other institutions, singular cases of sloughing of the cellular membrane have occurred; amongst others, in Bethlem Hospital, where there was found, by Mr. Lawrence, in one instance, a slough of cellular membrane formed around the œsophagus, as it entered the thorax, and in two or three others, an irregular slough, occupying the submucous tissue between the glottis and the corner of the os hyoides. Taking these and other facts into consideration, he (Mr. Coote) believed that the disease originated from some peculiar condition of the atmosphere.

Dr. Budd did not mean to imply that atmospheric causes had nothing to do with the spread of the disease; for if contagious, as he believed it was, it might be rendered epidemic by atmospheric causes, as we knew small-pox, measles, and scarlet fever, occasionally were. With respect to the circumstances mentioned, with a view of establishing a connexion between hospital gangrene and erysipelas, he might observe, that in his opinion erysipelas was an infectious disease.

Dr. Ogier Ward, in confirmation of the local origin of hospital gangrene, phlegmonous erysipelas, &c., assigned by the last speaker (Dr. Budd) to the cases in question, begged to mention, that for a space of about two years, 1836-7, phlegmonous erysipelas prevailed to such an extent in the Birmingham Hospital, that the surgeons were very unwilling to perform operations that were not imperatively required; and that the disease continued, notwithstanding every attention was paid to cleanliness, ventilation, whitewashing, and fumigation; so that a question arose, whether it might not be desirable to close the hospital for a time, or select another site for it, though apparently the site was most eligible, being on a gravelly bank in the outskirts of the town, which is itself the most healthy large town in England, from the undulations of the surface, the gravelly soil, and the width of the streets, &c. The only drawback to the healthiness of the site of the Birmingham Hospital was the stagnant canal, which lies within a few yards, though about thirty feet below the hospital.

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## Case of Enlargement of the Left Mamma. By W. E. Image, F.R.C.S., Surgeon to the Suffolk General Hospital. To which is added, An Anatomical and Pathological Description of the Tumour. By P. E. Hake, M.D., Physician to the Suffolk General Hospital; and W. E. Image, Esq.

(*Communicated by* Robert Liston, F.R.S.)

Sarah H——, aged twenty-one, was admitted into the Suffolk Hospital in April, 1845, with an enormous enlargement of the left breast. Her general health had been good. Two years back she first perceived a red mark, about the size of a shilling, just above the nipple, and that the breast was enlarged; but it was free from pain or tenderness. The catamenia was regular. Two months afterwards she began to suffer pain, and had leeches applied, and iodine was also employed. She remembered to have struck the breast some time since with a pump-handle, but did not connect the accident with the disease. On admission, the breast was pendulous, with a blue, nævus-like spot just above the nipple, as large as a crown-piece, and several smaller ones in its vicinity; a leaden hue pervaded the whole surface of the breast. By gradual pressure it admitted of being reduced to half its bulk; but fulness in the head accompanied this experiment, and faintness succeeded it. The general health was good, and functions normal. Pressure with an air-cushion was employed for some time, but the tumour continued to grow, and the nævus-like discolouration to spread, the nipple becoming almost obliterated, and the areola obscured; the integument at one point was also much attenuated. After consulting with several surgeons in London, to whom the patient was shown, the author determined on the following operation, which was performed on Sept. 25th, 1845, the tumour being at that period twenty-three inches round its base, and projecting seven inches from the chest:—The patient was placed in a recumbent posture, and a vertical incision was made on either side of the enlarged mass, and two flaps dissected back as far as the healthy skin would permit, the bleeding vessels being secured as the operation proceeded. Two long and strong needles were then passed, at right angles to each other, through the base of the tumour, and each being armed with a double ligature, was then returned; the ends of the ligatures, eight in number, were then tied, and the tumour was thus strangulated. Fourteen ounces of blood were lost, and a great shock was evidently sustained by the system; vomiting and venous oozing followed, and she sank after the lapse of twenty-two hours from the time of the operation.

The tumour was removed entire for examination. The appearance presented by a horizontal section was that of strongly marked congestion, caused by the operation, which artificial condition rendered the true nature of the disease more difficult to trace. The adipose tissue beneath the skin, and the neighbouring fibrous laminæ, constituted (as the result of compression) a dense, tough membrane, perforated around the base of the swelling by dilated veins. The lactiferous ducts were traceable in front, towards the nipple, and vestiges only of the mammary gland could be discerned. The

arteries and nerves of the mamma were unaltered; but some cells of considerable size presented themselves, filled with semi-fluid blood. The internal mammary vein, towards its junction with the subclavian, presented a sacculated appearance, the interior having a valve-like formation, the narrowed parts being thickened, and the sacculated portions formed of one hollow within another. The superficial veins were dilated uniformly into large sinuses. Under the microscope (with a low power) various sized cells were seen to constitute the bulk of the tumour, smaller ones being found contained within the greater; and into these cells all the veins were traceable. These cells therefore consisted of the veins between the capillaries and vein-trunks, in a state of distention. The rupture of these under the pressure of the ligatures produced the larger cells already noticed. The authors regard the disproportion between the arterial and venous circulation, produced by the narrowed condition of the internal mammary vein, as the evident cause of the fatal disease which ensued.

Illustrative drawings accompanied this paper.

Mr. Hilton had seen this case with Mr. Image: it had the appearance of a large nævus, and pressure reduced it to one half of its size. There were several large arteries and veins in it. The patient was in good health, with the exception of the tumour—a circumstance, he thought, to be surprised at.

Mr. Partridge said, that from the dissection it would appear to have been a venous nævus of unusual magnitude. The dissection was important, as the cells appeared to be a continuation of bunches of varicose veins; but the veins only were connected, and did not open into them, the cells only being seen by making a section of the convoluted vessels.

Mr. Cæsar Hawkins remarked, that the paper was interesting, with reference both to the structure of bloodvessel tumours and their treatment. It was well known that there had been much discussion relative to their composition; and it was his opinion that, as in many other disputes, both sides were, to a certain extent, right. The common idea, no doubt, was that which had been expressed by Mr. Coote; in many cases they were composed sometimes of dilated and varicose arteries, sometimes of veins only, the minute bloodvessels being unaffected; in other cases, of diseased capillaries, only without dilatation of any larger vessels; and in others, again, of capillaries and adjoining arteries or veins. But while the generality of bloodvessel tumours were thus formed, so that the appearance of cells is only produced by the section of convoluted vessels, in the same manner as Mr. Partridge has mentioned of the vesiculæ seminales, yet, in other cases, Mr. John Bell's description of their cellular formation is undoubtedly correct; and besides the dilated vessels filled with blood, there are also cells containing serum only, without any communication with vessels. Had he known that the paper was going to be read to-night, he (Mr. Hawkins) could have placed on the table some preparations and drawings illustrating this fact, which he had shown Mr. Image, when he brought his patient to Mr. Hawkins's house for his advice. These serous cysts he had seen on several occasions: in one instance, in removing a subcutaneous nævus, a central cyst existed which contained about an ounce of serum; and he had also punctured and obliterated the cysts, where the excision of the nævi with which they were mixed was not advisable.* Such cysts seemed also, though of small size, to have existed in the case narrated in the paper. With regard to the treatment of very large vascular growths, the removal in the way practised by the author was certainly not according to the advice which he (Mr. Hawkins) had ventured to offer, when he saw the patient, and he was glad to hear an account of the reasons of the fatal result, which he had understood was the consequence of some operation, and he could not but have anticipated the very dangers from hæmorrhage and mortification which had taken place from incision and ligature. Every one was aware how serious was the influence on the system from even a small gangrenous part, and therefore, when you came to the sudden strangulation of a large tumour, such as a breast twenty-three inches in circumference, the effects could not but be most formidable, especially in a delicate person, in addition to the loss of some thirty ounces of blood. The treatment Mr. Hawkins had ventured to suggest, was the introduction of several small setons of a single thread, from time to time, in different parts of the tumour, by which there would have been the usual advantages of coagulated blood and effusion of lymph, to block up the vessels, which, alone, often succeeded, in subcutaneous nævi, where removal was not desirable, and to which, in this case, could conveniently be added, general external pressure, with the moderate compression at the base, recommended by Lallemand, short of actual strangulation. Mr. Hawkins could not but think, that if this had been done, a different result might have ensued, and if it had failed, the more dangerous operations could afterwards have been had recourse to. Mr. Hawkins added, that the nævus with pulsating arteries, a form of aneurism by anastomosis, being comparatively rare, he might mention that he had an instance of it, in the lip, now under his care in the hospital; and in answer to a question by the President, he said that, the coronary artery being very large, and probably altered in structure, he rather inclined to think he should remove it by ligature, as he had seen troublesome hæmorrhage follow excision, from the artery having lost its contractility, and it was well known that tying the vessel going to the tumour almost always failed.

In a subsequent part of the evening, Mr. Hawkins mentioned a case of enormous venous tumour, in which the child of a medical man, about seven years old at the time he saw her, had an increase of all the veins corresponding to the external carotid artery of one side, producing a mass of convoluted vessels, the capillaries being unchanged, reaching from the ear to the sternum, and from the back of the neck and head to the front as large as the head itself; in the tongue it was very striking, since, if it were increased by excitement, the organ became too large to remain in the mouth, and required to be emptied by pressure to reduce it again. It was stationary when he had seen it, and no treatment seemed desirable.

Mr. Coote said that he had had several opportunities of minutely examining vascular tumours, and he thought that, from what had fallen, the results might prove interesting to some present. The morbid changes in the vessels consisted in their dilatation for a variable extent; a small artery or vein suddenly became three, four, or five times its ordinary size, and then, after a course of an inch or an inch and a half, as suddenly resumed its natural calibre; if the disease were not interfered with, the vessels became eventually dilated into irregular cells; if the small arteries were thus affected, (as seen usually in the lip,) they formed a pulsating tumour; if the capillary vessels were affected, they formed the ordinary non-pulsating nævi of infants; if the minute veins were diseased, they formed an irregular, livid blue, non-pulsating swelling, of which he, Mr. Coote, had seen lately two instances, one on the cheek, and another on the abdomen; the latter had been extirpated by Mr. Lawrence, and carefully examined, after a successful injection, when the continuity of the irregular cavities with the dilated veins was easily traced.

Mr. Partridge concurred generally in the statements of Mr. Hawkins. He did not see anything strikingly novel in the remarks of Mr. Coote; for it had been long known to the profession, that nævi were of three distinct kinds, the venous, the mixed, and the arterial. The mixed, if left alone, would go away; the other kinds must be treated according to their situation.

Mr. Coote did not remember saying that his observations were entirely new to the profession; all he meant to say was, that from what had fallen in conversation, he thought they might prove interesting to some present. That the subject was not clearly understood, might be inferred from the difference of opinion which prevailed in the profession: for example, with reference to the growth of these tumours, he entirely differed from Mr. Partridge. In his (Mr. Coote's) opinion, the pulsating arterial tumour, and the ordinary capillary nævus of infants, were almost sure progressively to increase, unless interfered with by operation, whilst the venous tumour, though very likely to increase, either progressively, or at irregular intervals, would, in some instances, become stationary, after attaining a certain size.

Mr. Curling briefly referred to the case of a woman who had died under some obscure circumstances, the only known fact connected with her history being, that she was subject to fainting fits. On examination, an immense nævus was found near the spine. He agreed with Mr. Hawkins, that less danger would have resulted from treating the case under consideration, on Mr. Hawkins's plan, than by the one adopted.

* A clinical lecture by Mr. Hawkins, in the Medical Gazette, vol. xxxvii. p. 1021, contains a description of such cases.

## Foreign Department.

### ACADEMY OF SCIENCES, March 22.

*Injection of Ether into the Arteries.*

We have this week to make known some experiments made by Baron Flourens on the injection of ether into the arteries, the results of which he communicated to the Academy, and which are the following:—

He caused several dogs to swallow ether, in doses varying from one drachm and a half to six drachms. "All the animals suffered much; some are dead, others have become stupified and drunk, but none have become truly etherized,—that is to say, seized with a general and total insensibility. Those most intoxicated have remained sensible to impressions." "The injection of ether into the stomach, then, does not produce etherization; nor does its injection into the arteries cause it. But the injection produces a remarkable phenomenon. When an animal is submitted to the action of ether by inhalation, the spinal marrow loses its power of receiving sensations before it loses its power of exciting motion. This succession in the order of phenomena is constant, the power of motion outliving that of sensation. But when ether is injected into an artery, the very reverse of this takes place; the motor power disappears before the sensitive." In two cases, sensation and motion ceased together; but in those two the dose of ether had been very large; when small, the succession occurred in the order stated. A quarter of a drachm of ether was thrown into the left axillary artery of a small dog, and half a drachm into the same artery in a large dog; in both cases in the direction of the circulation. In each, the power of motion was lost, but sensation retained in the left leg. The nerves of the brachial plexus being pinched, in both dogs marked pain was excited, but no contraction.

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*Ether employed to facilitate the Reduction of a Dislocation of the Shoulder.*

A man, aged thirty-two, very muscular, dislocated his shoulder. On the same day as the accident, reduction was attempted, but unsuccessfully. The next morning, the man entered the Hôpital d'Aix, when the resident-surgeon again made attempts at reduction, but without accomplishing it. On the morning after, when M. Bourguet visited the hospital, he ordered the patient to be placed in a bath, and a cataplasm to be applied to the shoulder. At three o'clock in the afternoon, M. Bourguet, with some surgical friends, administered the vapour of ether, but the man did not comprehend the way of inspiring it, and intoxication did not manifest itself for a quarter of an hour. At this moment, reduction was begun by extension and counter-extension; but before they had hardly commenced, the head of the humerus was felt to leave its abnormal position, below the coracoid process, and the muscles offering but a slight resistance, it soon slipped into its place, without a sudden jerk or pain, and without the patient being conscious of it.

The case went on most favourably, not being succeeded by headach or fever, and on the third day the patient left the hospital.

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*On Exostoses: their Characters.*

A valuable memoir has been published in the *Revue Médico-Chirurgicale*, illustrated by numerous cases, on Exostoses, and on the operations necessary to their removal, by M. Roux. We here give the conclusions at which the author arrives:—

1. Among the different tumours met with on bones, some of them only are to be termed exostoses, and from them all others which have borne the name should be carefully distinguished.

2. True exostoses are constituted, like the bones themselves, chiefly of the spongy or cancellated variety, and only covered by a thin lamina of the compact bony tissue; or, on the contrary, they may be entirely composed of compact tissue, and then their consistence is very hard and resembles ivory.

3. Every exostosis having either of the preceding characters, is attached to the bone from which it is developed by a constricted base, forming a pedicle, short and thick, proportionate to the volume of the tumour.

4. After a certain time, exostoses cease to grow, and never pass beyond a certain degree of development. This definite volume is proportionate to that of the bone on which they may be implanted, being small on small bones, of large magnitude on great ones.

5. They are mostly merely contiguous to the surrounding soft parts; sometimes, however, they contract adhesions with them.

6. Exostoses do not degenerate, but tend indefinitely to preserve their primitive structure, or, at least, their tissue may acquire, by age, a greater density, as does that of the bones, when they are formed in young subjects.

7. According to the situation they occupy, they may constitute a deformity only; or they may produce pain and difficulty to the functions of the surrounding organs; or, lastly, they may, in some cases, act as an obstacle to the performance of their functions.

8. If their position do not render them inaccessible, they may almost always be removed; and their removal in nearly every case is indicated, either to do away with a great deformity, or constant suffering and uneasiness, or to re-establish the functions of an organ in their full and regular play.

9. The removal of exostoses may, in the greater number of cases, be proceeded with, without previously exposing the tumour, and without having great difficulties to surmount.

10. The operation may be followed by serious consequences, either because of the peculiarity of the locality of the tumour, or on account of its relations and connexions with neighbouring organs, or from a vitiated state of the constitution in the individual operated on. Nevertheless, the removal of exostoses is generally successful.

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*Dislocation of the Sixth Cervical Vertebra.*

The *Archives Medicales du Midi* contain, among other articles, the report of a case of dislocation of the sixth cervical vertebra, occasioned by a fall. A mason, aged forty-four, fell from a scaffolding on the upper part of his back. He lay motionless; his head bent towards his breast; his neck immovable, and, as it were, pressed down. On a level with the sixth cervical vertebra, a tumour, of the size of an almond, and feeling like bone, was detected. There was no ecchymosis nor motion, no crepitus nor lesion of the skin. The patient felt a severe pain, aggravated by pressure. There was no thoracic respiration, the breathing being kept up by the diaphragm only. The lower extremities were completely deprived of sensation and motion; the upper preserved a little. Intelligence was unimpaired; the pulse frequent and feeble; the extremities somewhat cold. The next morning he was in much the same state, and unable to pass his urine, which was drawn off by a catheter. Death supervened, without fresh symptoms, thirty-four hours after the accident.

*Post-mortem examination.*—Infiltration of blood in the soft parts, between the skin and spine. The spinous process of the sixth cervical vertebra is separated from that of the seventh by an interval, into which the finger may be introduced, so as to touch the cord. The two vertebræ are completely disconnected, and so twisted, that the spinous process of the sixth vertebra is directed anteriorly, and, at the same time, upwards; whilst that of the seventh is carried downwards and backwards. The articular processes are also displaced, and in separating have assumed opposite directions. Thus, those of the sixth vertebra are advanced, and slope from below upwards; those of the seventh have the reverse position. There is no fracture, except of the left transverse process of the sixth vertebra, and which has only its tip broken off.

The spinal canal being opened, the cellular tissue, external to the dura mater, was found very infiltrated with blood. On the posterior surface of the cord, a contused surface, about two-fifths of an inch square, corresponding to the space left by the separation of the two spinous processes, was found: it was softened, and presented a bluish appearance, but did not extend deeply. Nothing similar was met with on the anterior surface. The fibro-cartilage which united the bodies of the sixth and seventh vertebræ, was divided into two segments, of nearly equal thickness, one of which adhered to the upper, the other to the lower vertebra. The body of the sixth vertebra projected behind, so as to compress the spinal marrow in its canal.

Luxations of this kind are rare; there are but three on record:—one, by Dupuytren; another, by Astley Cooper; and the third is described in the *Gazette Médicale* for 1834.

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*Amputation at the Ankle-joint.*

In the same journal we also find a description of the mode of operating, in amputation at the tibio-tarsal joint, as practised by M. J. Roux, of the Naval Hospital, Toulon. Amputation at the ankle-joint has been brought before the notice of British surgeons, by Mr. Syme, of Edinburgh; and, we believe, has also been practised by Mr. Fergusson, in London.

M. Roux lays his patient on the side of the bed, having the leg not operated on supported by an assistant. The operator, holding the foot in his left hand, directs his scalpel, held in the right hand, to the posterior part of the external surface of the calcaneum. The knife is then brought into a straight line, under the external malleolus; from this point, an anterior convex incision is made, over the dorsum of the foot, a little more than an inch from the lower end of the tibia, and terminating somewhat in front of the inner mal-

leolus. From this last point, the incision is carried down beneath the sole of the foot; arching across it, till it reaches the external border; taking the course of the incision in Chopart's operation. From the external border of the foot, the incision is continued to the point where it was commenced, that is to say, to the posterior extremity and centre of the external surface of the calcaneum. By the preceding incision the soft parts are divided down to the bone.

In the second place, the soft parts are dissected off from the bone beneath, so as to expose the tibio-tarsal articulation, and the two malleoli, especially the external, and the outer surface of the os calcis.

In the third place, the articulation is attacked, first, on the external, then on the internal side.

In the fourth place, it is necessary to dissect the parts which adhere intimately to the posterior surface of the calcaneum; then to detach those met with on the internal surface; and in order to accomplish this, the bistoury, after having divided any remaining fibres of the internal lateral ligament, must describe a curve along the inner side of the os calcis. This last part of the operation is important, if it be desirable not to divide the posterior tibial artery before its division into the plantar arteries.

The foot being thus detached, a wound of an irregularly oval form is left; and lastly, the malleoli are removed, on a level with the articular surface of the tibia, by the saw. The arteries are tied, and the flap brought forward, so that the skin of the heel is placed in apposition with the lower extremity of the tibia.

Mr. Syme employed the skin of the heel to form the flap; M. Baudens, the integument of the division of the foot. M. Roux's method nearly resembles that of Mr. Syme; but the former surgeon, by prolonging his incision backwards on the external surface of the calcaneum, gains considerable facility for the dissection of the posterior parts, and for the incision of the tendo-Achillis. Another great advantage results from his plan. If the patient be made to lie so that his foot may rest on its outer side, the free escape of pus is ensured by the continuation of the incision backwards: and thus the objection to the formation of a flap from the sole is done away, viz., that a receptacle is thus formed for the collection and detention of the pus."

## British Medical Journals.

### DETECTION OF SUGAR IN THE EXPECTORATION OF PATIENTS AFFECTED WITH DIABETES.

At a recent meeting of the Manchester Pathological Society, Dr. Francis exhibited a specimen of saccharine matter which he had obtained from the expectoration of a patient labouring under diabetes and consumption. This substance was partly crystalline, of a rich senna-brown colour, strong honey-like odour, and an intensely sweet taste. The expectoration in quantity amounted to twenty-four ounces daily, and each ounce yielded on fermentation two and a half cubic inches of carbonic acid, equal to two and a half grains of sugar, or about fifty grains in the imperial pint.

The following was the method by which the sugar was obtained from the fluid:

"The expectoration was treated freely with strong alcohol, which coagulated much of the albuminous matters. Distilled water was then added, and, after agitation and digestion for a short time, the whole was thrown on a filter, and a clear watery fluid passed through.

"A small portion of this fluid reduced the protoxide of copper when tested in the manner recommended by Trommer, and another portion underwent fermentation over mercury.

"The remainder was evaporated in a water-bath to dryness, the residue broken up into fragments, and digested for several hours in alcohol, which was then filtered. The alcoholic solution thus obtained was of a yellowish tint, clear, and decidedly sweet to the taste. On evaporation, it left the sugar produced."

Dr. Francis describes the same result from the examination of another patient similarly affected, and expresses his belief that this is the first occasion in which sugar has been detected under those circumstances. The author's concluding remarks, to the following effect, deserve attention:

"It might be found," he thought, "when closer attention came to be given to the subject, that there were other organs than the kidneys habitually playing an active part in the removal of the sugar which was accumulating in the blood during the progress of diabetes. There were at least some grounds for believing such might be the case from the results just detailed, and if so, the quantity of sugar escaping in the urine could not be viewed as an absolutely safe index to the quantity formed in the system, unless taken in conjunction with other means of its elimination.

"Such cases might further be looked upon as furnishing an argument, if further evidence upon the subject were necessary, that the kidneys play no part in the formation, but merely in the separation from the blood, of the sugar."—*Medical Gazette.*

### THE ASPHYXIA OF NEW-BORN INFANTS.

In an essay on artificial respiration for the resuscitation of new-born infants, M. Depaul states that he has

"instituted a series of experiments on the dead subject, with the view of determining the amount of danger of injuring the lungs by the insufflation of air. He satisfied himself that this danger is almost an imaginary one, since, even after the lungs were removed from the body, it required several most forcible insufflations, far stronger than ever would be made in the case of a still-born child, to produce rupture of the pulmonary vesicles. On the other hand, he was struck with the great force needed thoroughly to inflate the lungs, while their resiliency was sufficient to expel the greater part of the air. He found, moreover, in many cases where children had died suddenly, after breathing for several hours or days, no other morbid appearance than an unexpanded condition of a large portion of the lungs. With reference to the mode of practising artificial respiration, he condemns the mere blowing into the mouth as inadequate, and recommends the use of a tracheal tube. He is of opinion that there is more danger of failing from imperfect insufflation than of doing harm by its too forcible performance. It is of importance, likewise, that it should not be suspended on the first sign of breathing, but continued until the child cries loudly and respires well."—*Dr. West's Report, British and Foreign Review.*

### MAGENDIE'S EXPERIMENTS ON THE CEREBRO-SPINAL FLUID.

The following observations from Mr. Paget's Report of the Progress of Physiology, show on what uncertain data opinions are sometimes formed. They illustrate the necessity of taking all facts into account, before any positive conclusion as to cause and effect:—

"M. Longet has found that the peculiar, unsteady, tottering movements, like those of drunkenness, which M. Magendie ascribed to the removal of the subarachnoid fluid of the spinal cord, are really due to the division of the muscles of the occipito-atlantal region, which is made to form a passage, through which the fluid may be drawn off. Whenever M. Longet drew off the fluid, without injuring these muscles, the animal preserved the power of motion unimpaired; but when he divided the posterior sub-occipital muscles, (including always the recti capitis postici minores, and the supra-spinous ligament in the animals in which it exists,) the peculiar defects of motion were produced, although the cerebro-spinal fluid was left untouched, and the sheath of the cord unopened. He ascribes the impairment of motion in these cases to the falling of the head, when its attachments to the atlas are destroyed, and the consequent dragging and pressure of the upper part of the cord, and especially of the medulla oblongata and pons; for the effects of the division of the muscles and other tissues are completely prevented, by artificially supporting the animal's head in a raised position; and in different animals, the degree in which the movements are impaired is directly proportionate to the amount of separation which takes place between the occiput and atlas, when their connexions (the occipito-atlantal ligament excepted) are divided. The speedy recovery of the animal, which Magendie ascribed to the rapid reproduction of the fluid, M. Longet considers to be due to the readiness with which the nervous masses (especially in animals) adapt themselves to new and unnatural pressure. He observed a striking analogy between the effects of the division of these muscles, and those observed by M. Flourens and himself, in consequence of injuries of the cerebellum; and hence draws another evidence, that the former are due to the pressure and dragging of the medulla and pons, with which the crura of the cerebellum are connected."

# THE LANCET.

LONDON, SATURDAY, APRIL 24, 1847.


On Tuesday last, Mr. Wakley, on a motion made by him in the House of Commons, obtained leave to introduce a Bill "For the Registration of Qualified Medical Practitioners, "and for Amending the Law relating to the Practice of "Medicine in Great Britain and Ireland."

A verbatim copy of the measure will be published in the next number of the The Lancet, when we shall explain the mode of petitioning in its favour, and print a form of petition. Probably this is the last Parliamentary effort that will be made in the present generation to obtain an Act for the Registration of Qualified Medical Practitioners, and for amending the present anomalous condition of medical law.

If an immense majority of the medical practitioners of Great Britain and Ireland unite their exertions in support of the Bill, they will obtain a law which will confer both upon them and the public inestimable advantages. If the profession be indifferent, Parliament will be indifferent, and the Bill must be lost.

We wish to direct attention to the admirable report, in the first page of the present number, by Mr. Wharton Jones, on the progress of knowledge regarding the structure of the sympathetic. Written in a clear and intelligible style, it embodies all that is yet known of the minute anatomy of the ganglionic system, and is especially useful at the present time, as laying bare the low state of anatomical knowledge in the physiological committee of the Royal Society, and proving, beyond the possibility of a doubt, either the ignorance or the corruption of the decisions and honorary awards made by the Society in matters pertaining to anatomy and physiology.

The following advertisement of the Council of the Institute of Medicine, Surgery, and Midwifery, has been going the round of the medical press:—

"*The National Institute of Medicine, Surgery, and Midwifery.*—The Council of the National Institute having observed an application for the introduction of a Medical Registration Bill into the House of Commons, the Members are hereby informed, that any Bill for amending or altering the laws of the profession will obtain the immediate and most earnest attention of the Council, and that the Council will take the earliest opportunity to make a Report on the Provisions of the Bill in question, and if necessary, convene a General Meeting of the Members of the Institute, in order that their opinions may be expressed on the subject.—By order of the Council, "George Ross, Sec.

"Hanover-square Rooms, Hanover-square, April 13th, 1847."

After the former declamations of the Council, it would have been only straightforward if they had said that they would give opposition, instead of "attention," to any measure of medical reform. They have again and again declared that they will attempt to thwart any alteration in the laws relating to the medical profession, unless they have united with it an incorporation of and for themselves. Then why disguise their intentions by such a specious advertisement. The few active members of the Council know very well that the members of the Institute would not join in an open opposition to the Registration Bill, and hence this plausible show of fairness and deliberation. It may be all very well for the few metropolitan members of the Council, who look to hold office in the (for the present) imaginary College, to contend for the incorporation of the embryo institution. They may want the superstructure; but their constituents care less for the superstructure than for the base; and the mass of the profession know and feel that a Registration Bill would be a basis—a root, upon which a superstructure might be raised, or a goodly tree produced. They know right well that before particulars can be arranged, the general plan must be settled; that before internal organization can be effected, the external boundary, the landmarks, so to say, of the profession, must be defined. We warn the general practitioners not to be cajoled, by the coffee and sandwiches at the Hanover-square Rooms, by testimonials to the meek and suffering secretaries, or by special but hypocritical advertisements, into an opposition to a just system of registration. If they do, under pretence of demanding a college charter, they—the general practitioners—may depend upon it they will have lost the substance in grasping at the shadow; and the Council of the Institute, keeping the promise of protection with the ear, will assuredly break it to the hope. We can say that we have the welfare and prosperity of the general practitioner more at heart than the interests of any other branch of the profession, and we may point for the proof to the whole existence of The Lancet. Through a quarter of a century, in hundreds of numbers, and many thousands of pages, we have steadily advocated the cause of the general practitioners, never fawning or flattering, but speaking what we have held to be the truth and to their true interest, whether palatable or unpalatable; and but for our exertions, we are well assured the British general practitioner would never have held the high rank he does hold—would never have been in a position to dream of contending even for a separate College. We claim, then, to be heard, when we earnestly advise our brethren not to be misled by the Institute into an opposition to the Registration Bill, for no better reason than because it is a foundation upon which the whole profession may rest—and simply and no more than a foundation, without reference to the interest or inclinations of any classes or castes, if such can be held to exist.

## Correspondence.

### ETHER IN MIDWIFERY.

*To the Editor of* The Lancet.

Sir,—Having used the ether on Sunday last, in a difficult labour, I consider a report of the case may be acceptable:—Mrs. W——, aged thirty-six, having previously borne three children, was taken in labour on the 8th inst., in the evening. The following morning, about four, the liquor amnii escaped. The pains subsided until the 10th, at nine in the evening. Her medical attendant was again sent for; he found it to be an arm presentation. Experiencing difficulty, he called in another gentleman. All their efforts to pass the hand through the vagina were fruitless. At three the following morning, I was sent for. I could not get near the os uteri, the contraction of the vagina was so firm. At half-past three, her pulse being 140, I administered the ether: it fell to 130. She was insensible for two or three minutes, during which time I passed my hand through the vagina, and seizing a foot, I brought it into it. Consciousness now returned, and with it the contraction of the vagina; my hand was then as in a vice. The other gentlemen tried, with like results. At a quarter past four, I again gave the ether, when the insensibility continued for ten minutes, during which period the foot was brought down and secured. The uterus all this time continued firm, the pains being perpetual, so that there was no such

thing as entering it, thereby showing that the ether produced no effect upon the uterus in diminishing its contractile powers. At half-past four, forty drops of sedative solution of opium were given her; in less than two minutes, she was fast asleep and snoring, which we attributed to the ether, and not to the opium. Examination was again made at a quarter to five, five, six, and seven o'clock; the uterus still continuing as firm as before, it was agreed that rest should be given her for a few hours. The pulse was now 120. At ten we met, and found the rigidity of the uterus had in some measure given way; so that, by steady perseverance, the second foot was brought down, and the delivery completed at a quarter to eleven. I wished, at this latter time, to have used the ether again, to have prevented her from suffering during the turning; but the gentleman whose case it was feared some danger might ensue, as he had been called in to see her about three years before for some affection of the heart. During the second exhibition of the ether, she was not conscious of anything; she had previously been and was then grasping her friend's hand with great force during the attempt to bring down the foot; but as the ether took effect, she gradually withdrew her fingers, and laid back her head in a perfectly quiescent state.

April 15th, I visited her, and found her quite as well as she would have been at the same period after a natural labour. To-day, the gentleman attending her told me she had not had a bad symptom: her own expression was, that she was better now than upon former occasions, and that, should she ever be so circumstanced again, she should beg to have the ether given to her.

The apparatus used was a bladder without any valve, the patient consequently respiring into the bladder, and again inhaling the same. I have now performed thirty-eight different operations with the bladder, and have twice used Robinson's apparatus. Not in one instance have I seen anything approaching to asphyxia; neither has there been any cerebral congestion.

From what I saw in the above case, I shall not hesitate to give the ether in any natural labour during the latter pains, when the head is commencing to bear upon the perinæum, that being the point at which I consider the ether to be of benefit: to give it at an early stage would be perfectly useless, as it would not act upon the uterus; and it is only when the head is approaching the outlet that there is any occasion for relaxing the muscles for the egress of the child. Certainly, if used in the early part of the labour, the pains would not be felt; but as its duration is always uncertain, it would be imprudent to be following up the ether for several hours, should it be so long required.

It is probable I might not have troubled you with this, but as I am written to by practitioners in the country for my opinion with regard to the ether, I think a few accounts of its practical use and consequent effects far more beneficial for them than all the theoretical surmises which may be put forth upon the subject.—Believe me, Sir, yours obliged,

Bristol, April, 1847. J. G. LANSDOWN.

## ON THE DISCOVERY OF THE USE OF NARCOTIC VAPOURS IN MITIGATING PAIN.

*To the Editor of* THE LANCET.

SIR,—When a new discovery of wide importance is brought before the public, the individual by whose agency it is more immediately introduced is seldom suffered long to enjoy, undisturbed, the applause which is the meed of the discoverer.

"Coming events cast their shadows before."

The establishment of every great discovery has been preceded by the accumulation of isolated facts and glimmerings of the truth brought together by various labourers. When the fulness of time is come, these facts and glimmerings supply the materials out of which the truth itself is deduced, and a discovery results. The early pioneers of a discovery often deserve a larger portion of honour than those who bring it tangibly before the world. These remarks particularly apply to the new method of rendering patients insensible to pain by the inhalation of vapours.

The discovery of this method has been boldly claimed by Drs. Jackson and Morton: and to them must certainly be accorded the chief merit of bringing it into use. No sooner was the discovery announced, than Dr. Collyer claimed priority of invention, without, however, adducing those proofs which could alone substantiate his pretensions. Still another aspirant, Mr. Horace Wells, appears in the field, with apparently better-founded claims. History will, in due course, assign to each his just award. In the meantime, while leaving the living competitors to assert their own rights, I venture to put in a claim on behalf of the "illustrious dead."

When the new method was first noised abroad, I recollected that an institution called the Medical Pneumatic Hospital had been founded by Dr. Beddoes at Clifton; and that, in the year 1798, Humphry Davy had been called from his seclusion in Cornwall to take charge of this establishment. In it, the great chemist laid the foundation of his future fame, by making an extensive series of observations and experiments to determine the value of gases in the treatment of disease. An indistinct presentiment assured me that the powerful minds of Beddoes and Davy could not, in the course of their comprehensive researches, have overlooked the special application of the inhalation of gases to the mitigation of pain. On reperusing the beautiful work of Sir Humphry Davy, entitled "Researches chiefly concerning Nitrous Oxide and its Respiration," 8vo, 1800, I found my expectations realized. And I would earnestly recommend those who are engaged in the interesting inquiry as to the effects of the inhalation of vapours, carefully to study this work, which may be said to form a model for all future observations, and patiently to follow in the footsteps of the great father of pneumatic chemistry as applied to medicine.

I will now submit two extracts from Sir H. Davy's writings, which will satisfactorily prove that he at least anticipated this important discovery. These extracts will probably be acceptable to those who have not an opportunity of consulting his works. It would be superfluous to quote the many observations he made as to the effects of nitrous oxide upon man. Similar experiments have since become familiar to every one. For these and many other interesting points relating to the subject—his comprehensive mind left nothing untouched—reference must be made to his work.

"In one instance, when I had headach from indigestion, it was immediately removed by the effects of a large dose of gas, though it afterwards returned, but with much less violence. In a second instance, a slighter degree of headach was wholly removed by two doses of gas.

"The power of the immediate operation of the gas, in removing intense physical pain, I had a very good opportunity of ascertaining.

"In cutting one of the unlucky teeth, called dentes sapientiæ, I experienced an extensive inflammation of the gum, accompanied with great pain, which equally destroyed the power of repose and of consistent action.

"On the day when the inflammation was most troublesome, I breathed three large doses of nitrous oxide. The pain always diminished after the first four or five inspirations; the thrilling came on as usual, and uneasiness was for a few minutes swallowed up in pleasure."*

"As nitrous oxide, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage during surgical operations, in which no great effusion of blood takes place."†

The foregoing extracts I leave to speak for themselves. I feel, that by recalling attention to the admirable work from which they are taken, and which has been unaccountably overlooked, I have discharged a duty to departed worth.

I deem it right, however, before concluding, now that experiments upon the human frame are being so enthusiastically made, to adduce the caution recommended by Dr. Beddoes and Davy, against employing the nitrous oxide in the cases of hysterical females. They cite cases showing the danger of the practice.

The most appropriate termination to this letter will be found in the concluding words of the great discoverer, whose claims I have asserted:—

"An immense mass of pneumatological, chemical, and medical information must be collected, before we shall be able to operate with certainty on the human constitution.

"Pneumatic chemistry, in its application to medicine, is an art in infancy, weak, almost useless, but apparently possessed of capabilities of improvement. To be rendered strong and mature, she must be nourished by facts, strengthened by exercise, and cautiously directed in the application of her powers, by external scepticism."

Notting-hill, March, 1847. ROBERT BARNES, M.B. Lond.

## THE POISONED MIND.

*To the Editor of* THE LANCET.

SIR,—The mind may be poisoned as well as the body. I am consulted by young men who, after sexual intemperance, perhaps after an attack of gonorrhœa, have been to consult some of the advertising quacks of the day. By these persons,

* Sir Humphry's Collected Works. By John Davy, M.D., 1839, p. 276, vol. ii.

† Op. cit. p. 329.

the mind of the patient is poisoned, and if mercury has been administered, it is in the bones; if there be a remaining gleet, the case is one of impotency. In either case, the youth becomes a prey to the worst form of hypochondriasis.

Is it not melancholy to think that the legislature has afforded no remedy for such an evil as this? If "grievous harm" be done to the body, the law inflicts its just punishment; but poisoning of the mind, like every species of quackery, is permitted. Nay, the pages our first journals are polluted with the advertisements of the perpetrators of this heinous wrong.

From that day, the poor patient is a prey to every hypochondriac terror; he becomes pale, and wan, and thin, the picture of weakness and misery; he is unfitted for business, for study, for recreation; one horrid dread, in short, pervades and corrodes his wretched being.

A Looker-on.

## MEDICAL REFORM.

*To the Editor of* The Lancet.

Sir,—In The Lancet of last week I observe a spirited letter, signed R. O., which deserves the particular notice of all those gentlemen possessing diplomas and degrees in medicine of the United Kingdom, who practise in England and Wales, without the leave of the usurped authority of the London Apothecaries' Hall. I think all those so situated should adopt the plan which was proposed lately when there was a talk of the militia bill being enforced—viz., to form an association for mutual protection on the principles of assurance companies, and whoever is attacked ought to be defended out of the common fund. A respectable solicitor could be easily found, and also a respectable treasurer, with other officers, without much trouble. I would also propose that the same fund be applied to the *prosecution* of cases wherein two or more persons join in a *conspiracy* to prosecute a *rival practitioner*. I believe the law is pretty strong on this subject.

I suppose the fraternity of Apothecaries will not be satisfied until, like the College of Physicians, they make a hero of such a gentleman as Doctor Harrison, who immortalized himself by his resistance of the prosecutions, or rather *persecutions*, of rival physicians, whom the judges and juries found on the trial to be his inferiors in both general and medical education. The question was not then, nor is it yet decided, whether the solemn Act of Union between England and Scotland in the time of James I., or the still more recent Union of Ireland and England in 1800, have been *repealed* by the Apothecaries' Act of 1815: to my simple apprehension the House of Lords would say that physicians and surgeons have the same right now to prescribe, attend, and apply remedies in England and Wales as they have in other parts of the United Kingdom, and as they had previous to 1815. The House would not fail to recollect that the avowed object of that Bill was for the *safety* and *protection* of the lives of her Majesty's subjects in England and Wales, and not for the *petty gratification* of *malicious spite* towards gentlemen of undoubted respectability and high qualifications. I would also suggest to your correspondent and others that it is very probable the universities and colleges whose members have been injured these last 32 years by the false construction put on the aforesaid act, would contribute morally and pecuniarily towards their support, so as to have the cause fairly brought before the public, and thence to the legislature; and it ought to be purely a question of sixteen corporate bodies against one. As the greatest test posterity will have to judge of your honesty will be the uniform consistency of your writings and actions throughout (we may hope) half a century; so we may expect that in case of malicious and spiteful proceedings of one class of medical men against another, the injured party will find a pillar of defence and support in your columns and advice from your wisdom, which will serve them as a rallying point throughout any struggle that may take place, either in the law courts or in the houses of Parliament. The cause of Universities and Colleges of Surgeons and all their members throughout the world, is identified with your Medical Registration Bill, and now is the time for them to rally round you, Mr. Warburton, and, I may say, every member of the House of Commons who either sat on the committee of 1835, or who have since directed their attention to the subject. As far as I can learn, Lord Grey in the House of Lords, and Sir George Grey in the House of Commons, as also Sir James Graham and Mr. Macauley, will give you their support; and the same English sense of justice which sought for and obtained parliamentary and municipal reform, will support you in your honest and manly efforts to obtain a reform inferior to neither in a social point of view; and the man who was mainly instrumental in striking down the upas tree of quackery in all its forms may rest satisfied that future historians will do him that justice which a present generation cannot foresee, or they, like me, would anticipate for the living that which they often reserve for the dead.

C. P.

## PROGRESS OF DENTAL SCIENCE.—ADMIRABLE RESULTS OF THE NEW COLLEGIATE SYSTEM.

*To the Editor of* The Lancet.

Sir,—The following interesting case may not be unacceptable to you, or uninstructive to others, more particularly as it very aptly illustrates the fact, that a metastasis of a function, from occult causes, may be produced, as well as those phenomena occurring in that of disease, and, per consequence, an unthinking or too hasty conclusive physician may be led into very ludicrous mistakes, if not placed in a very humiliating position.

Case.—August, 1846. Mary H——, aged twenty-four; married; of robust make; hitherto in the enjoyment of general good health, until within the last two months, in which period she has occasionally suffered from giddiness and nervous headach, and pains in her shoulders, attributed to a cold, and slight rheumatism, and also an occasional nausea, with muscæ volitantes. Being minus two front teeth, she applied to Mr. Jones, to have them replaced by artificial substitutes, which operation was completed with his usual mechanical tact. After having worn them two or three days, in addition to her headach, the superior maxillary apparatus became swollen and tumefied; the natural teeth loosened, however, with but little pain, but accompanied with fever, thirst, and (as her physician observed) a quick, jerking pulse, attended with nausea and a metallic taste in the fauces. On the fourth day from the commencement of the swelling, a profuse hæmorrhage from the gums and the roof of the mouth supervened, causing a remission of the headach, and lessening the fever. Her medical adviser, in addition to cathartic and diaphoretic medicines, had given her an astringent wash and gargle for the mouth and fauces: it stayed the hæmorrhage, but increased the distress of the head as well as the fever. He carefully examined the mouth and the general apparent characteristics of the affection, and without hesitation came to the conclusion, and attributed all her difficulties to the artificial teeth being set and inserted on bad gold, at the same time advising her to apply to and consult some dentists more familiar with these facts. She did so; she applied to two; and these professional gentlemen, with that intuitive generosity so much expected from, and which is such an amiable feature and peculiar characteristic of, this highly-respectable and learned profession, two D.D.S.'s, doctors of dental stupidity, big with the fate of dentition, dentistry, and its concomitants, at once made a display of their knowledge from the "dental lecture-room," "dental museum," "dental mechanical workshop and dissecting room;" of their knowledge of "practical dentistry," "dental pathology and physiology," "special dental pathology and therapeutics," nosology and pneumatics, and at once gave her an elaborate disquisition upon "dental pathology" and bad gold, and hydrostatically proved, to her entire satisfaction and dread, that her heart was actually a pump, and her mouth a cavity, (we add, with considerable suction,) and all were influenced by nervous ganglia, consequently there could be no doubt that the gold was of the most injurious quality, and the cause of all her troubles.

I should here state that the bleeding from the mouth recommenced a few hours after it had been stopped by the astringent application, and did not again cease, causing much debility. She applied, in accordance with the advice she had received, to Mr. Jones for reparation for the injuries he had caused upon her, as well as to "get her money back." He, being satisfied that he had done her justice in the quality and application of the materials used, suggested the justice, as she had consulted physicians and dentists, that he also might have the same privilege, to which she readily assented. Mr. Jones selected me for my opinion upon the case, and brought his patient to my offices.

I found that the patient had been married two years, had never been pregnant, was somewhat irregular "at times" in her menstrual periods, but which had never given her any uneasiness "to speak of;" she had not menstruated for the previous two months; never before was more than five or ten days after her time; did not suspect her suppression to be the cause of her illness; "the doctor and dentists had told her it was the bad gold was the cause."

I prescribed the emmenagogues and appliances suited to her case, hip-bath, &c. On the fourth day the matrix as-

sumed its functions, the hæmorrhage from the gums and roof of the mouth ceased, and in a few days she recovered her usual health.

It is no more than justice to Mr. Jones to state, that the gold he used for her mouth was 18 c., and the gold solder 15 or 16 c.; and with my advice, as there was no pain, she wore the teeth during the whole time that she was under my medical treatment, though contrary to reason: I did so to prove to her the injustice done.

I would beg to add, that it is still the decided opinion of the above two D.D.S.'s, doctors of dental stupidity, that all amalgams, as well as the gold used in this instance, are very injurious. A more striking proof could not be afforded of the recent extraordinary progress of dental science and the admirable results of the new collegiate system.—I am, Sir, very respectfully yours,

A. C. Castle, M.D.,
Surgeon-Dentist

New York, Jan. 1847.

## EXTRAORDINARY BIRTH.

*To the Editor of* The Lancet.

Sir,—Last week I attended a patient who was delivered of four children; and as such an instance is rare, I thought it would not be uninteresting to your numerous readers if I stated the particulars. I was called to her about eleven o'clock on Thursday night, and on my arrival, found her in strong labour, which had come on rather rapidly; the os uteri dilated, and the membranes pressing down at the os externum. These soon gave way, when a female child was born in the natural manner. On applying my hand to the abdomen, I felt the uterus still large, and on making a vaginal examination, discovered the membranes of a second child presenting, through which the feet were felt. The pains flagging, I waited for about three quarters of an hour, until they returned with some degree of force, when I ruptured the membranes, and the second child, a boy, was speedily born, footling. After this child was born, the uterus still continued large and hard, as if containing another child; the pains being rapid, I examined, and found the head of another child presenting. A male child was soon born. The uterus still did not feel quite emptied of its contents. This proved to be the case, for a fourth child was discovered, presenting the feet. This, a female, was soon born. They were all alive. The four funes were attached to a single placenta. The children were very small—not larger than seven months' children, as was to be expected. They lived between forty and sixty hours. The mother is doing well.—I remain, yours truly,

Great Suffolk-street, April, 1847. George Elisha Newth.

# Medical News.

Royal College of Surgeons.—The following gentlemen were admitted Members of this Institution on Friday, the 16th instant—viz., Messrs. Peter Augustus La'Fargue, Asylum-road, Old Kent-road; Walter Yonge, St. Ives, Cornwall; Frederick Moore, Shelsley-Beauchamp, Worcestershire; Samuel Wilks, Camberwell; Hugh Robert Rump, Wells, Norfolk; Thomas Webb, Cheadle, Staffordshire; John Edward Ellerton, Aberford, near Leeds; Edward Adams, Great Barton, Suffolk; William Daniel Michell, Truro, Cornwall; David Hughes, Plas Newydd, Llandegla, Ruthin; and Charles Munday, King-street, Snow-hill.——On the 21st instant, Messrs. Henry Barlow Gibbon, Ashton-under-Lyne; Alexander Ferguson, Victoria-place, Hoxton-town; James Vaughan Hughes, Queen's College, Birmingham; Jabez Harwood, Sheffield; John Samuel Pearse, Newcastle-upon-Tyne; William Parker Shipton, Cheltenham; William Mutrie Fairbrother, London-road, Southwark; Richard Donald Harris, Gloucester; James England Gannon, Dublin; William Henry Sproston, Birmingham; James Laurence Cotter, Army; George Fry, Mayfield, Sussex; and John Thomas Campion, Exeter, Devon.

At the meeting of the 16th, Mr. Henry Piers passed his examination for naval surgeon: this gentleman's diploma from the London College is dated December 11, 1840.

Apothecaries' Hall.—Names of gentlemen who passed their examination and received certificates to practise, on Thursday, April 15th, 1847.—Frederick Freeman Allen, Market Harbro', Leicestershire; William Palmer, Rugeley, Staffordshire; William George Harvey, Penzance, Cornwall; William Mott; William Ellis Hambly, Kingsand, near Plymouth; Abraham Jubb, junior, Halifax, Yorkshire; William Price, Wrexham, Denbighshire; Edward Haycock, London; William Alexander Bryden, Wadhurst.

The Duke and the Quacks.—Observing the name of his Grace the Duke of Wellington advertised the other day as the patron and swallower of the pills of one of the pestiferous tribe of London medical quacks, we used the liberty of asking the illustrious duke, whether his Grace gave authority for the publication, and the following characteristic reply was received in course of post:—"Strathfieldsaye, April 10, 1847. F. M. the Duke of Wellington presents his complimentts to Mr. M'Nab. He has received his letter. The duke knows nothing of the person alluded to, or his pills. No individual of his class has authority to use the name of the Duke of Wellington in any manner."—*Glasgow Constitutional.*

The Jacksonian Prizes.—At the late meeting of the Council of the Royal College of Surgeons, the prizes founded by the late Samuel Jackson, Esq., were awarded to Mr. Thomas Callaway, Jun., of Wellington-street, London-bridge, for his Dissertation on Luxations and Fractures of the Clavicle, Scapula and Scapular end of the Humerus, and Treatment. This gentleman is a son of the member of the Council. The other prize, of equal value, was awarded to Mr. Edward Hulme, of Exeter, Devon, for his Dissertation on Asphyxia, its various Causes, Forms, and Treatment. The subject of the Jacksonian Prize for the present year is "The Nature and Treatment of Permanent Contraction of Muscles, especially in relation to Distortion and Disability." The subject of the Collegial Triennial Prize of Fifty Guineas is "The Origin, Connexion, and Distribution of the Nerves of the Human Eye, and its appendages," illustrated by comparative dissections of the eye in other vertebrate animals.

The Cooperian Prize.—Considerable surprise has been occasioned by the appearance in this journal, on Saturday last, of an advertisement from the Physicians and Surgeons of Guy's Hospital, stating that they were unable to award the prize for the present year, the subject of the prize being the Structure and Uses of the Supra-Renal Capsules; the competitors not having, in their opinion, complied with the conditions of the bequest, and inviting any candidates aggrieved by the decision to make application to the umpires. It will be recollected that this triennial prize of 300*l.* was founded by the late Sir Astley Cooper, Bart.

Medical Appointments.—*Norfolk and Norwich Hospital:* Dr. Arthur Tawke has been elected physician to this Institution, in the vacancy occasioned by the death of Dr. Lubbock.—*Taunton and Somerset Hospital:* Dr. Francis Henry Woodforde has been appointed one of the physicans to this Institution, in the vacancy occasioned by the resignation of Dr. Catlett.—*Exeter Dispensary:* Mr. Pridham having resigned his appointment of Surgeon to this charity has been succeeded by Mr. J. W. Harris.

Western Medical and Surgical Society.—The first Anniversary Meeting of this Society was holden in their rooms in Sloane-street, on Friday the 9th instant. The report of the Council was read. It commences by congratulating the members on the success which has hitherto attended the progress of the Society. There are upwards of sixty members; the library contains already more than 300 volumes, and the reading-room, which is open daily from ten in the morning till ten in the evening, has been regularly supplied with all the weekly and quarterly medical periodicals. The report proceeds to allude to the valuable communications which have been read at the monthly meetings during the first year, and the interesting discussions which have ensued, and dwells especially on the value of these meetings for promoting kindly feelings among the profession. It concludes with some suggestions, the result of a year's experience, for the future. The most important of these is, that the meetings should be held once a fortnight during the medical session, the monthly meetings being retained during the recess. The report having been received and adopted, thanks were voted to the president and other officers for their valuable services during the past year, and the officers for the present year were elected.

Sir James Clark was re-elected president; Messrs. Dickenson and Lane, and Dr. Mantell, were re-elected vice-presidents, with Dr. Hardwick, of Kensington, in the room of Mr. Woolley—the laws of the Society requiring that one of the vice-presidents should retire annually, and the lot having fallen on that gentleman. Mr. Woolley was elected a member of the council with Messrs. Gaskell, Godrich, Keen, Mackintosh, Mould, Pettigrew, Pollard, Seaton, Synnot, Warder, and Wilson. Mr. Muller was re-elected treasurer, and Mr. Barnes, secretary.

Obituary.—On Friday, the 2nd of April, 1847, died, at his house in Gracechurch-street, London, Richard Casson, Esq., surgeon. He had been in practice at Hull, in York-

shire, for many years, where he was highly respected for his sound professional qualifications, his sterling worth, and honourable character. Some twenty years ago, in conjunction with the late excellent Dr. Alderson, he established the East Riding Lunatic Asylum, which is now under the superintendence of his son, Mr. F. W. Casson. In this institution he devoted himself to the amelioration of the physical and moral condition of the insane. The *Hull Advertiser* of April 9th, after speaking of his death, and giving a short notice of him, concludes with the following just and honourable tribute to his memory:—"In all relations of private life he was amiable, upright, and benevolent; his attachment to liberal principles was as steady as his views were sound and comprehensive. He will long be lamented by a wide circle of friends, and by none more sincerely than the poor, whose friend he was throughout the whole of his professional life."

THE ROYAL SEA-BATHING INFIRMARY, MARGATE.—At the last quarterly meeting of the governors of this institution, the following "protest" from the London Medical Board was read. "*To the Governors of the Royal Sea Bathing Infirmary.*—At the desire of the Court of Directors, we drew up a well-digested plan for increasing the efficiency of the medical staff of the Infirmary; that plan, though carefully reconsidered and affirmed by us, has been rejected. We sincerely regret this decision, and are desirous that the governors should know that we do not give our sanction and support to the present arrangements, which we believe are not adapted to promote the usefulness of the Infirmary as a charity, nor raise its character as a medical institution." (Signed,) P. Black, M.D.; F. Cobb, M.D.; J. Dunlop, M.D.; H. Jeaffreson, M.D.; J. G. Andrews; T. Callaway; F. Le Gros Clark; William Coulson; T. Blizard Curling; James Farish; C. Aston Key; Richard Partridge; Thomas Wormald.

We, the undersigned, not having been present at the meetings of the medical board in which the plan above referred to was considered and resolved on, yet knowing the nature and importance of the measure, concur in the opinion of our colleagues:—B. G. Babington, M.D.; Richard Bright, M.D.; H. S. Roots, M.D.; John Scott; B. Travers.

The plan alluded to consisted in a series of regulations for the guidance of the medical officers, and the appointment of three additional local honorary surgeons, who should each visit the patients twice a week, and give directions to the house-surgeon, in fact, to perform the same duties as are executed by the surgeons of the metropolitan and provincial hospitals; these rules, made by the medical board in London, at the request of the directors, were confirmed, and three surgeons appointed; prior, however, to the election of these gentlemen, the directors advertised for a successor to Mr. W. O. Chalk, who had held the appointment upwards of twenty years, stating in their advertisement, that the duties of the person elected would be subject to the regulations of the medical board. Mr. Field, a young member of the College, was appointed: this gentleman, however, on entering on the duties of his office, evinced considerable repugnance to acting under any control, refusing to follow the directions of the surgeons, or to accompany them on their visits to the patients, though a paid officer of the Institution; and in this opposition, it is to be regretted, he is supported by the treasurer, Mr. Alderman Gibbs, and a few directors. Much dissension ensued, and the dispute ends by the directors requesting the surgeons to discontinue their attendance; and Mr. Field takes the entire charge of the surgical cases for the remainder of the season. Hence the above protest. Since the above was written, a report of former proceedings has appeared in a Kentish paper, in which it is stated by Mr. Waddington, (one of the local surgeons, and a warm supporter of Mr. Field in his opposition to the medical board, signing the above protest,) that he (Mr. Field) "was a gentleman too well bred for the appointment he filled," and, moreover, was "married to the daughter of an alderman of the City of London." The last circumstance may account for Alderman Gibbs' conduct in what must be considered a disgraceful affair, and ill calculated to promote the interests of the Infirmary.

## CORRESPONDENTS.

*Alex. Wilson.*—The party named is one of the odious, obscene, and dishonest quacks, whose practices we have so often exposed. Our correspondent says our answer "may be the means of saving a life." We trust it may—a thing by no means improbable, if life be entrusted in the hands of such a rapacious quack as the party referred to.

*Dr. Pring's* excellent paper shall be published in an early number.

*Mr. Page.*—The wish of our correspondent shall be attended to.

*Justicia* should refer the question to his barber; barber-surgeons are out of date.

*Mens tibi conscia recti.*—We admire the temper, while we condemn the conclusion, of the communication forwarded to us. In due time it will be seen that we have good grounds for attacking popular medical writers, whether of high or low degree.

*Centurion.*—We are obliged for the trouble which has been taken. Will our informant send us the next advertisement of the class he exposes, which he may meet with.

*Mr. Christophers.*—We believe the paper was acknowledged. It was duly received, and press of matter has been the only reason for its being deferred.

*A Constant Reader* asks—"If Holloway uses the name of Sir B. Brodie without authority, and obtains money upon the strength of such fraud, is he not liable to be indicted for obtaining money under false pretences?" Without a doubt; and the profession ought to have a public prosecutor for the correction of such frauds.

*A Liverpool Surgeon* shall not be disappointed.

*Mr. Perks* writes, in an angry tone, to complain of the terms in which we treated his printed circular, announcing the transfer of his practice to Mr. Philson. Mr. Perks writes—"I have yet to learn the disgrace that is connected with the announcement of the transfer either of *a commercial or professional business*, especially when one of the parties is about to remove to a distant part of the country." We hold that every man is bound in honour to uphold the respectability of the profession, and this is poorly done either by circulars or comparisons of any kind between the profession and ordinary trading. Our strictures were directed, not against Mr. Perks or Mr. Philson, but against the system.

*Vigil* is thanked.

*H.G.*—A graduate of Aberdeen cannot obtain the extra-licence of the College of Physicians without examination. The licence of the Edinburgh College alone does not give a legal title to the M.D.

*A Bartholomew Student.*—The matter is scarcely worth a public complaint.

*Mr. J. Smith* (Bridge-street, Southwark) is informed that we cannot be instrumental in any way in promoting the use of a secret remedy: to this rule of conduct we have ever adhered. Secrecy is quackery in one of its worst forms.

The *Brighton Gazette*, containing the quackish advertisement of the migrating oculist, has been received.

*Mentor.*—We have reason to believe that General Sir HOWARD DOUGLAS will again bring the subject under notice in the House of Commons. We have been favoured with a corrected copy of the gallant General's able speech, and shall embrace the opportunity of publishing an extract from it in the next LANCET.

The "Review of the Naval Service of Boys' Bill" has been received.

*An Old Practitioner.*—It is very questionable whether the indictment for misdemeanor will stand, as the Act 55th George III. contains a distinct provision for inflicting a penalty for the commission of the offence charged. To sustain such indictments, when their legality is questionable in the Court of Queen's Bench, would be extremely difficult.

The note of *Mr. S. H. Wraith* was received; but the circular which Mr. Wraith stated that he had enclosed did not accompany it. The note formed the only contents of the envelop.

The proposal of *Dr. Price* to appoint inspectors to superintend the operation of the Medical Registration Act, would not meet with the sanction of the legislature. Besides, under the new Bill, if it should, fortunately, become a law, medical practitioners would themselves be the most efficient inspectors, in every place where they may be residing. With such a law in operation, it would be impossible that unqualified practitioners could exist to any extent, or that quacks, qualified or unqualified, should continue to disgrace the profession.

The account of the further experiments with ether, on the horse, by Messrs. Henderson and Cherry, has been received.

*Inquirer.*—The Coroner was not required by law to summon the medical practitioner who had been in attendance previous to the death. Had such been the law, Cronin ought to have been called, and to have made the post-mortem examination, in the case of his patient, the late Miss Collyer. If the judges of the Court of Queen's Bench had read the MEDICAL WITNESSES' ACT only for a moment, they must have discovered that its provisions, with respect to medical witnesses, did not supersede the common law, but were framed to aid its powers. The Coroner has *authority* to summon the practitioner who was in attendance, if it appears to him to be necessary, but he is not *required* to summon such practitioner.

We have to acknowledge the receipt of the *Glasgow Constitutional*, the *Banner of Ulster*, the *Nottinghamshire Guardian*, *Emery's Journal*, and the *Warwickshire Standard*.

*** Numerous communications are in type, but are omitted from want of room.

Communications have been received from Dr. James H. Pring, (Weston-super-mare;) Mr. Collins; Mr. Watson Perks; Mr. Cattell, Braunston; Vigil; Dr. Venables; Dr. Ormerod; H. G.; Mr. A. B. Barnes; Dr. Allnatt; a Bartholomew Student; R. L. Baker, (Birmingham;) Mr. J. Jackson, (Long Clawson;) Dr. Dick; Mr. Douglas Fox, (Derby;) Mr. Levison, (Brighton;) Mr. Edward Garney, (Cranborne, Cornwall;) Dr. J. C. Hall, (East Retford;) Mr. Page, (Carlisle;) Mr. L. Owen Fox, (Broughton;) Mr. Young, (Sunderland;) Dr. Farebrother, (Bristol;) Mr. Garlick, (Halifax;) Centurion; Mr. Christophers; Iatros; Mr. H. Trelfer; Mr. J. Gorringe, (Truro;) Mr. C. Bullen; a Subscriber to THE LANCET, (with the extraordinary circular of Mr. Innes, of Fitzroy-square;) and Mr. W. J. Cumming. The *Birmingham Journal* was not received from Mr. C.

MEDICAL TRANSFER AND PARTNERSHIP.

MR. ORRIDGE, MEDICAL TRANSFER AGENT, 30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the honour of being allowed to refer TO THE WRITTEN TESTIMONY of upwards of forty gentlemen of the highest respectability, (between many of whom he has been professionally engaged in matters of transfer,) as a guarantee of the sincerity of his endeavours to conduct business in an honourable and straightforward manner.

Mr. Orridge takes leave to point out that his Agency offers particular advantages to gentlemen ABOUT TO RELINQUISH PRACTICE, EITHER WHOLLY OR IN PART, by placing them in direct communication with applicants for purchase of suitable professional standing and pecuniary resources, an INDISCRIMINATE publicity being carefully avoided.

Gentlemen ABOUT TO COMMENCE, who favour Mr. Orridge with the nature and extent of their wishes regarding purchase, may depend on being informed of appropriate opportunities as they occur.

Assistants provided on the plan formerly observed at Apothecaries' Hall.

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MEDICAL PRACTICE, HAMPSHIRE.—In a well-known, pretty, ancient Market Town, near the New Forest, an increasing PRACTICE of standing for disposal. Rent, Taxes, and Gardens, £20. It is desirable that a married man should take this practice, his success being certain. £180 will cover the whole. Soil gravelly, and population under 10,000.—Application to Mr. Pyke, Medical Agent, 87, Chancery-lane, and Verulam Chambers, Lincoln's-inn.

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MEDICAL COUNTRY PRACTICE.—TO BE DISPOSED OF, the PRACTICE of a Gentleman, recently deceased, on the borders of Bedfordshire and Huntingdonshire. Terms moderate. For particulars, apply to Messrs. Sharman and Turnley, Solicitors, Bedford.

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WANTED, by a Medical Man of some years' standing, an ASSISTANCY in a large practice, with a prospect of a more permanent arrangement.—Address, T. G., LANCET Office, Strand.

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A GENERAL PRACTITIONER in the Country wishes to engage an ASSISTANT, whose principal duties will be to dispense, and occasionally to visit and attend midwifery.—Letters stating age, salary, &c., to be addressed to J. H., Post-office, Marsden, near Huddersfield.

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TO CHEMISTS AND SURGEONS.

FOR IMMEDIATE DISPOSAL, a RESPECTABLE CONCERN, in a business situation. Moderate rental, and convenient house. Modern Fixture Fittings, Bottles, Drugs, &c., with or without the entire furniture of house, linen, glass, and every other item. The price for the whole will not exceed £200. Unexceptionable reasons assigned for parting with the same.—Apply in the first instance to Mr. Wilkes, corner of Stepney Green, Mile-end.

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TO GENTLEMEN ABOUT TO COMMENCE PRACTICE.—The Fixtures complete, Bottles, Drugs, &c., of the Surgery of a General Practitioners TO BE DISPOSED OF.—For particulars, apply on the Premises, 18, Holland-place, Clapham-road.

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A YOUNG GENTLEMAN, aged Nineteen, who has attended one Session in London, wishes for a Situation as DISPENSING and VISITING ASSISTANT to a Surgeon during the Summer Months, where board and lodging, and gentlemanly treatment, would be deemed equivalent to his services.—Address, by letter, prepaid, M. R. C., care of Messrs. Hunt and Son, Booksellers, Ipswich.

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A B.M. and M.R.C.S.L., residing in Devonshire, has a VACANCY for TWO PUPILS. Every branch of the profession taught, and the fee moderate.—Address. A. Q., THE LANCET Office.

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TO SURGEONS, &c.

WANTED, by a respectable, well-educated young man, an ENGAGEMENT as DISPENSING ASSISTANT. The Advertiser has had considerable experience both in Hospital and Private establishments, and can offer the most satisfactory references, &c. Address, L. C. P., Post-office, Abergavenny.

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WANTED immediately, a DISPENSING ASSISTANT to a General Practitioner. Address, A. B., Post-office, Lobro'.

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TO MEDICAL STUDENTS.

A GENTLEMAN, resident near St. George's Hospital, the Chelsea Gardens, and about half-an-hour's walk from King's College, wishes to receive into his family a Gentleman, whom he would assist in his studies, treat liberally, and afford an opportunity of attending Midwifery if desired. Apply, by letter, paid, to J. L., Roberts' Library, Arabella-row, Pimlico.—A Transferred Pupil would not be objected to.

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MEDICAL.—WANTED, a married Gentleman to pay a Premium for a PARTNERSHIP in a Hydropathic Establishment. Apply to Messrs. Nicholls and Doyle, Solicitors, 48, Bedford-row, London.

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MEDICAL.—A Medical Man in the country is in immediate want of an active and qualified VISITING AND DISPENSING ASSISTANT. The highest references as to ability and general conduct will be expected, and may be forwarded, with the application, to A. Z., Messrs. Corbyn and Co., Chemists, 300, Holborn. A man of studious habits, and of a scientific turn of mind, will be preferred.

---

SCHOOL OF MEDICINE, ALDERSGATE-STREET.—Dr. ARLIDGE will commence his COURSE of LECTURES on BOTANY, on WEDNESDAY, the 28th instant, at Ten A.M., and will continue them daily, Saturdays excepted, at the same hour.

Dr. SNOW will LECTURE on FORENSIC MEDICINE daily, Saturdays excepted, at Nine A.M., beginning on MONDAY, MAY 3rd.

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NUMBER ONE, SAINT PAUL'S CHURCHYARD.—It is a well known fact, that the original cost of the finest CONGOU TEA is over thirty-nine taels, or 2s. 2d. per lb., which, with duty added, makes the cost to the merchant in this country, 4s. 4½d. per lb. for the finest Congou tea. We have, ever since we began selling teas at "Number One," sold this description at 4s. 6d., per lb. Hundreds and thousands of people have tried it, and can vouch for its strength and richness of flavour. Nobody ever finds fault with it, and it pleases everybody because it is both good and cheap.—DAKIN and Company, tea-merchants, Number One, St. Paul's-churchyard.

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WANTED, for the Parish Hospital of Stoke-upon-Trent, an active, intelligent Woman, from 35 to 45 years of age, as NURSE; one who has been trained in a Public Hospital, and is thoroughly acquainted with the duties of the office, will be required. The entire supervision of the Hospital being under her control, unexceptionable testimonials of competency, honesty, and sobriety, must be forwarded to the Clerk to the Guardians forthwith. Salary, £15 per annum, together with board, washing, and lodging.

THOMAS GRIFFIN, Jun., Clerk to Guardians.

Stoke-upon-Trent, Staffordshire, April 15th, 1847.

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COVENTRY AND WARWICKSHIRE HOSPITAL.—HOUSE-SURGEON WANTED.—He must be a Licentiate of the Apothecaries' Company. Salary, £60 per annum, with furnished apartments in the hospital, coals, candles, and attendance. A Dispenser is employed. The duties to be commenced on July 1st.—Applications to be made, and Testimonials addressed, to the medical officers, care of the Secretary, Hospital, Coventry.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Jacksonian Prizes for the last year, on Luxations and Fractures of the Clavicle, Scapula, and Scapular end of the Humerus, and Treatment—and on Asphyxia, its various Causes and Forms, and Treatment—have been respectively awarded to Mr. THOMAS CALLAWAY, Jun., of Wellington-street, Southwark, and to Mr. EDWARD HULME, of Exeter, Members of the College.

By order,

EDMUND BELFOUR, Sec.

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FORENSIC MEDICINE & BOTANY.—DR. VENABLES will begin his SUMMER COURSES on the above, on Monday, the 3rd of May inst., at eleven o'clock in the morning, and continue the same daily till the end of the course.

TERMS:

| | |
|---|---|
| Forensic Medicine .. .. .. .. | One Guinea. |
| Botany .. .. .. .. .. .. .. | Two Guineas. |

Further particulars may be had of Dr. Venables, at his residence, 5, Saint Vincent-place, City-road, or at the Lecture-room, 24, Bartholomew-close.

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ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—FOUNDED 1804.

*Consulting Physician*—DR. FARRE.
*Physician*—DR. F. FARRE.
*Surgeons*—G. MACKMURDO, Esq., J. DALRYMPLE, Esq., J. DIXON, Esq.
*Assistant-surgeons*—G. CRITCHETT, Esq., W. BOWMAN, Esq.

Upwards of seven thousand patients affected with Diseases of the Eye are under treatment every year at this hospital; and those whose cases require operation, or who are suffering from severe inflammation, are admitted into the wards.

Hours of attendance daily from half-past Eight to Ten.

Fee for One Year, FIVE GUINEAS.

Pupils may continue their attendance on the practice of the hospital for a longer period, with the sanction of the medical officers; but no further fee is required.

Lectures will be delivered by the medical officers during the Summer. The Introductory Lecture by Dr. FARRE.

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UNIVERSITY COLLEGE, LONDON.—FACULTY OF MEDICINE.—SUMMER TERM.—The Summer Term will commence on the 1st of May.

Classes in the order in which the Lectures are delivered during the day.

BOTANY—Professor LINDLEY, Ph.D.

MIDWIFERY—Professor MURPHY, M.D.

COMPARATIVE ANATOMY AND ZOOLOGY—Professor GRANT, M.D.

MEDICAL JURISPRUDENCE—Professor THOMSON, M.D.

PRACTICAL CHEMISTRY—Professor FOWNES, F.R.S.

ANALYTICAL CHEMISTRY—Under the superintendence of Professor GRAHAM and Professor FOWNES.

PATHOLOGICAL ANATOMY—Professor WALSHE, M.D.

MEDICAL CLINICAL LECTURES—By Dr. WILLIAMS, Dr. THOMSON, and Dr. TAYLOR.

SURGICAL CLINICAL LECTURES—By Mr. LISTON and Mr. QUAIN.

Hospital Practice daily.

Prospectuses may be obtained at the Office of the College.

ROBERT LISTON, Dean of the Faculty.
CHARLES C. ATKINSON, Secretary to the Council.

April 15, 1847.

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DR. J. HALL DAVIS, Physician to the Royal Maternity Charity, will commence his LECTURES on MIDWIFERY and the DISEASES of WOMEN and CHILDREN, for the Summer Session 1847, on TUESDAY, the 4th of MAY, at Nine A.M., in the Theatre at his Residence, 17, Russell-place, Fitzroy-square.—For further particulars see the prospectus.

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LECTURES ON DISEASES OF THE UTERUS.—On WEDNESDAY, MAY the 26th, at Four P.M., Dr. HENRY BENNET, Obstetric Physician to the Western General Dispensary, (New-road, Lisson-grove,) will commence a Course of Lectures on Diseases of the Uterus. The Course will consist of about eight or ten lectures, to be delivered at the Dispensary, at the hour stated, on the Wednesdays and Fridays, and will be FREE TO STUDENTS AS WELL AS TO MEMBERS OF THE PROFESSION.

ST. GEORGE'S HOSPITAL.—The SUMMER SESSION will commence on the 1st of MAY.

BOTANY—Mr. HENFREY, F.L.S.
MEDICAL JURISPRUDENCE—Dr. BENCE JONES, F.R.S., and Mr. H. CHARLES JOHNSON.
MEDICAL CLINICAL LECTURES—Dr. NAIRNE.
SURGICAL CLINICAL LECTURES—Mr. CÆSAR HAWKINS.

Further information may be obtained from the apothecary of the Hospital.

UNIVERSITY OF EDINBURGH.

THE SUMMER SESSION OPENS IN MAY.

BOTANY.*—Dr. BALFOUR, at the Garden, Monday, May 3rd, Eight o'clock A.M.
MEDICAL JURISPRUDENCE.—Dr. TRAILL, Monday, May 3rd, Eleven o'clock A.M.
CLINICAL SURGERY.—Mr. SYME, Monday, May 3rd, Twelve o'clock Noon.
CLINICAL MEDICINE.—Drs. CHRISTISON and ALISON, Tuesday, May 4th, Twelve o'clock Noon.
PRACTICAL ANATOMY.—Mr. GOODSIR, Monday, May 3rd, One o'clock P.M.
NATURAL HISTORY.—Mr. JAMESON, Monday, May 3rd, Two o'clock P.M.
ROYAL INFIRMARY, Daily, at Noon.
DISSECTING ROOMS open Daily, under the superintendence of Mr. GOODSIR.
PRACTICAL CHEMISTRY and PHARMACY in the Laboratory of the University.

BLAIR WILSON,
April 17th, 1847. Secretary to the University.

* The Course of Botany will be given only in Summer.

THE NEW SYSTEM of TEACHING the CLASSICS, invented by an M.A., of long and extensive experience in tuition. This system is not based on any mechanical principle, such as phrenotypics or artificial memory; but is purely intellectual, and so constructed as to qualify any one for public examination at the schools or universities in as many months as the old system requires years to effect. In fact, the author of it will teach any one not knowing a single Greek character, without regard to sex or age, the entire of the Greek or Latin accidence, in from twelve to fourteen lessons. Terms moderate, and references to heads of schools and colleges. Address to Eta, at Messrs. Hatchards, Piccadilly.

An Evening Class for professional gentlemen. Terms, Three Guineas per quarter.

C. HOCKIN & Co. beg to invite the attention of the Medical Profession to their PREPARATION of SEIDLITZ, in ONE POWDER, which may be prescribed as an effervescing Saline, or as an Aperient, in the form of Draughts or Powder. Hockin's Liquor Sarsæ Fluid, and Concentrated Infusions, manufactured on a principle (they believe) not adopted by any other house, cannot be surpassed in quality or moderateness of price.

Medicated Wool, in bales of 28lbs. or in small packets.

C. Hockin and Co., 38, Duke-street, Manchester-square, and 1, Bishopsgate-street Within.

TO SURGEONS, DRUGGISTS, &c.

C. JOHNS, MEDICAL FIXTURE DEALER AND FITTER, begs to acquaint his Customers and Friends in the above Professions, that in consequence of his late Premises, Nos. 13 and 15, Hanover-street, Long-acre, being required by Her Majesty's Commissioners of Woods and Forests, for a new line of street, he has removed to No. 44, GREAT QUEEN-STREET, LINCOLN'S-INN-FIELDS, (corner of Drury-lane, and adjoining his other Premises, No. 157, Drury-lane, London,) where he trusts, by strict attention to the orders he may be favoured with, to continue to ensure the confidence of those who may entrust him with the same.

Estimates and Plans made.

Stock and Fixtures valued in Town or Country, and Negotiations effected for the Sale or Purchase of Businesses, and Registered free of expense.

Second-hand Fixtures purchased or taken in exchange. Established 1820.

ETHER INHALER.—Dr. SNOW'S Apparatus, as used most successfully at St. George's Hospital, is manufactured by Ferguson, Instrument-maker to St. Bartholomew's Hospital. This scientific apparatus is made of metal, and not liable to accident.

"Dr. Snow's invention is peculiarly adapted to country practice, being small, compact, and portable."—THE LANCET, March 13, 1847.

"Dr. Snow's apparatus has the important advantage of enabling the operator to know exactly the strength of the vapour administered, to regulate its quantity, and also to ascertain the precise amount of fluid ether consumed."—BRITISH AND FOREIGN MEDICAL REVIEW.

Price £2 2s. In case, with thermometer and bottle for ether, £3 3s.
21, Giltspur-street, City,

Where may be procured Mr. Tracy's Treatise on the Inhalation of Ether, price 1s.

THE ATRAPILATORY, or LIQUID HAIR DYE; the only dye that really answers for all colours, and does not require re-doing, but as the hair grows, as it never fades or acquires that unnatural red or purple tint common to all other dyes.—BOTANIC WATER and BEAR'S GREASE. When the hair is becoming thin and falling off, the only effectual remedy, besides shaving the head, is the use of the two above-named articles, applied alternately—the Botanic Water to cleanse the roots from scurf, and as a stimulant, and the Bear's Grease as a nourisher.—THE NEW TOOTH-PICK BRUSH, thoroughly cleansing between the teeth, when used up and down, and polishing the surface when used cross-ways. The hair warranted never to come out.—The UNION and TRIPLE HAIR BRUSHES.—The DOUBLE ANTI-PRESSURE NAIL BRUSH.—The MEDIUM SHAVING BRUSH.—The RAILWAY STROP and POWDER.

The above new and elegant articles, in addition to a very extensive assortment of beautiful PERFUMES, are the sole MANUFACTURES and INVENTIONS of MESSRS. ROSS AND SONS, 119 and 120, Bishopsgate-street, London.

DEFORMITIES OF THE CHEST AND SPINE.—EDWIN EAGLAND'S New Invented INVISIBLE SPINE SUPPORTS are respectfully submitted to the Profession, in the confident assurance that they will be found well deserving their notice, their usefulness in assisting in the correction of LATERAL CURVATURE having acquired for them the patronage of the highest surgical authorities. As any attempt at a description must needs fall short of giving a correct idea of the plan itself, Mr. EAGLAND solicits an inspection. They are remarkably light, beautifully simple, and eminently successful; quite imperceptible, and conceal the deformity from the keenest observer.

21, Coventry-street, Haymarket, London. Hours, 12 till 6.

ETHER AGENT FOR RESUSCITATING PATIENTS AFTER INHALING THE VAPOUR OF ETHER.

Mr. HOOPER has affixed to his Etherial Inhaler the necessary appendage for giving OXYGEN, and which is in daily use by Mr. ROBINSON and others. Operating Surgeons and Dentists giving Ether should lose no time in procuring the requisites for this valuable agent.—Orders, addressed to Mr. Hooper, Operative Chemist, Pall-mall East, will receive prompt attention.

COXETER'S ROTO-LEVER SCARIFICATOR.
Registered July 3rd, 1845. No. 484.

Pronounced by many of the most scientific gentlemen in the profession who have used it as the best and most ingenious instrument they have seen. It has very strong springs, yet the lancets can be raised by a child six years of age. The flying-back of the trigger is prevented, the discharge rendered easy, and the noise much lessened.

It is highly finished, and price the same as the old instrument, £2 2s.

The Editors of THE LANCET, after examining it, with other inventions, were pleased to express the following, page 538, Nov. 15th, 1845:—

"We have examined the instruments described by Mr. Coxeter, and think them ingenious modifications of those in use, and worthy the attention of the profession."

Used and recommended by Messrs. Betts, Cuppers to University College and Middlesex Hospitals.

J. Coxeter, Surgeon's Instrument-maker to University College Hospital, 23, Grafton-street East, London.

DRUG PRICE CURRENTS forwarded free of Postage, on application, by Messrs. HEWLETT and GODDARD, Wholesale Druggists, 6, Arthur-street West, Upper Thames-street, near London Bridge, Removed from Hatton-garden; containing the Ready Cash Prices for Drugs and Pharmaceutical Preparations of the purest quality. Messrs. H. and G. solicit the attention of the Medical Profession resident in the Provinces, Infirmary Committees, Dispensaries, &c., &c., to the advantages attendant upon the above Price Current.

TO SCIENTIFIC CHEMISTS, LECTURERS, AND THE TRADE.

CHEMICAL TESTS, RE-AGENTS, and Apparatus of every description, supplied on the most advantageous terms. Full Descriptive Catalogues, illustrated with 250 Engravings of Apparatus, post-free, on receipt of eighteen postage stamps.

Estimates for sets of apparatus forwarded gratuitously on application.

George Simpson, Operative Chemist, and Manufacturer of Chemical and Philosophical Apparatus, 1 and 2, Kennington-road, corner of Newington-crescent, London.

ROYAL GERMAN SPA, QUEEN'S PARK, BRIGHTON.
UNDER HER MAJESTY'S ESPECIAL PATRONAGE.

STRUVE'S PUMP-ROOM, offering every facility for taking a course of Mineral Waters in precisely the same perfection and with the same benefit, as at the natural Springs, WILL RE-OPEN for its TWENTY-SECOND SEASON, on the 3rd of May, and close in November.

Struve's Waters are also sold in bottles; and orders are executed throughout the year by Struve and Co., Brighton; and by their Agents, George Waugh and Co., Chemists to the Queen, 177, Regent Street, London; and numerous other respectable houses in London and other towns, where a succinct account of the waters, and of their application, including the highest medical testimony, may be obtained gratis.

To the waters of Vichy, Salzbrunnen, Saratoga, Homburg, Kreuznach, Kissingen, Marienbad, Eger, Spa, Pyrmont, Pulna, Seltzer, Fachingen, &c., sold in glass bottles, are now added, in stone bottles, those of Carlsbad and Ems, with directions respecting their temperature.

STRUVE and Co. feel it necessary to caution the public against spurious articles.

SEND Eight Postage Stamps, and by return, and post free, you will get a handsome TEASPOON, of C. WATSON'S SOLID ALBATA PLATE, which is rapidly superseding Silver for all domestic uses. It is equally sweet and handsome as Silver itself. This is the only SOLID substitute now sold; and, unlike plated Goods of any kind, there is nothing to wear off; so that the more you rub and clean it, the better it will continue to look, though it should be in daily use for fifty years. Don't be afraid to put it to any test, and then send your order. A full catalogue of prices, with patterns of every other article manufactured from this beautiful metal, will be enclosed with the sample Spoon.

Address C. Watson, 41 and 42, Barbican, and 16, Norton Folgate, London.

# Hospital Reports.

## WESTMINSTER HOSPITAL.

### NEPHRIA. URINE OLEO-ALBUMINOUS. DEATH.

Communicated by T. G. TEBAY, Esq., Resident Medical Officer.

CASE 1.—M. A. G——, aged fifty-one, was received into the Westminster Hospital Aug. 31st, under Dr. Hamilton Roe. Aspect anæmious. Has been in better circumstances, accustomed to live well, and drinking wine regularly for many years. Has been latterly deprived of her accustomed comforts; has followed a sedentary occupation, and been subjected to many causes of anxiety. Has observed her skin to be harsh and dry for the last two or three years; usually passing more urine than natural, and frequently of a high colour. Menstruation has been irregular for the last twelvemonth, entirely ceasing three months ago, at which time the lower extremities became œdematous, and their temperature diminished. Has suffered from debility for some time past, and been troubled with a dull, heavy pain in the lumbar region. Attacks of atonic dyspepsia have frequently recurred, attended with spasmodic epigastric pain and flatulence.

On admission, the pulse was 80, moderate; skin moist; tongue clean, inclined to dryness; abdomen is not painful on pressure, and there are no physical evidences of enlarged liver; heart's sounds and impulse natural; urine is acid, spec. grav. 1.009, and containing a large amount of albumen.

During the first five weeks after admission, the dyspeptic attacks recurred frequently, and became aggravated in character, although diet was carefully attended to; and the abdomen enlarged somewhat, with evidence of ascites and some tympanitis; the urine being usually about two pints in twenty-four hours, (no diarrhœa,) spec. grav. varying from 1.010 to 1.017, acid reaction, and containing a large amount of albumen.

She was treated by dry-cupping to the loins, warm aloetics, the warm bath occasionally, (from which she experienced considerable relief,) and by mild saline diuretics, with a carefully regulated diet.

On Sept. 24th she suffered much from diarrhœa, the urine diminishing in quantity, and becoming more natural in colour, being generally, at other periods, of an olive-green tint, opalescent, sometimes brownish, and throwing down much albumen (with heat and nitric acid) of a chocolate colour. Mercury was carefully avoided, from its frequently disastrous effects in this disease.

Oct. 24th.—She continued in a similar condition, the ascites and tympanitis gradually increasing, and the subcutaneous œdema becoming more general, having now extended to the upper extremities. The urine continues from thirty to forty ounces daily, of a dirty olive-green tint, spec. grav. 1.018-20, highly albuminous; the bowels acting once daily, without aperients; the countenance pallid, puffy, and anxious.

Nov. 7th.—The urine shows alkaline reaction immediately on being removed from the bladder.

12th.—The subcutaneous œdema has continued to increase, particularly in the right upper extremity and mamma, from her constantly lying on the right side. Since Oct. 1st, oily particles have appeared occasionally floating on the surface of the urine, which were soluble in ether, and which, on evaporation in a watch-glass, left a fatty matter. The urine has latterly contained so large an amount of albumen as to become nearly solid with heat and nitric acid. The vision for the last three weeks has become dim, and she is occasionally somewhat drowsy. The abdominal enlargement has become great, principally from the accumulation of fluid in the peritonæal sac. Frequent auscultation of the heart has never detected anything abnormal. Extreme insomnolence has usually required ten grains of Dover's powder at bedtime. On adding one-third nitric acid to the fresh urine in a watch-glass, the greater portion is converted into a mass of small bright-yellow granules, encircled by an iridescent halo of red and blue, (conversion of the uroxanthin of Heller into urrhodin and uroglaucin?)

She gradually became exhausted, and died on the 20th of November, no stupor having occurred until within twenty-four hours of death, and no distress existing at any time through vomiting or headach, from which she never suffered whilst under treatment in the hospital.

*Autopsy.*—Countenance betrays the aspect of long-continued disease; general œdema of subcutaneous cellular tissue; some effusion of straw-coloured serum in the pleural sac. The peritonæal sac contained between two and three gallons of serum of the same character. Heart, eight ounces and a half, healthy, as also valves. Liver, small, weight thirty-two ounces. The left kidney was generally atrophied, weighing two ounces, six drachms; exterior lobulated, the tubular portions being greatly diminished in extent, and disappearing beneath a generally granular condition. The right kidney weighed four ounces, and was in a similar condition, but less advanced.

### NEPHRIA; PERICARDITIS, TWENTY-ONE DAYS; DEATH; ABSENCE OF ALBUMEN IN URINE.

CASE 2.—Thomas M——, aged fifty-four; married; labourer; was admitted under Dr. Hamilton Roe; of very intemperate habits ten years ago; of moderate development, and anæmious aspect. Two months ago, being in his usual health, caught cold whilst "hopping" in Kent, in consequence of which he kept his bed; a fortnight afterwards, observed his feet and ankles to swell, pitting on pressure. His wife, a few days afterwards, noticed his face to become bloated; the œdema subsequently extended to scrotum and penis, and latterly, to upper extremities. Twelve years ago, he had a rheumatic attack, attended with pain in cardiac region, and for which he was blistered. Has had for two years a dull aching pain in right renal region.

*Auscultation.*—Moist râles on expiration, and sonorous rhonchi on inspiration, generally diffused over both lungs. Heart: no abnormal sound or increase of impulse to be detected; both sounds are rather obscured, and dulness is more extensive than natural, in cardiac region; pulse 84, weak, occasionally intermittent; tongue pale, flabby, moist; skin usually arid, temperature natural; bowels usually torpid; universal subcutaneous œdema, especially in lower extremities, penis, and scrotum, but not greatly so; countenance bloated; has a rather troublesome cough, with watery sputa, intermixed with greyish masses of mucus; the capillaries of the cheeks present a reticulated character, which is strongly marked.

Nov. 3.—Urine, three pints in twenty-four hours, slightly acid; specific gravity, 1.008, with a cloudy, reddish mass in lower third of vessel, similar to a mucous cloud in appearance, which mostly disappears by heat, and which, under the microscope, proves to be amorphous lithates, with a few lithic acid crystals, of nucleated, rhomboidal form, intermixed with mucous globules.

19th.—The urine has continued of same character, but the lithic acid crystals have increased in quantity; the secretion is usually from three to four pints daily; and to-day, the crystals are perceptible to the eye, from their increased quantity.

25th.—Urine is now forty ounces in twenty-four hours; crystals of rhomboidal shape, mixed with tubules formed by epithelial scales, probably excreted from the tubuli uriniferi, (these tubules were observed on other occasions.)

28th.—Some occasional murmur frictionis is heard, of rough, grating character, and distinguished more particularly at apex, but much obscured by bronchial respiration; the heart's sounds, always previously muffled, are now more distinct; no cardiac pain; pulse very small and weak; some increase of œdema in upper extremities.

December 2nd.—Murmur frictionis heard occasionally over cardiac region.

10th.—Heart's sounds continue obscure; a double murmur frictionis is now heard, but not with every contraction, and is generally diffused over cardiac region, though most distinct at base of the heart; urine, forty ounces in twenty-four hours, loaded with lithates.

16th.—During the last three or four days there has been great torpor of mental faculties, and increase of anorexia; constantly sleeping, unless aroused to take anything; appears to be very deaf at some periods, at others not so; the urine continues to show the same characters; there is no excess of urea.

He sunk comatose the following day, not having suffered from vomiting or headach at any time, the general œdema, exsanguine aspect, troublesome cough, with profuse mucopurulent sputa, moist and sonorous râles, muddy urine, loaded with lateritious deposit, anorexia, &c., having continued throughout, and terminating in a gradual failure of the vital powers.

The general powers of the constitution, on admission, were too enfeebled to admit of active treatment to any extent, tonics, the warm bath, diaphoretics, and mild saline diuretics, &c., being exhibited according to circumstances.

*Autopsy, twelve hours after death.*—The surface of body was generally œdematous, aspect waxen and exsanguine; the heart was large and flabby, but the valves healthy; the inner surface of the pericardium contained about eight ounces of sanguinolent serum, was not adherent at any point, but almost universally coated by very rough lymph, of pinkish-red colour; the liver was large and congested, and of dark-red colour; the lungs were generally healthy in tissue, but, on making sections, reddish serum freely oozed from the smaller bronchial tubes; the right kidney was small, flabby, and generally granular; weight, three ounces, two drachms; the tubular portions apparent to the eye much diminished in extent; the cortical portions granular, and considerably atrophied: the left kidney was in a similar condition, but less advanced; weight, five ounces, two drachms; intestines natural; some quantity of serum in peritonæal sac.

## Original Papers.

ON THE

# EMPLOYMENT OF ETHER BY INHALATION IN OBSTETRIC PRACTICE,

WITH CASES AND CLINICAL OBSERVATIONS.

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The power of the vapour of ether, when inhaled, to diminish, or even to destroy sensation, and consequently pain, has been placed beyond doubt by the results of hundreds of surgical operations. Its safety in surgical cases may also be considered as established, especially when the administration of the ether is conducted with attention to the precautions indicated by experience. We may, I think, fairly consider that the instances in which ether will be administered before surgical operations will be the rule—those in which it will be omitted, the exceptions. We may also expect its use to be general in dislocations, hernia, spasmodic strictures, &c. In the first two of these cases, it acts in a twofold manner:—1st, it relieves the pain; and 2ndly, it relaxes the muscles, whose contraction opposes reduction. We shall see that in midwifery, also, it possesses the latter advantage, by its action on the perinæal muscles.

Ether has been but little employed in painful medical cases; and yet it has already been proved to give instant ease from the agony of neuralgia, and from the horrible dyspnœa of spasmodic asthma. A case of colica pictonum, which had resisted the usual means for three days, was cured by ether. A case of puerperal mania was immediately and permanently relieved; and several cases of dysmenorrhœa have been recorded, in which this agent has acted like magic. Probably, many spasmodic diseases will be benefited by inhalation of ether; and we may confidently expect many forms of intractable hysterical pains to yield to it. In a few cases published by M. Piorry, which appeared unfavourably affected by it, the ether was probably impure. It is not my intention, however, to discuss the effects of ether in medical and surgical practice.

But though the diseases, as hysteria and dysmenorrhœa, which are commonly regarded as belonging peculiarly to the obstetric practitioner, will probably derive very great benefit from the etherial treatment, I would proceed to the inquiry, whether its exhibition will ever be habitually employed in daily obstetric practice.

To answer this question, we may examine—1st, the *à priori* physiological probabilities; and 2ndly, the results of the cases in which ether has been tried.

Labour is a complex process, in which every part of the nervous system is concerned. Now, ether affects, in succession, every portion of the nervous system, unless we except the ganglionic.

In labour, the brain is in action, as is proved by the presence of thought and special sensation; so, also, the pons Varolii (or whatever the seat of pain may be) is also active—as are the cerebellum, the medulla spinalis, the medulla oblongata, and the ganglionic system. But though all these portions of the nervous system are concerned in ordinary labour, they are not all necessarily, or, as it appears to me, advantageously so.

It is proved beyond a doubt, by cases of paraplegia, that the patient may be sensible, and yet feel no pain, though the uterus contract regularly. The same absence of pain is seen in puerperal convulsions, in which unconsciousness is superadded; and in some cases of paraplegia, even the reflex actions of the abdominal muscles have been wanting, so that labour has been terminated by the efforts of the uterus alone. Cases have occurred in which the patient has been unconsciously delivered, without accident or apparent delay, when in a state of extreme intoxication.

Thus, then, of the usual nervous concomitants of labour, consciousness, pain, and spinal reflex action, may be wanting, and yet parturition proceed uninterruptedly.

But though they may be absent, can they be artificially abolished without danger? Can this be accomplished by ether—and if so, is it justifiable on Christian principles? as I have frequently been asked.

I will answer the last question before entering upon the consideration of the others; because, if we have reason to believe that an attempt to relieve the pains of labour would be in opposition to the will of God, all discussion of the other questions must at once be abandoned.

I think it is obvious that the same principle which would lead us to view any attempt to remove the dreadful and dreaded pains of labour, as opposed to the Divine will, would induce us to neglect every means of relieving human suffering. Though from different motives, we should, like the Turks, passively bear evils easily removable, as disease and suffering are alike dependent on the event which elicited the decree—"In sorrow thou shalt bring forth." In fact, precisely the same objections have successively been made to most of the great discoveries and improvements in medicine. Some may remember that one of the great arguments against vaccination—and, in the last century, against inoculation—was, that the practice was a presumptuous contravention of the Divine will. With far more reason might the objection be urged to the practice of inducing premature labour, and still more strongly against that of destroying in utero a living fœtus. And yet it is now universally admitted, that to risk the life of the mother by refraining from these operations is not only unjustifiable, but highly criminal. Certainly, then, if it is justifiable to attempt the relief of pain, it is especially imperative upon us to do so in the most intense of all pain.

I am induced to offer these observations, in the hope that they may satisfy the scruples of those who have opposed the employment of ether in ordinary cases of labour, from a feeling that its use is not justifiable on Christian principles. Time has often hallowed what science and advancing knowledge have proved to be but the offspring of habit and prejudice; and in support of this assertion, I would quote a recent publication of Dr. Simpson, in which he says, "The idea of its inevitable necessity makes both the profession and our patients look upon the amount and intensity of pain encountered in common cases of natural labour as far less worthy of consideration than they in reality are."

These observations will, I trust, be deemed conclusive on this part of my subject. Pathology, then, has proved that parturition will proceed without material interruption or injury by the ganglionic nervous influence. I do not enter into the question, whether the uterus is exclusively under the control of the ganglionic system. It is sufficient that it is very largely so.

Ether will first derange, and then temporarily suspend, in succession, consciousness, special sensation, common sensation, pain, (which is certainly something different from common sensation—i.e., tact,) power of muscular combinations, spinal reflex actions, and respiration.* It is doubtful whether it will not, in some cases at least, increase ganglionic nervous power.† It is certain, however, that if the medulla oblongata is completely etherized, and, consequently, the movements of respiration stopped, the action of the heart is speedily arrested also, and life becomes extinct.‡

The chief authorities for enabling us to decide the question of the safety of ether from the actual results of its exhibitions are, Professor Simpson and Baron Dubois; and both maintain that they have observed no bad effect on either the mother or child. M. Dubois distinctly states that "none of the women who inhaled ether experienced any bad effects attributable to ether."§ These gentlemen differ, however, in reference to the probability that ether will become universally, or even generally, applicable to ordinary midwifery practice. The Baron states his "profound conviction that ether will be applicable to but a limited number of peculiar cases;" whilst the Professor entertains much more sanguine views. As yet, general experience favours the opinion of the latter.

* British and Foreign Medical Review, April, 1847, p. 571.

† Ibid, p. 572. M. Longet.

‡ Ibid, p. 572. M. Flourens.

§ The Lancet, March 6th, 1847.

The pain of labour (incomparably the greatest which human nature is called upon to bear) must, I think, be viewed as an unmixed evil. I will not quote the descriptions given by eminent accoucheurs of the agony and anguish of the final throes; they are universally acknowledged, as are also the bad effects of intense pain. Pain acts injuriously in several modes. Thus, its severity is very greatly dreaded, and the depression caused by the anticipation of its inevitable occurrence, preying for months upon the spirits, has been known to produce very injurious effects.

The hope that ether will substitute tranquil dreams for the dreaded suffering would obviate this evil. Again: pain is one of the greatest elements in the shock of labour. It is probable that all parts of the nervous system share in this shock. Now, if the effects of ether can be so regulated as to be confined to the brain and spinal marrow, there would be left only those portions of the shock which are seated in the medulla oblongata and ganglionic system. I think we should not be justified in refusing the abolition of part, because we cannot destroy the whole of any evil. Again: we do not know the exact proportion in which the various parts of the nervous system share the shock; we only know that pain is a large element of it.

To the question, how far should we carry our etherization, I would answer, in ordinary cases of labour, merely till the cerebrum and pons Varolii are under its influence, as shown by the suspension of intellect, and of the perception of pain;* but in cases requiring extraordinary manipulation or operations, we ought to bring the cerebellum and medulla spinalis into temporary narcotism, to prevent, as far as possible, the violent muscular movements which, when the control of the will is suspended, might be productive of mischief. Consciousness is certainly no advantage to the obstetrician; for the patient can do little or nothing to assist him, and frequently may do much harm by her involuntary efforts to bear down, and by her restlessness, which latter often greatly debilitates and exhausts her.

It is obvious, assuming the power of ether to produce these effects, that unless we can regulate the dose, or other circumstances which modify its effects, so as to limit the action to the cerebrum, pons Varolii, cerebellum, and medulla spinalis, ether would be a dangerous agent. Fortunately, there is no reason to doubt that, with proper apparatus, and common observation of the symptoms induced, we may invariably prevent the medulla oblongata from being involved.

Though causing the patient to breathe atmospheric air, either pure, or mixed with the etherial vapour, has hitherto been sufficient to check any approach to stertor or coma, and also to relieve such conditions when induced, I have observed, with much pleasure, that Mr. Hooper has adapted to his inhaling apparatus an appendage for administering oxygen. This will be a most valuable adjunct in cases where there exists an unusual degree of susceptibility to the effect of ether on the medulla oblongata.

Complete insensibility to pain exists only when the pons Varolii or seat of pain is narcotized; and M. Longet states (in a paper quoted in the last number of the *British and Foreign Medical Review*) that no operation should be attempted until this effect is produced.

On the patient awaking from the state of etherization, the nervous functions return in the same order that they were suspended.† This explains the fact of many patients being perfectly sensible, and holding rational conversations, but being the whole of the time unconscious of pain.

The following observations by Dr. Simpson will serve to explain my reasons for venturing to enrol myself amongst the advocates of the new remedial agent:—

He says,—"A careful collection of cautious and accurate observations will no doubt be required before the inhalation of sulphuric ether is adopted to any great extent in the practice of midwifery. It will be necessary to ascertain its precise effects both upon the action of the uterus and the assistant abdominal muscles; its influence, if any, upon the child; whether it gives a tendency to hæmorrhage or other complications; the contra-indications peculiar to its use; the most certain modes of exhibiting it; the length of time it may be employed, &c."

In the hope that some of these desiderata may be supplied, I now beg to lay before the profession the following interesting cases of instrumental labour which have occurred in my practice within the last few days, and in which I have employed ether by inhalation:—

Case 1.—On the afternoon of Sunday, 28th ult., I was summoned by Mr. Alder Fisher, to a lady on whom he had been in attendance all day. The expediency of being prepared to employ ether by inhalation, should it be deemed advisable, having been suggested, I gladly availed myself, as on previous occasions, of the valuable services of Mr. Tracy, of St. Bartholomew's Hospital, who has not only invented an ingenious and simple apparatus for administering this agent, but has successfully applied it in several hundreds of surgical cases. On our arrival at the residence of the patient (about four P.M.), we found her in strong labour with her first child. We were informed that her age was forty, and that she had been married eleven months. She is a woman of spare habit and lax fibre; apparently well formed, and about five feet three inches in height. From the age of fourteen, at which the catamenia first appeared, she has always been "regular;" and although not of a robust frame, has enjoyed uninterrupted good health; her last menstruation was in the end of June. I learned from Mr. Fisher, that premonitory labour pains had commenced at half-past twelve A.M., and had gradually increased, both in severity and frequency, until three A.M., when they recurred regularly every twenty minutes. At five A.M. the intervals became shorter, the uterine contractions coming on every ten or fifteen minutes, and the suffering they occasioned, even at this early period of labour, was very considerable. When first seen by Mr. Fisher, at eight A.M., although the os uteri was only dilated to the extent of half-a-crown, the head, still in the uterus, rested on the perinæum. At four P.M., the pains, which had been frequent and energetic since eight A.M., were now both strong and expulsive, recurring every four or five minutes, and the patient complained greatly of her sufferings. Having been informed of the benefit resulting from the employment of ether by inhalation, she was very urgent for its immediate adoption. The bowels had been well acted upon during the day; the tongue was moist and clean; and she was perspiring profusely. On a vaginal examination, the passage was found to be cool and well lubricated; the os uteri dilated to the size of the rim of a tea-cup; and the child presenting in the first cranial position. The head rested on the floor of the pelvis, and forcibly pressed, during each pain, against the converging tuberosities of the ischia, the distance between which was barely four inches. The membranes were entire and distended with liquor amnii; they protruded through the opening os, the margins of which were rapidly yielding; the uterine structure was soft and dilatable. Being satisfied that there existed no abnormal complications to forbid the inhalation of ether, its exhibition was commenced by Mr. Tracy, at a quarter-past four P.M., immediately after the spontaneous rupture of the membranes. At this time, a pain was coming on, which proved to be very violent, and was attended with considerable straining, and some retching. The ether, in three minutes, produced insensibility to suffering, although the pains continued as strong as previously to its application, and recurred regularly every three minutes. The patient occasionally gave rational answers to questions, and stated that she had scarcely been conscious of any pain since the administration of the etherial vapour; her friends who were present could hardly credit her report, as no difference in the violence of her efforts, or in the character and severity of the uterine contractions, could be remarked.

The following notes of the farther progress of the case were taken on the spot:—At half-past four P.M. the uterine contractions have recurred at intervals of three minutes only, though the patient has remained perfectly narcotized for the last quarter of an hour. During these pains, which were very powerful, the legs were at times forcibly extended, and the right arm raised, and all the usual straining exclamations during expiration, continued as before. On placing my hands upon the abdomen, I became sensible of the powerful contraction, not only of the uterus, but also of the abdominal muscles. The os was now fully dilated.—Forty-three minutes past four P.M.: Since the escape of the waters, she has had pains every two or three minutes, and her cries are loud, sharp, and expressive of severe expulsive efforts. In the intervals of pain, the child's head rests on the perinæum, (producing a distention of its right side, and of the corresponding labium pudendi,) and is closely embraced by the bony outlet. The pains are of short duration. Pulse 84, soft and compressible; skin freely perspiring. Fifty-three minutes past four P.M.: During the last five minutes, the inhalation has been discontinued, and there has been an intermission of uterine contractions for four minutes. In reply to inquiries, she again says she has felt scarcely anything since the ether has been employed.—Thirteen minutes past five P.M.: For the last twenty minutes, the ether has been administered only during uterine action, the intervals between

* British and Foreign Medical Review, April, 1847, p. 571.

† Dr. Snow's paper, p. 9.

which have been only two or three minutes. She occasionally cries out as if in slight pain, but when interrogated, states she is "perfectly easy and comfortable."—Fifty minutes past five P.M.: The pains have continued every three minutes, but have produced no apparent effect on the head, which is firmly fixed at the outlet; the amount of straining effort, the peculiar cry, and the expression of the face, seem to betoken great suffering during her pains, but she again asserts that she is "easy." The ether was now again suspended for ten minutes, when she had three uterine contractions, and became sensible to pain.—Half-past six P.M.: Under the influence of the ether, in the last half-hour she has had twelve pains, and has been wholly unconscious of them. The head is still fixed at the outlet.—Forty-five minutes past six P.M.: During the last ten minutes the ether has not been employed, and the pains have been precisely of the same character as when she was inhaling; she also states that they are productive of much agony. As the head had made no advance, and had been firmly impacted for half an hour, the cranial bones overlapping considerably, I determined, after ascertaining by the stethoscope that the child was alive, to apply the short forceps. This was accomplished at seven P.M., after emptying the bladder, and again narcotizing the patient. It was evident, from the extent to which the handles of the forceps were separated, that the head was a very large one, and that it would require considerable compression, as well as traction, to bring it through the disproportioned outlet. To accomplish this with safety to the mother, and with a prospect of saving the life of the child, I made my efforts at intervals of two or three minutes, during which I relaxed my grasp of the head, and held the handles of the forceps loosely, in order that the brain might recover from the effects of the severe pressure to which it was subjected during traction. By these means the head was delivered in fifty-five minutes from the first application of the instrument, and at fifty-five minutes past seven P.M. a living male child was born. After the introduction of the forceps, some difficulty was experienced in consequence of the forcible extension of the patient's legs, and the constant disposition to straighten the body during the strong expulsive efforts. With the assistance of Mr. Fisher and another gentleman the pelvis was held in a favourable position; the right leg was separated from the other, and flexed on the abdomen, so as to admit the handles of the instrument between the thighs. By these means, and by occupying a position in front of the patient, I could easily employ traction in the direction of the outlet with my right hand, whilst with the left I supported the perinæum. The placenta quickly followed, and at eight P.M. the uterus was felt, firmly contracted, through the abdominal walls; a bandage was immediately applied round the abdomen and pelvis, and the ether, which, during the whole period of the operation had effected complete narcotism, was discontinued.—Five minutes past eight P.M.: Consciousness is restored; she expresses a hope that she shall soon be delivered, adding that she is very comfortable. She says she feels as if just awoke from a painful dream. When informed of the termination of her labour she burst into an hysterical laugh, and exclaimed, "It is a dream! it must be a dream! Oh what a good thing it is that I had the ether!" She also observed she had not been sensible of the circumstances attending her delivery.—Quarter past eight P.M.: appears somewhat exhausted, and her face being still flushed, it is ordered to be bathed with cold water. From this period she became rapidly restored to her usual state of mind and sensibility. Farinaceous nourishment and perfect quiet are enjoined.

The child weighed eight pounds and a half; it is twenty-two inches and a half in length. The dimensions of the head are as follows:—round the head and face, in the direction of the oblique or occipito-mental diameter, sixteen inches; around the forehead and occiput, in the longitudinal or fronto-occipital diameter, fifteen inches; from one parietal protuberance to the other, across the vertex, six inches.

It is worthy of observation, that neither the character nor the frequency of the pains was affected by the use of the ether; that all the efforts of the abdominal and other muscles which aid in expulsion, and also the characteristic cries, continued unaltered; that though consciousness remained, excepting during the last hour, in which the forceps were employed, she was wholly insensible to pain, except when the ether was suspended for a time; that with the exception of this rest, she continued under its influence for three hours and three quarters, without experiencing the least injurious result; and that she inhaled, in all, eight ounces and a half of pure ether.

Notwithstanding the advanced age of the patient, and the disproportion between her pelvis and the child's head, delivery was effected within twenty hours from the time premonitory labour pains commenced, and with perfect safety to both mother and child.

In referring to the rigid condition of the extensor muscles of the trunk and inferior extremities, I would direct attention to the position of the operator and the patient as well calculated to overcome the difficulties created by these circumstances in instrumental labour. The result of this case also shows the importance of observing attentively the space between the blades of the forceps during compression, as with little practice it will enable the accoucheur to determine with accuracy the diameter of the child's head, and its relative proportion to the passages of the mother; and thus he will be better able to decide the important question of delivery by means of the forceps or perforator. From a conviction that the life of a child may sometimes be sacrificed by forcibly tying the handles of the forceps together, and by thus keeping up uninterrupted pressure on the head during the operation, I now usually adopt the plan mentioned in this case, by which the head is free from compression, save only during the efforts of traction.

It is to Professor Naegelé, of Heidelburg, that we are indebted for having first pointed out the true mechanism of parturition, and for showing that the head of the child passes through and emerges from the pelvis obliquely. Dr. Rigby observes, in his "Sytem of Midwifery," that in the first cranial position, the right parietal protuberance lies, in the early stage of labour, lowest and deepest in the pelvis; whilst the superior and posterior quarter of this bone is the part which first comes under the pubic arch and enters the external passages. I am not, however, aware that any one has observed a fact of some practical interest, in reference to this subject, which I have long known, and which I have alluded to in the above notes—viz., that in the first cranial position the right side of the perinæum and corresponding labium pudendi are chiefly subjected to pressure during the distention of the soft parts, and therefore principally demand the support which may be necessary to save the perinæum from accident, and *vice versâ* when the head passes in the second position. From my own observations, I am induced to believe that future experience will prove, that as the first cranial position is the most common, so rupture of the perinæum usually occurs on the right side of its raphé, and that this accident may most effectually be prevented by acting on the suggestions I have here ventured to make.

March 29th.—Eleven A.M.: Has passed a comfortable and tranquil night, and has slept without dreaming—a very uncommon occurrence with her; the lochia are natural in quantity, &c.; pulse 70, soft and regular; tongue clean; is very cheerful, and entirely free from ailment, with the exception of inability to evacuate the bladder; a pint of healthy urine was accordingly drawn off by the catheter. She observed this morning that she had a most vivid recollection of severe suffering previously to the inhalation of the ether, and also a slight impression of having felt some pain during the intervals of its exhibition, which entirely ceased after a few inspirations; that with these exceptions, she was not at all aware of the birth of the child, or of any circumstance attending her confinement; and that it was not until after her face and temples had been bathed with cold water that perfect consciousness was restored, when she felt as though she had awakened from some strange and painful dream, the subject of which she could not call to memory.—Eleven P.M.: Has passed her urine spontaneously; is doing well in every respect. The child is healthy, and takes the breast readily.

30th.—Noon: Has had a good night; the milk is increasing; and with the exception of feeling rather stiff, she is perfectly well.

April 19th.—Both mother and child continue perfectly well, and since the delivery no medical aid, beyond the passage of the catheter on one occasion, has been required.

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Case 2.—April 1st, 1847. Mrs. ——, aged thirty-three; married ten years and a half; has had six children, of which the last was born in February, 1846; is a robust-looking woman, with florid complexion; states that her general health is good, and that, with the exception of slight chronic cough, she has been free from ailments during the term of utero-gestation; says her family is of a consumptive and rheumatic tendency, her mother having died at forty, and a brother at twenty, of phthisis; has always been "regular" from the age of sixteen, except when pregnant or nursing. Her first five labours were ordinary in their character; the fifth lasted forty-eight hours, and was attended with great

suffering; and the sixth and last, five hours: in each the child was a female. In the last, the head was arrested at the brim for some time, and in consequence my assistance was called for; but as the labour terminated before my arrival, I did not make any examination. She last menstruated at the end of June. The bowels have been freely opened, and the bladder has been lately relieved. Premonitory symptoms of labour commenced on Sunday, 28th ult., recurring about every two hours. On the following day, 29th, they abated in frequency and power; but became more urgent on Tuesday, 30th, towards evening, with intervals of only half an hour. The pains were felt chiefly in the groin and hypogastrium. On Wednesday morning, 31st ult., she had an interval of rest until about eight o'clock, when a strong pain ruptured the membranes, and what she described as a "good deal of water" escaped. From this time the pains recurred about every half hour, until six A.M. of the following day, when they became slack. Mr. Orford, who attended this patient, first visited her at eight P.M. of the 31st ult. The os uteri was then soft and dilatable, but not at all dilated. An enema was given, which emptied the rectum. He visited her again at half-past twelve o'clock, when the dilatation of the os uteri was nearly complete. The pains having been very powerful and frequent, without any effect on the head of the child, Mr. Orford gave tincture of opium, half a drachm, at five A.M. During the early period of labour, he could not detect the true position of the head in consequence of its high situation in the pelvis. Mr. Campion, who was called to the patient, first saw her at six A.M., when the head was resting on the pelvic brim, and was movcable; and as the symptoms at that time were those of arrest, he administered three doses of ergot at half-past six, seven, and half-past seven A.M. successively. This treatment had the effect of increasing the strength and frequency of the pains; but without producing any advance of the head, which became firmly fixed in the brim.

The above history was given to me on my arrival at ten A.M. On making a vaginal examination, I found the passages cool and well lubricated; the head resting on the brim, and firmly fixed during a pain; slightly moveable in the intervals. A very large *caput succedaneum*, and an evident malformation of the pelvis, rendered it difficult to diagnose the true position of the child. On carefully examining, however, I ascertained that it occupied the first cranial position, the posterior fontanelle being turned in the direction of the left foramen ovale.

The pelvis, in this case, formed a remarkable example of that condition so faithfully described by Professor Naegelé, of Heidelburg, under the appellation of "pelvic oblique ovata." In this instance the pelvis was twisted, so that the symphysis was inclined to the right, and the sacrum to the left. The left side of the pelvis was flattened, as though driven inwards, and the left linea ilio-pectinea presented almost a straight line from the sacro-iliac synchondrosis to the posterior margin of the foramen ovale. From this point, the body of the pubic bone abruptly inclined backwards, so as to present a distinct ridge of the size of a finger. This ridge was formed by the angle, perpendicular surface, and inner margin of the ramus, and projected backwards so as to contract the conjugate diameter of the brim. This projection at first conveyed to the touch the impression that it was a considerable exostosis; but on further investigation, the true nature of the malformation was detected. Anteriorly, I could feel a narrow rim of the uterus, (the remains of the anterior lip,) and by introducing two fingers this rim could be traced backwards, encircling the head of the child, and pressed between the projection of bone and the brim of the pelvis. The pains were coming on every three or four minutes; but were not at all powerful, lasting from a quarter to three quarters of a minute. It having been ascertained by the stethoscope that the child was alive, I determined to administer ether by inhalation. The patient was very urgent to be relieved from her sufferings, which were beginning to tell upon her strength and nervous system. At a quarter to eleven A.M., the ether was accordingly administered by Messrs. Campion and Orford. At first it induced slight cough, which entirely disappeared in about five minutes. At the end of the first eight minutes, during which she continued to inhale, but not uninterruptedly, she became conscious of a pain—the ether having been very imperfectly taken, from her frequent efforts to talk and to interrupt the process of inhalation. In ten minutes she was quite reconciled to its use; but owing to its imperfect exhibition, she became rather inebriated than narcotized. In this state she continued until a quarter to twelve, uterine contractions recurring every three or four minutes, but unattended by any efforts on the part of the abdominal muscles. From this time the ether produced more effect, and she became unconscious of her pains, though they were much increased in power, and were aided by distinct action of the assistant abdominal muscles. These were felt to contract forcibly under the hand. She was at times very loquacious. At every vaginal examination the "pains" became more frequent, returning every minute, and were much increased in intensity.—Fifty-five minutes past eleven: Is completely narcotized; the hand drops powerless when lifted up; the eye is turned up under the superior lid; her face is flushed; pulse 92, soft and smaller; skin profusely perspiring. The narrow rim of the cervix uteri can no longer be felt; the head is firmly impacted in the upper strait; the bones of the cranium overlapping.

Having determined on employing the long forceps, from the impression that, notwithstanding the great deformity, there was room to bring the head through the contracted brim by cautious traction, having previously introduced the catheter, I accordingly applied this instrument at a quarter to twelve. For about half an hour, my repeated, but interrupted, efforts to extract were apparently unavailing; but in a few minutes afterwards, the head slipped suddenly over the projection before described, and fairly occupied the true pelvis. During this process, I passed two fingers of my left hand—one on each side of the projection, so as to guard it effectually from undue pressure during traction. A few more efforts brought the head through the os externum, when the child immediately cried loudly. The body quickly followed, and the placenta was thrown off by the same pain that expelled the child. The uterus contracted well, and there was very little hæmorrhage. The ether, which had been employed with but little interruption for two hours, was discontinued immediately after the birth of the child; and the patient recovered her consciousness in two or three minutes. Though apparently aware of the presence of pain in the early part of the process, she expressed herself very grateful for the use of the ether, and stated that she was entirely ignorant of the birth of the child, and of the means which had been adopted for its accomplishment. The pains instantly ceased on the expulsion of the secundines, but were immediately induced on the introduction of my finger, after the completion of the labour, in order to ascertain with more accuracy the true state of the pelvic deformity. So powerful were the expulsive efforts thus induced, that the uterus was forcibly driven down to the outlet; but these after-pains suddenly ceased with the withdrawal of the finger, and a state of perfect repose followed. The child is a very large and vigorous boy; the head presented a perfect cast of the deformed pelvis of the mother; it is very oblong — perfectly flattened on its left side from the lambdoidal suture to the temporal ridge of the frontal bone; whilst the opposite side describes a hemispherical, or rather semi-oval, figure, elongated by a very large *caput succedaneum*, which occupies the superior posterior angle of the right parietal bone.

April 2nd.—Has passed a tranquil night. Both child and mother are in every respect well. She states that she has no recollection of any circumstance from the time the ether was first administered, until the escape of the placenta from the vagina, of which she was conscious, though she felt no pain. She is most profuse in her grateful acknowledgments of the blessing of the ether, which she hopes will be employed again, should she become pregnant.

6th.—Is sitting up in bed, and observes that she has suffered less after this confinement than in any previous one—in fact, that she has experienced no exhaustion, and, to use her own expression, "never felt so well in her life." This unusually healthy condition she attributes to the use of the ether. Her cough is almost gone, and everything is going on favourably. The child is vigorous, and takes the breast eagerly; and its head has recovered from the misshapen state in which it was born.

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Case 3.—Mrs. H——, aged twenty-four; primipara; of delicate appearance, and weakly constitution. From the age of fifteen years and a half, when menstruation first occurred, her health suffered from the sedentary nature of her occupation—that of dress-making. But from the period of her marriage, twelve months since, she has relinquished her business, and has enjoyed better health, though she has occasionally experienced pain in her chest, and has had at times black mucous expectoration. Her last menstruation was in July, 1846. Labour commenced at ten P.M., on the 14th of April. She was first visited by Mr. Orford, at seven A.M., on the 15th, when the os was dilated to the size of a crown-piece; and the pains were slight, and recurred at long intervals. The bowels having

been constipated for some days, an enema was administered. At ten A.M. the uterine efforts were powerful and frequent, and the os fully dilated. The child was presenting in the first cranial position. The membranes ruptured during a pain at noon, at which time the head had not entered the true pelvis. The uterine contractions then became very forcible, and the intervals short, until two P.M., when the head descended to the outlets, where it remained stationary. At half-past three P.M., Mr. Orford gave her half a drachm of the ergot, the uterus having been in a state of inertia for an hour and a half. From this time until eight P.M., notwithstanding very frequent and expulsive efforts, the head made no advance. Mr. Campion having seen the case at this juncture, concurred with Mr. Orford in the necessity for instrumental assistance, and my attendance was accordingly requested. On my arrival, I found the patient much exhausted, and very desirous to be relieved of her pain by the agency of ether. For nearly four hours the head had been firmly impacted at the outlet, the transverse diameter of which did not exceed three inches and a half. The cranial bones were overlapping to a considerable extent, and the caput succedaneum was very large. Having satisfied myself of the healthy condition of the thoracic viscera, and that the child was alive, the use of the short forceps and the inhalation of ether appeared to me to be clearly indicated. After the bladder had been emptied, the ether was administered by Messrs. Campion and Orford at ten minutes to nine P.M. In three minutes, she became perfectly narcotized, when I introduced the forceps and extracted the head in twelve minutes afterwards. The body of the child followed in five minutes more, and the placenta was expelled by natural efforts in about ten minutes afterwards, when the inhalation of ether was discontinued.

When I first visited this patient, I found that her pains were recurring every two or three minutes; but when she became under the influence of ether, their force and frequency were evidently augmented; the abdominal muscles, as well as the uterus, contracted powerfully, and each effort was attended by the cries peculiar to the last stage of labour. During the period of etherization, the breathing at first was stertorous for a few moments, and the thighs and legs were forcibly flexed, and drawn towards the abdomen. Having adopted the mode of operation proposed in Case 1, the extraction was accomplished with great ease. The head of the child (a male) was much flattened by the action of the forceps, and was still-born, but the usual means for restoring animation were successful before the separation of the funis. The maternal surface of the placenta, which was very large, presented a beautiful net-work of white, thread-like lines, apparently calcareous; this diseased condition of the placental cotyledons appeared to have exerted no injurious influence on the child, or to have impeded the separation of the afterbirth. I much regret that, owing to some misunderstanding, the placenta was destroyed. It is worthy of remark, that the perinæum presented no obtacle to the passage of the head, being perfectly relaxed, and yielding readily to its pressure. In both this and the first case, the usual rigidity of the soft parts was entirely wanting, and I think we may venture to attribute this condition to the influence of the ether. Indeed, in both instances, and more particularly in Case 1, where the patient was a primipara, and forty years of age, this favourable condition was sensibly effected in the narcotized state. The uterus contracted firmly after the completion of parturition, and the loss of blood was trivial.

On restoration to consciousness, which was expedited by bathing the face with vinegar-and-water, she observed that she had been asleep, but yet was strangely impressed with the conviction that she had been "travelling very far on a railroad;" she was totally ignorant of all which had occurred during her state of narcotism. She expressed the hope that her labour would soon be terminated, and when I intimated to her that it was already accomplished, she replied, "Oh I wont believe that!" nor could she be convinced of the fact, until her infant, a fine, squalling boy, was called upon to witness to its truth.

Eleven P.M.: Is quiet and comfortable; says she only feels weak; lochia and urine have been passed freely; the child has taken the breast; she has asked for something to eat; she has had some after-pains.

April 16th.—Both mother and child are well; the former has passed a tranquil night. Towards evening the after-pains became troublesome, but disappeared after the expulsion of a few coagula.

17th.—The mother and child are going on well in all respects.

During traction on the head, which was in the first position, the bulging of the right side of the perinæum and labium pudendi, as mentioned in Case 1, was very evident to Mr. Campion, whose office it was to support the soft parts. In this case, it is remarkable that the legs were flexed, as extension of the lower extremities has been usually observed under the influence of ether.

The result of the foregoing cases will, I think, bear out M. Dubois's summary—viz.,

1. Ether prevents pain during obstetric operations.
2. It may momentarily suspend the natural contractions, but,
3. It does not suspend them, nor the contraction of the abdominal muscles, when energetically set up.
4. It appears to lessen the natural resistance of the perinæal muscles.
5. It does not appear to exert any bad influence on the life or health of the child.
6. It does not prevent or retard the subsequent contraction of the uterus.

To these conclusions I would add,—

1. That ether produces freedom from pain during natural labours, as well as during obstetric operations.
2. That it is very probable that the momentary suspension of uterine action, which sometimes occurs when ether has been administered in the earlier stages of labour, may be caused by the novelty, not unmixed with fear, of the inhalation, just as the arrival of the accoucheur will often temporarily suspend the contractions.*
3. That it will be a most powerful agent in preventing rupture of the perinæum, especially in primiparæ advanced in life; firstly, by producing relaxation of the perinæal muscles; and secondly, by rendering the woman incapable of sudden movements, during the support of the soft parts, under the intolerable pain when the head is emerging from the os externum.
4. There is no evidence to show that the ether has any bad influence on the mother. If it has, the proof remains to be adduced.

Thus, then, I agree with Professor Simpson† in anticipating great advantages from the use of ether, not only in cases requiring manipulations or operations, but also in natural cases; and the chief advantages which I think we are entitled to expect are—

1. The saving of suffering—perhaps the greatest borne by human beings, and in no way contributing to the happy termination of the case. Possibly, as a drawback from this advantage, we may admit that an inexperienced practitioner may occasionally pinch or bruise the maternal soft parts, from the inability of the patient to give any warning by her complaints.‡
2. The saving of a considerable portion of the shock, or that portion of it dependent upon the brain, which always occurs, and which can certainly not be looked upon in any light but that of an evil, and which is sufficient, in some cases, to destroy life.
3. The obtaining sleep, or at least quiet, during the progress of the case.
4. The more speedy relaxation of the os uteri and perinæal muscles.
5. During operations, the very great advantage of having the patient lying perfectly still.
6. The removal of the dread which many patients entertain during the whole of their pregnancy, and which, by its depressing effects, may prove injurious.

In all the cases published, the relief has been great and immediate. In none has there been any untoward event—no hæmorrhage, no convulsions, no collapse, which could fairly be chargeable upon the ether. Baron Dubois distinctly says, that he could trace no bad effect in his five cases to the ether; and my own experience confirms this account. He bases his opinion, that ether will never be habitually employed in ordinary cases, upon two main grounds; 1st, the small number of cases which he had to refer to; and 2nd, the impossibility or probable danger of keeping a woman etherized for several hours. Both these grounds have been removed; the latter especially, by the result of Dr. Simpson's cases and my own; and it is very doubtful if the Baron would not at this time greatly modify his opinion.

* I observed this to occur in Mr. Skey's case of Cæsarian operation, at which I assisted, the fatal termination of which was the combined result of peritonitis and previous shock.

† Dr. Simpson, who was the first to employ this agent in midwifery practice, has used it with perfect safety and success in forty or fifty cases, in some of which the etherization was kept up for hours.

‡ Let it be remembered, however, that two of Baron Dubois' cases, which terminated fatally from metro-peritonitis, were forceps cases; but puerperal fever was present in the wards of La Maternité.

A point which may become of great interest and importance is, whether other agents cannot be combined with the ether; for instance, laudanum where the pains are dangerously violent; or tincture of ergot where they are insufficient. In one of Dr. Simpson's cases, the patient inhaled a volatile solution of ergot. The pains, which had previously been languid, almost immediately became strongly expulsive, and the child was born in a quarter of an hour. The woman had been in labour from forty to fifty hours.

In conclusion, I would state it as my opinion, that with perfectly pure ether, carefully administered by skilful persons, and with good apparatus, and especially by one containing an appendage with a supply of oxygen, the operation not being commenced until efficient etherization is produced, the employment of ether is not only justifiable, but promises to be instrumental in materially diminishing the dangers of operative midwifery. Probably, in natural cases it will be both sufficient and safer to carry the etherization only to the second stage, in which partial consciousness remains, but sensation is abolished; and towards the end, when the pains are ordinarily intolerable, to induce perfect narcotism. From the results which I have already obtained, it is my intention to continue the use of this valuable agent, and I do not hesitate to state my belief, that future experience will fully confirm my present opinion.

John-street, Bedford-row, April, 1847.

## OBSERVATIONS AND EXPERIMENTS ON THE DIRECT ACTION OF ETHER ON THE BLOOD.

By JAMES H. PRING, M.D., Weston-super-mare.

In the state of uncertainty which at present characterizes the opinion of the profession respecting the propriety of having recourse to the novel employment of ether as a means of suppressing pain during parturition, and the performance of surgical operations, it is hoped that the facts which form the subject of the following communication may contribute to divest the question of some of the sources of ambiguity in which it is still involved.

The altered condition of the arterial blood, resulting from the inhalation of ether, has been pointed out by several of the French physiologists, who found that a dark and fluid state of the blood was produced in animals subjected to the process termed "etherization," and a similar result has been repeatedly observed by surgeons in this country, whilst operating on patients under the influence of ether, the arterial blood lost during the operation having exhibited the change of character above mentioned.

Considering, however, the important influence which the change in question must necessarily exert on the animal economy, it seems surprising that it has not yet been made the subject of more special investigation. It is true that M. Amussat, in his experiments on the lower animals, purposely continued until a fatal result ensued, does not hesitate to ascribe the cause of death to the altered state of the blood, and that Mr. Adams, of the London Hospital, however questionable may be his mode of explaining the rationale of the subject, nevertheless refers the peculiar effect of the ether to its influence primarily on the arterial blood, yet I am not aware that any satisfactory attempt has hitherto been made to ascertain the mode in which the altered state of the blood is brought about,*—whether it is owing solely to the direct action of the ether on the blood; or whether it may not rather depend—as has, I believe, been suggested—upon the deficiency of the usual amount of oxygen, in consequence of the substitution of a considerable proportion of the vapour of ether, in place of the normal supply of atmospheric air; whether the effect produced is in any way determined or modified by vitality; or whether it is independent of this influence, and occurs equally in blood removed from the body, and is therefore to be regarded as a chemical rather than a vital change. On these, and some similar questions, it has appeared to me desirable that we should have some more certain information than that at present possessed; and it was with a view, in some measure, to supply this desideratum, that I was induced to try the effect of the direct admixture of ether with arterial blood, when removed from the body.

For this purpose I collected in two separate two-ounce bottles, some arterial blood, as it was flowing fresh from a divided vessel in a sheep. In one of the bottles, a small quantity of pure washed ether* had been previously introduced, whilst the other, being employed merely as a standard of comparison, contained only atmospheric air, and as soon as each bottle became about half full of blood, it was immediately closed hermetically. On comparing the two bottles after the lapse of two or three minutes, the blood in that containing the ether was found to be almost black, and in some measure fluid, the coagulum formed being at the same time of a much softer consistence than usual. In the second bottle, that in which no ether was introduced, the blood at this time exhibited itself as a firm and uniform coagulum, retaining all its florid arterial character. This experiment, made some weeks since, has subsequently been varied, as opportunity has been afforded, and the following may be taken as a brief summary of the results arrived at. Oxygen gas introduced into the vessel containing ether, does not in any way prevent the peculiar action of the ether on arterial blood, nor does the subsequent transmission of oxygen gas through the darkened etherized blood restore to it either its arterial colour, or the power of coagulating; though it seems probable that the cause of the failure of the oxygen in displaying its usual agency on the blood in this instance, may be attributable to the presence of some free ether still remaining in the vessel. Ether poured on fresh arterial blood produces the same results as where it is first introduced into the vessel in which the blood is subsequently to be received, and in each instance the effect is increased by agitation of the vessel. Arterial blood collected in a vessel containing ether was found to become darker and more fluid than when collected in a vessel containing carbonic acid gas.

The common sulphuric and nitric spirits of ether of the shops, when mixed with arterial blood, produce, apparently, the same effects as are obtained with the washed ether.

Of these experiments, which, believing them to be new, I have thought it worth while to communicate, the first appears to be the only one deserving more particular attention. From this experiment alone, the questions formerly proposed will be found, in great measure, to have received their solution, whilst a more attentive consideration of it will assist us in drawing some practical conclusions in reference to the novel use to which ether is now applied.

We learn from this experiment that the state of the blood observed in etherized patients does not depend merely upon the absence of the normal amount of oxygen in the lungs, nor upon any impediment which the process of etherization, with the apparatus employed, &c., may offer to the due elimination and disengagement of the carbonic acid from the lungs; neither does the ether act, as stated by M. Robin, simply by "preventing the transformation of venous into arterial blood," since it is shown, in this experiment, not only "to oppose the arterialization of the blood," for the reasons assigned by M. Robin, but actually to deprive arterial blood of the oxygen already combined with it.

The conclusion, therefore, is inevitable, that the change produced in the blood is independent of any vital agency, and hence must be regarded as of a purely chemical nature, dependent, in all probability, on the affinity which ether has for oxygen—a property which the high temperature to which it is exposed when taken into the lungs would have the effect of augmenting in a remarkable degree, so as to favour its rapid absorption of oxygen from the oxygenized constituents of the blood.

It seems scarcely necessary to do more than advert to this changed condition of the blood, in order to indicate the true source through which an explanation of the physiological effects of ether must be sought. "Physiology," says Liebig, "has sufficiently decisive grounds for the opinion, that every motion, every manifestation of force, is the result of a transformation of the structure or of its substance; that every conception, every mental affection, is followed by changes in the chemical nature of the secreted fluids; that every thought, every sensation, is accompanied by a change in the composition of the substance of the brain." And again:—"The change of matter, the manifestation of mechanical force, and the absorption of oxygen, are, in the animal body, so closely connected with each other, that we may consider the amount of motion, and the quantity of living tissue transformed, as proportional to the quantity of oxygen inspired and consumed

* Since the above was written, the observations of M. Robin, in relation to this subject, as reported in THE LANCET of April 17th, have come under my notice. The views, however, of M. Robin, and the conclusions he arrives at, appear, as will hereafter be shown, so different from those forming the subject of the present communication, as to render any material alteration of the above remark unnecessary.

* Should the use of the liquid ether in these experiments be objected to as affording no sufficient ground of analogy with the process as ordinarily employed, it must be remembered that a similar state of the blood to that here described is, in many cases, undoubtedly found to result from the process of etherization, whilst it is presumed that no very marked differences of effect would be likely to ensue from the employment of the ether in a condensed, instead of in a more rarefied, form.

in a given time by an animal." If, then, these views are correct, as it is now pretty generally admitted that they are, can it any longer be a matter of surprise, that sensibility, in common with the other vital manifestations, should, according to circumstances, be variously modified, or even altogether suppressed, by a process which not only arrests at its very source the necessary absorption of oxygen by the blood, but has the property, further, of depriving the arterial blood of the supply of oxygen of which it is already in possession.

The experiments made by M. Serres, by which he showed that a sponge dipped in ether, and placed in contact with the crural nerve of a rabbit, had the effect of abolishing sensibility in the nerve at the part in immediate contact with the ether, and in all the ramifications of the nerve below that point; but that sensibility remained unimpaired in the portion of the nerve above the point of contact of the ether, may seem to militate against the view just advanced, which ascribes the physiological effect of the ether to its chemical action primarily on the blood in the lungs. The discrepancy, however, seems more apparent than real, since it is most probable, that as general insensibility results from the action of the ether on the blood in the lungs, so particular or local insensibility may result from the like changes, produced by the direct chemical action of the ether on the blood circulating in the minute vessels, by which the nerve subjected to the experiment was supplied; though it is possible, that in this instance some chemical action may also have been exerted on the nervous substance itself.

As regards the practical conclusions to be drawn from a consideration of the experiments now detailed, it is obvious that where there is any tendency to passive hæmorrhage, the condition of the blood produced by ether must tend remarkably to favour its occurrence. In reference to the new employment of ether in obstetric practice, I feel it unnecessary, after the able manner in which this part of the subject has been treated by Dr. W. Tyler Smith, to offer any observations of my own.

With respect to the use to which the vapour of ether has been applied in operative surgery, I am aware that any remarks which may tend to discourage its employment may at once be met by an appeal to the numerous instances in which it has been resorted to with success. That some cases, however, owe their fatal issue to the employment of ether seems now no less certain—a fact of sufficient significance to require no comment in order to guide the judicious practitioner in his decision as to the eligibility of having recourse to this new agency.

It was formerly a principle in operative surgery, that previously to submitting to an operation, the patient should undergo a suitable preparatory treatment; and we find Mr. Abernethy stating, that "as operations are injurious, so we ought not to perform them, if it can be avoided, where the constitution is much disordered." Whether such a state of the blood as that caused by etherization can occur without giving rise to any corresponding degree of constitutional disorder, or whether the production of such a condition of the blood can be regarded as a salutary preparation for an operation, are questions that must be left to the decision of those surgeons who may still deem it prudent to make etherization the prelude to the use of the knife.

April, 1847.

## ON INFANTILE SPASM OF THE WINDPIPE.

ILLUSTRATED BY CASES.

By JAMES REID, M.D.,

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I AM induced to offer some observations on this complaint, on two accounts; the first, that to some practitioners it seems an unusual one, many with whom I have spoken on the subject never having met with an instance of it in their practice; whilst with others there is a strong difference of opinion as to its primary cause, and consequently as to its treatment.

It is not my intention to enter fully into all the details connected with the disease, but more especially to consider the two points above alluded to; and I shall endeavour to be as concise as the subject will allow of.

Until within the last few years, the subject seems to have been rarely described by authors, and not at least to have been inserted in the different works which professed to treat on the "General Practice of Physic." Dr. Simpson, in 1761, and Dr. Millar, in 1769, described it under the name of infantile asthma, although Hamilton, John Clarke, and Gooch, at an after period, thought it either to be little known, or, as two of them imagined, not to have been regularly described. This, at least, proves how little it had excited the attention of the profession generally.*

The different terms under which it is found in the authors who allude to it are, infantile asthma, bastard croup, cerebral croup, child crowing, laryngeal asthma; Dr. John Clarke described it under the title of "A peculiar species of convulsion in infant children." The most common appellation at the present time is, unfortunately, I think, that proposed by Dr. Mason Good, and afterwards adopted in the voluminous work of Dr. Hugh Ley—viz., laryngisimus stridulus. On being questioned by the parents or relations of an infant attacked by this peculiar complaint as to its name, I am sure that every practitioner must feel a difficulty in giving this sonorous reply; and, for my own part, I have seldom done so without being requested to write down the name, so that they might both understand and recollect it. A far better term is that used by Dr. Marsh, who, in a paper in the *Dublin Hospital Reports*, vol. v., terms it "Spasm of the glottis;" and in the following observations I shall adopt it, modifying it slightly, by using the common appellation of that tube of which the glottis forms a part, and terming it spasm of the windpipe. From the effects produced, it might also not inappropriately be called infantile spasmodic asphyxia, for in fatal cases the death of the child appears to be caused fully as much by asphyxia, owing to continued closure of the air tubes, as if the throat were compressed tightly by a ligature, or the child submerged in water for the same period of time.

*Description.*—The spasmodic stricture of the windpipe varies of course much in its intensity and duration; in some cases being but momentary, in others continuing for a minute nearly, and occasionally, when not altogether fatal, it is just within the limits of the period of suffocation. In the first case, a slight catching of the breath is alone noticed, and passed over as of no consequence. It is this affection, in a slight degree, which is perceived when a young child is injudiciously and rapidly tossed up and down by the nurse for some time. In the next degree, it is attended with a peculiar crowing sound, like the prolonged inspiration of hooping-cough, the child suffering for the moment, apparently, with a sensation of constriction about the throat, which, together with the attendant fright, occasions a fit of crying afterwards. Should the affection proceed to a greater extent, either from neglect of precautionary treatment, or from the persistence of the primary cause in spite of it, the symptoms take on a much more alarming form. Temporary asphyxia occurs, the face becomes either livid or ashy pale, the body is rigid, the head thrown back; the child is motionless, after struggling for a time, and the friends are uncertain whether life still remains or not, until respiration is at length reëstablished feebly, and the infant gradually recovers from the paroxysm. There is not, afterwards, necessarily, either cough or difficulty in respiring, unless another paroxysm supervenes, but occasionally both may be present.

This I regard as a case of simple asphyxia; the shrill, squeaking sound attending the first struggles of the child, something like the crowing of a cock, is the result of the attempt to inspire through the narrow chink of the partially-closed glottis.

But not unfrequently, though not necessarily as part of the disorder, there is a complication of another equally serious symptom—convulsion, rendering the attack much more dangerous. This general convulsion may be the effect either of the same irritable state of the intestinal canal, and of the nervous system, which we know so frequently results from dentition, or it may be caused by the state of the cerebral system which results from the asphyxia itself, as in common cases of that state, when produced by noxious gases, drowning, or hanging, the same convulsive action often occurs. This tendency to convulsions is generally evidenced by the drawing in of the thumbs across the palms of the hands, accompanied frequently by a spastic contraction of the toes.

The complaint is found to attack the most robust and apparently healthy children, as well as those of more delicate conformation and health. The paroxysms may be slight, and speedily relieved, or they may continue, at intervals of uncertain nature, during several months.

*Age when attacked.*—The period of dentition seems to be the boundary as to the liability to these attacks. The peculiarly irritable state of the nervous system during this time

* Dr. Underwood—whose valuable "Treatise on the Diseases of Children," with the practical additions of its three respective editors, is so well known to the profession—does not apparently describe the disease from his own knowledge, but gives the account "of a gentleman of great respectability and experience, by whom it was regarded as a spasm of the stomach, lungs, or other vital parts."—*New Edition*, 1846, p. 180.

renders the child more liable to these spasmodic attacks when the primæ viæ are loaded with an undue quantity of undigested fæcal matter. Dr. Henry Davies mentions the usual period of infantile life in which children are most likely to suffer from this complaint to be from seven months till two years and a half old; but that the greater number occur from the tenth to the fourteenth month.

Two cases, however, which occurred in my private practice, commenced at the age of three months, in one of which the mother thinks she had observed the symptoms even at two months and a half, it proving fatal suddenly at three months and a half. The latest age at which I have known this disease to attack a child was at eighteen months,* after sixteen teeth had appeared—the same child having had, a twelvemonth previously, several severe paroxysms, accompanied by general convulsions. I find in my case-book several instances also at the fifth month.

*Predisposition.*—Spasm of the windpipe appears to attack the individuals of some families in preference to others, there being in the former a predisposition to the disease apparently. I have been called in to three children of a medical friend at the west-end of the metropolis, who were attacked, and to the same number in two other families. Dr. H. Davies mentions the cases of four children in the same family, three of whom died. Mr. Powell, of Great Coram-street, has a patient who has borne thirteen children, and only one of these has escaped this disease, which proved fatal to three of them.

*Cause.*—The direct or immediate cause of these spasmodic actions of the muscles, which influence the epiglottis, may depend on any excitement. Fear, surprise, joy, or any unusual exertion, may bring on the attack. The most likely time for its occurrence is that at which the child awakes; but I am not prepared to say whether this is the cause or effect.

The remote or primary cause is a *questio vexata* with those authors who have written on the subject. Dr. John Clarke thought that the disease originated in "vascular congestion within the head," in which opinion he is supported by Gooch, North, Pretty, and some later writers. Dr. Hugh Ley, on the contrary, thought that it is generally more allied to partial or local paralysis, owing to compression on the pneumogastric and recurrent nerves, rather than to convulsive movement. This theory seems to have originated from the two cases of our practical and talented fellow practitioner, Dr. Merriman, in which "the principal deranged structure discovered was a collection of small glandular swellings in the neck, pressing upon the par vagum.

It has been well pointed out by Dr. M. Hall, that such pressure would cause permanent paralysis and constant closure of the glottis. The general history of the complaint is likewise widely different from that of paralysis.

Dr. Marsh forms a conjecture, that the seat of the disease may perhaps be found to exist at the origin of the pneumogastric nerve, but the description of the primary causes, given so ably by Dr. Marshall Hall, fully coincides with all the ideas which I had practically formed for some years past, but which he has most ingeniously explained, by his theory of reflex action.

I have already alluded to the presence of vitiated secretions and noxious fæcal matter within the intestines, as one cause of the disease, which, moreover, occurs during that period in which a great general irritability of the nervous system is known to exist peculiarly, that is, whilst the deciduous teeth are rising up through the gums.

According to Dr. Marshall Hall's explanation of these united causes, the pneumogastric nerve is irritated at the stomach by undigested food; the spinal nerves at the rectum suffer in the same way, from irritating fæces; and the trifacial nerve is irritated by the process of dentition.

The pneumogastric nerves appear to be the great means of causing the sudden action; and as the superior and inferior laryngeal nerves act on the larynx and glottis, in opening and closing this orifice, Dr. Hall considers the disease to depend on a reflex excito-motory action of the superior and inferior laryngeals, and the medulla oblongata.†

The cause, then, of simple spasm of the glottis or epiglottis, I think, does not exist (in the majority of cases) in the state of the brain principally, or, in other words, the affection of the brain, when it does occur, (as evidenced by general convulsions,) is not the primary cause, but is itself produced by the same excito-motory action as that which causes the spasmodic seizure itself.

There are some other affections, both in the child and the adult, which produce this sudden spasmodic action of the glottis, without the brain being implicated more than usual in any other form of asphyxia. Dr. Marshall Hall mentions a case of spina bifida, in which pressure on the tumour caused immediately a croup-like convulsion; and another case of a lady, who, on taking a dose of strychnia, was seized with spasm of the muscles about the larynx, and she felt as if strangled. Occasional irritation of the pneumogastric nerve, by tumours of various descriptions, may (though such are rare cases I think,) act as an exciting cause. Dr. Addison saw a case in which it was produced by an aneurism of the aorta; and some cases may possibly thus have been produced by the irritation of enlarged glands, but I again repeat, that I should look upon such cases as rare exceptions.

The peculiar crowing noise is not even confined to the disease now under consideration; it closely resembles that of croup, and more especially of hooping-cough, though perhaps more stridulous, and not in general of so loud a character. It is even heard in some instances of hysteria in women, appearing to depend in them, on a spasmodic closure of the glottis, with a consequent croup-like inspiration. It is sometimes even recognised in epileptic attacks.

In a very interesting paper lately read before the Medico-Chirurgical Society by Dr. Budd, the same train of symptoms was described as occurring in adults who were convalescents in King's College Hospital. The patients, three in number, were attacked suddenly with a spasmodic closure of the glottis, resulting apparently from as sudden an erysipelatous affection of that part. Some of the cases described, both by Dr. Budd and by other fellows of the Society, had not suffered from any previous local pain; and they were, in fact, walking in the wards at the moment of the attack, which in each case proved fatal, notwithstanding the operation of laryngotomy was speedily had recourse to. The same croup-like inspiration was observed, and death took place under the same circumstances, as in infantile spasm of the windpipe. I did not understand that the parts presented, in the post-mortem examination, the appearance of such œdematous swelling, as mechanically to have blocked up the air passage, and thus to have prevented respiration, but merely to have produced such sudden irritation as to excite the spasmodic action of closure likewise.

There is a form of œdematous angina met with occasionally in young infants, and described by Billard and other authors, in which the glottis was found after death inflamed, as well as the larynx itself.

From a somewhat extensive experience now in cases of the infantile spasm of the windpipe, I have, I must confess, long since come to the conclusion, that the principal cause of this disease will be found to exist in "the improper description of food administered to the stomach of the infant, especially when combined with improper description of air inhaled at the same time by its lungs; and this leads me at once to speak of the great evils to be apprehended in the attempt to bring up children, as it is termed, 'by hand.'"

I am quite aware that there are numerous instances which may be pointed out of fine, healthy children who have been thus reared, and have escaped; but still, I look upon these as the exceptions, which I think I may fairly do, when I can at the same time time show, by statistical details, the results of the two different systems—viz., "that of rearing by hand," and the other by affording to the infant its natural nourishment."

It was long since stated by Dr. Merriman, that seven out of eight children who were attempted to be reared by hand died in infancy; and I believe that the same result would in the present day be found to exist. We need only to inquire into the ultimate fate of those beautiful, well-developed, healthy infants brought to us by mothers seeking the office of wet-nurse; and we shall find, that in a few months after the engagement, their children, transferred to a dry nurse, are either dead, or have dwindled down into emaciated, unhealthy beings, ready to fall a sacrifice to the first acute disease which may happen to attack them.

The mortality of very young infants thus fed, in the public institutions of London, would present a fearful result if thoroughly inquired into. In one of the largest workhouses

* Dr. Marsh mentions in his paper a case, communicated by Dr. Johnson, of an infant which was attacked three days after birth with a laryngeal spasm, and a crowing inspiration, of a severe character, the attacks returning at intervals until the third month. They returned between the fifth and sixth months with general convulsions, and no benefit resulted from any treatment until the child was removed to the country, when they immediately ceased.

Dr. Underwood mentions a case also at fourteen days after birth. A medical friend's child, aged two days, to whom I was called, had this spasmodic action of the glottis, with its attendant loud crowing inspiration, evidently dependent upon retained meconium, producing irritation. A purgative, with antispasmodic remedies, afterwards speedily removed the complaint.

† On Diseases and Derangements of the Nervous System.

of the metropolis, the fact of a young infant having been reared by hand, I have been informed, would be looked on as something unusual; and during the last half century, on this account, metropolitan parishes were obliged, by Act of Parliament, 7th of George III., to send out their infant poor to country residences provided for that purpose, which proceeding was said to have reduced the mortality considerably. For what reason I know not, this humane Act was repealed by the 7th and 8th of Victoria, so that the obligation now no longer exists.

Although the removal to the country, I have not the least doubt, must materially increase the chances of life in infants, still it is not sufficient alone, unless, at the same time, some provision is made to nourish them by their natural food. I shall best exemplify this by contrasting the different systems as pursued by two different London institutions.

In one, the young infants are sent to a very salubrious part of the country, a few miles distant from London, where they are carefully nursed, I am assured, by hand—the matron of the establishment being a conscientious and humane lady. I have procured the accurate returns of the mortality of infants in this establishment for the last ten years, and find from them, that out of sixty infants admitted under the age of one year, thirty-eight died speedily; and that of the remaining twenty-two, fourteen were nearly attaining to the age of one year when they were admitted. Only four infants out of the survivors had been admitted in early infancy—viz., at two, three, six, and nine weeks old.

In the other London institution alluded to,—the "Foundling Hospital,"—the plan pursued appears to be by far the most humane and successful. Every infant gaining admission into this establishment is immediately sent some miles out of town to a healthy vicinity, and provided with a wet nurse.

Through the kindness of Mr. Brown, assistant-secretary to this excellent institution, I learn, that from May, 1835, to May, 1837, one hundred infants were received, and of these only twelve died under the age of one year.

From May, 1837, to May, 1839, one hundred children were likewise received, and of these only nine died under the age of one year.

The contrast certainly is remarkable. I will not deny that children brought up solely on breast-milk may have this complaint; for I believe that mental emotions or altered health of the nurse may so far alter the quality of the milk she forms as to irritate the bowels of the infant, and thus produce such a result; but it so happens, that out of a very large number of infants so attacked, not one of them was wholly dependent on the breast, but was also partially fed by hand; and from numerous inquiries which I have made of different members of our profession in extensive practice, they have given me the same result.

The only case approaching to it was that of a child, aged six months, who had a wet nurse, but was slightly fed by hand occasionally also; but by a curious coincidence, the nurse herself had had, two nights previously, a similar spasmodic attack of the glottis, caused by hysteria, the sound of which so precisely resembled that of the infantile spasm, that the father of the child (a medical practitioner) hurried up stairs, thinking his own infant was thus, for the first time, attacked. Two days after, such attack in reality did occur in it.

It is well to recollect also, that in many cases in which the wet nurse is supposed to nourish the infant solely with breast milk, unless carefully watched, this in reality is very deficient in its supply, and other food is given, unknown to the parents.

*(To be continued.)*

## Reviews.

*Gray's Supplement to the Pharmacopœia; entirely re-written, re-arranged, and considerably enlarged.* By Theophilus Redwood, Professor of Pharmacy to the Pharmaceutical Society. London, 1847: Longman and Co. pp. 1118.

The title of this work brings to our mind the necessity there is for a new edition of the London Pharmacopœia, brought up to the present state of our knowledge of pharmacy, and containing the many additions which have been made to our medical armamentarium since the appearance of the last. Eleven years have now elapsed since the last edition of the Pharmacopœia was issued by the London College of Physicians, during which time many valuable medicines have been introduced into general use, and the necessity of numerous corrections to the work has been pointed out. To the above-named College the duty of preparing a Pharmacopœia for England is delegated, which should contain an account of all efficacious medicines, simple and compound, in common use, and of their mode of preparation, with a collection of authorized formulæ. The want of a new Pharmacopœia has long been felt and complained of: the reason why this want has not been attended to can be found only in the inertness, the supineness, of the College of Physicians of London—or rather "of England"—a trait of character not peculiar to it, but common to irresponsible corporate institutions in general.

The Scottish College of Physicians has evinced a greater desire to render its Pharmacopœia a more accurate representative of modern pharmaceutical knowledge; having issued an edition in 1841, a previous one having been published in 1839.

In the course of the recent trial of the apothecary Cronin for poisoning, the London Pharmacopœia was referred to as wanting in many pharmaceutical preparations, and as very deficient in the matter it does contain. At the same trial, the work which we have under notice was brought forward, as it contained a formula for the bitter-almond water, the preparation and strength of which compound formed the prominent subject for examination. This preparation is not contained in the Pharmacopœia, and therefore could not be deemed an authorized one, as one which might be dispensed by an apothecary or chemist from its name merely, as ordered in a prescription. A compound wanting the authorization of a British Pharmacopœia, we may suppose would differ in its strength and preparation from the non-existence of a standard according to which it should be dispensed; wherefore, a physician would be to blame if he ordered a *compound* not contained in a British Pharmacopœia, seeing that its qualities might vary according to the different proportions of its ingredients which different chemists might employ.

From the circumstance of its being quoted at the trial above referred to, Gray's Supplement has gained considerable notoriety. Indeed, it is a most comprehensive work, giving an account of all known substances, animal, vegetable, and mineral, to which have been ascribed medical properties; and also containing numerous formulæ for preparations, not only those which are employed in medicine, but others made use of in the arts and in domestic economy. Thus, we have an account of the composition of various cements used by the dentist, by the china and glass-mender, and by other artizans; of colours as used by colour-makers and dyers; of jellies; of pommades, &c. The strict applicability of the title—viz., Supplement to the Pharmacopœia—to the work, we would call in question. It affords, indeed, a supplement to the Pharmacopœia, yet gives, besides, a description of a great deal else which, although medical in character, we should be sorry to see the Pharmacopœia encumbered with; and of things, lastly, which have no relation with medicine. Hence it might be rather termed an "Encyclopædia of Substances used in Medicine and the Arts, and their Preparation."

However, such being the character of the work, it will be *particularly* useful to the chemist and druggist of modern days, whose business is of a mongrel kind, and whose shop is like an American store, furnished with articles of different descriptions and uses—drugs, pickles, perfumery, glass-ware, colours, &c. Medical men also will find in it numerous useful formulæ, and an account of many active and valuable medicines which have not yet found a place in the Pharmacopœia. The work will prove useful to those who are located in foreign and unsettled countries, as they will be able to discover from it the names and uses of the vegetable productions they meet with, and which may beneficially replace or make up for the want of those in ordinary use in their own country.

Matter of great utility and interest is collected in this com-

prehensive volume from numerous works on materia medica, botany, pharmacy, and chemistry; and hence it will serve as a most useful book of reference. For this purpose it is also well fitted, by the very copious index it possesses, to all its parts, and by the alphabetical arrangement of the part devoted to the consideration of the "animal, vegetable, and mineral products, and formulæ for the preparation of compounds."

The first few sections of the volume give a sketch of the history of pharmacopœias, and of weights and measures; a description of the methods of taking specific gravities; of the chemical elements, their symbols and equivalents; of terms used in prescriptions; and then a pharmaceutical calendar, or an account of the time of flowering of medical plants, and of that for collecting them. Together with the preceding information, there are many useful tables of specific gravities, of thermometrical equivalents, and of the solubility of salts.

A copious section follows on the animals yielding products used in medicine, the arts, and domestic economy; and presents a very good outline of the characters of the classes and orders of the animal kingdom, according to the classification of Cuvier. This section of itself might form an elementary treatise on zoology; indeed, we think so many details respecting the characters and habits of the several classes and orders of animals to be out of place in a work on pharmacology. This remark applies also, in substance, to the succeeding section, on vegetables employed in medicine, the arts, and domestic economy, which occupies above four hundred pages, and contains a description of the characters of the classes and orders, according to the system of De Candolle, and, briefly, of the several species, with a notice of their properties and habitats. The concluding portion of the work is occupied by a description of "animal, vegetable, and mineral products, and formulæ for the preparation of compounds employed in medicine, domestic economy, and the arts." With the exception of such products and formulæ as refer to the arts and domestic economy, this portion appertains to medicine more nearly than most of the preceding sections, and is best entitled to the appellation of a "Supplement to the Pharmacopœia." It describes the several substances used in medicine—both those contained in the British pharmacopœias, and many others which are not; their compounds, their mode of preparation, and their uses. Where a compound having the same name exists in the three Pharmacopœias, and differs in the substances entering into it, and in their relative proportions, in one or more of them, the preparation as ordered by each is given. Old formulæ, with their quaint and obsolete names, which have some utility, and existed in the pharmacopœias of former days, are occasionally given, and some also used in foreign countries. It is in this section that we find a formula for the aqua amygdalæ amaræ, which compound formed a principal subject of investigation in the late trial of Cronin, and which, as a matter of some interest, we will give:—

"Aqua amygdalæ amaræ—Bitter-almond water. Obtained by distilling the cake left after the expression of the fixed oil from bitter almonds, with water. Mix one pound of almond-cake with eight pounds of water; let the mixture stand for twelve hours, then carefully distil with a moderate heat."

The treatise, considered as a whole, is very comprehensive, well got up, with good paper and good type. It must have been a laborious task to Mr. Redwood to have "entirely re-written and re-arranged the work," as the preface states, and to have added so much to the contents of former editions of "Gray's Supplement," which, as now issued by him, is greatly improved, and very complete. And although we have found fault with the title of the work, as not strictly applicable, yet we have not to blame Mr. Redwood, the present editor, for it, since he has merely retained the title he found it possessing when he commenced the preparation of this new edition, and which he could not well have laid aside to substitute another.

# Medical Societies.

## WESTMINSTER MEDICAL SOCIETY.

April 10, 1847.—John Webster, M.D., F.R.S., President.

Mr. Hird made some observations on a

DEFORMITY OF THE CHEST IN CHILDREN.

He related one of the cases of this deformity which he had seen. It occurred in a little girl now seven years of age. He attended her at the age of six months, when she was suffering from extreme difficulty of breathing, which obliged her to let go the nipple when sucking. The tonsils were found much enlarged, and a portion of them was removed, with much relief to the breathing at that time. He had been attending her again lately. She had cough, and a slow irregular pulse. The abdomen was tumid; the sternum prominent; and there was a projection of the spine backwards about its centre. There was a depression on each side of the chest at the union of the ribs with the cartilages, and a sinking in of the chest at the sides during each inspiration. The tonsils were much enlarged; and he had always found them so when this particular deformity was in existence. Baron Dupuytren, who had written on this deformity, had noticed the enlargement of the tonsils in connexion with it; and he had recommended a peculiar mechanical treatment for it, part of which consisted in the application of pressure by the nurse on the sternum during expiration, and withdrawn during inspiration. He (Mr. Hird) had found this treatment of service.

Dr. Snow said that this kind of deformity had been noticed by writers in this country as well as by Dupuytren; and he (Dr. Snow) had read a paper on it to that Society several years ago. The cases which he then related depended, however, on enlargement of the abdomen; but he had at that time explained how it might be occasioned by enlargement of the tonsils, when it was so great as to impede the ingress of air to the lungs. Whilst the diaphragm, by its contraction, tended to enlarge the capacity of the chest, the air, unable to enter and distend the lungs, forced inwards by its pressure the still delicate and flexible sides of the thorax of the child.

Dr. Murphy considered that this kind of deformity depended on scrofulous disease, which interfered with the growth of the bones of the chest; and that although enlargement of the tonsils, disease of the lung, or other causes, might assist in its production, they could not of themselves occasion it. In the infant, the abdomen was large in proportion to the chest; and if, from scrofulous disease, the chest did not grow properly, these infantile proportions would be preserved; the belly, getting larger, would cause the sternum to project, and the sides of the chest to be flattened; and if there was obstruction to the ingress of air from enlarged tonsils or any other cause, the atmospheric pressure might press on the flattened sides of the chest.

Mr. Streeter considered that the walls of cavities were influenced in their shape by the contained organs, and not by external causes; and that the form of the chest would depend on that of the lungs and heart, as the skull does on that of the brain.

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Saturday, April 17.

Dr. James Reid read a paper on laryngismus stridulus, illustrated by cases, which will be found at page 458.

A Member inquired whether the cause of the disease was always the same, and if so, remarked that it could not depend on organic mischief, for if so, the cause being always in action, the effects would be permanent and not transitory. He inquired if it were a frequent disease in country districts.

Dr. Reid believed that the disease was rare in country districts. In answer to a question, he stated that the best substitute for the mother's milk was two parts of cow's milk, one of water, and a little sugar.

Mr. Hancock believed that the cause of the disease was invariably functional, and alluded to the mischief occasionally produced by treating it as an inflammatory condition. To show the effects of withdrawing the natural nutriment from the infant, he stated that some years since he had on an inquiry respecting the deaths of several children in one of the metropolitan workhouses. It came out in evidence, that out of nine very young children, which had been arbitrarily separated from their mothers, and of course from their natural nutriment, eight had died in the space of two months. With respect to the mortality of infants in manufacturing districts, he had found it to depend on bad ventilation, the crowding

together of numbers in small, close rooms, and the administration of Godfrey's cordial. He related one instance in which a woman destroyed her infant, by taking a large dose of laudanum herself and allowing the child to suck when she was under its influence.

Mr. Streeter had not seen the disease in the country. He remarked that there appeared to be a tendency to it in certain families. He thought it depended, in some cases, primarily on an irritable state of the glottis, the result of bronchitis, or as a part of a general tendency to convulsions. He had noticed in some of these fatal cases that the medulla oblongata was much enlarged, and the fibrous portions of that body more distinct than usual. He alluded to the frightful mortality of the Foundling Hospital in former times, and to an article which had great influence in lessening this mortality, and which appeared in one of the medical journals about thirty years since.

Mr. Marson thought much of the improvement respecting mortality in the Foundling was attributable to an article by Sir Francis Head, in the *Quarterly Review* of ten years since.

Dr. Webster observed, that the mortality in foreign foundling hospitals was frightful.

Dr. Ayres said that the disease under consideration was very rare in the country, even in such large towns as Oxford. With respect to the best substitute for maternal milk, he had no doubt that this consisted in cow's milk, with a little farinaceous food.

Dr. Reid, in allusion to the observation of Mr. Streeter, respecting the connexion of this disease with bronchitis, observed that he had once seen it as a sequence of that affection; but this was only accidental, and had no relation as to cause and effect.

## PATHOLOGICAL SOCIETY OF LONDON.

Monday, April 5, 1847.—Dr. Williams in the Chair.

In the report of the case of

DISLOCATION OF THE ASTRAGALUS,

brought forward at the last meeting by Mr. Liston, it should have been remarked that "the astragalus was so tilted on itself that the under surface looked towards the outer malleolus, being confined by the peronæi tendons which passed over its posterior aspect, the head of it being tightly embraced by the annular ligaments and tendons of the extensor longus digitorum, which rendered reduction impossible. An analogous case had come some time ago under the notice of Mr. Liston, in which, although the foot was put straight, it was impossible to reduce the bone.

In the case of

CONTENTS OF A LARGE INGUINAL HERNIA,

which had been dissected by Mr. Morton under Mr. Liston's superintendence, it should have been stated that "the peculiarity of the specimen was the presence of a much more extensive peritonæal investment than ordinary, to the cæcum and ascending colon, which had, by a movement "*en vascule*," descended into the sac. The caput coli had, in fact, a complete mesentery, (instead of merely descending with its "fleshy connexions," as stated by Scarpa,) so that it was reducible with the greatest facility, a fact of importance in a practical point of view, the opinion generally entertained being that it was irreducible.

Dr. Ogier Ward stated that he had made an attentive

MICROSCOPIC EXAMINATION OF SECTIONS OF A NECROSED BONE

exhibited by him some time ago. He found that the upper part of the bone, which had suffered acute necrosis, exhibited not only a discoloration round the Haversian canals, but that the discoloured portions were corroded out, and separated from the sound parts when the sections were made very thin; though in thicker sections the structure seemed unimpaired, and the canaliculi were apparent even in the discoloured parts, whereas the lower part of the bone, which presented the appearance of ordinary caries, exhibited no change in its minute structure. The necrosed portion had a very offensive smell, from which the carious portion was free. He concluded that the disease originated in the necrosed portion itself, and that the periosteum and soft parts became secondarily affected in order to give exit to the dead bone which had been destroyed by the pus or other corrosive matter thrown out by the vessels in the Haversian canals; also that the carious portion being only affected by the disease of the periosteum surrounding it, suffered no change in its internal structure. In a drawing by Mr. Bowman, exhibited to the Society, the dilatation of the Haversian canals in acute necrosis was well shown.

Dr. Quain read a communication from Dr. Hughes Bennett on the nature of the cerebral tumour, a microscopic preparation of which was exhibited at the last meeting. A portion of the tumour had been incinerated in a platina crucible, and reduced to a white ash, in which the globular bodies of which the tumour was mainly composed were still apparent. The investing membrane had been destroyed, but the bodies themselves, though rounded, brown, and opaque, were unchanged in form, with the exception of a crenated margin, and the presence of distinct concentric rings. A considerable quantity of phosphates entered into their composition. On the addition of diluted nitric acid the phosphates were removed and a true organic structure left. They undergo no change on being boiled in ether, proving that they are not fat.

Dr. Garrod had also made a chemical examination of these bodies, and found them composed chiefly of phosphate of lime and animal matter; that when incinerated, they were insoluble in acetic acid and alkalies, but soluble in hydrochloric and nitric acids, and precipitated from its solutions by ammonia. They broke easily, separating into their component strata.

Mr. Nathaniel Ward remarked that the bodies under consideration appeared analogous to those described by Valentin, as occurring in the choroid plexus and pineal gland, and which he states appear under the microscope, at first sight, something like air bubbles, but on closer examination are found surrounded by a clear transparent membrane, so as to appear to be contained in a cell formation. On being pressed they break in a radiated manner, transversely or irregularly; after treatment with acids the organic skeleton remains, and the concentric structure is still visible. They are with difficulty converted into an ash under the blow-pipe, and even then preserve their laminated arrangement. They are composed of carbonate of lime, with the basic phosphate mixed up with a little phosphate of magnesia and ammonia.

Dr. Babington read a case of

CYANOSIS DEPENDENT ON PATENT DUCTUS ARTERIOSUS WITH DISEASE OF THE AORTIC VALVES, ETC.

The heart was exhibited. The patient, a female, aged thirty-four, of phlegmatic temperament and stunted development, was admitted into Guy's Hospital in January, 1847, under Dr. Barlow, and afterwards Dr. Babington. The countenance was pale, puffy, and abundantly streaked with dark-coloured capillary veins. She had scarlet fever at sixteen years of age. She never had rheumatism, nor other known existing cause of heart disease. When six or seven years of age she suffered from palpitation, shortness of breath, occasional sickness, and swelling of the legs and ankles. She was also subject to cough, and expectorated a good deal, the sputa being occasionally streaked with blood. When fourteen years old she went into the country, and began to grow out of these complaints. She first menstruated at eighteen, and for a time did so pretty regularly. At twenty, her old complaints returned. These symptoms continued, with little alteration, until her twenty-third year, when she came to reside in London. The menstrual discharge then became scanty, and at her twenty-eighth year entirely ceased for a period of five years. During this time she had pain at her proper periods, but the catamenia did not flow, and while this was the case her general ailments were always more severe. After this she returned to the country for eighteen months, when the catamenia reappeared for three months, but again ceased on her return to town. She entered Guy's Hospital in August last, under Dr. Addison, for the symptoms already mentioned, and went out relieved in three weeks; since that time, however, she has been gradually getting worse. On admission she complains of headach, palpitation, pain below the left mamma, shortness of breath, and cough, which symptoms frequently keep her awake at night, and disturb her rest by sudden startings and frightful dreams. The tongue is dry, and the tonsils are enlarged. She feels nausea occasionally, but says she digests her food well. Her legs and ankles are swollen. The bowels are open. Urine is natural in colour and quantity. The chest is narrow, contracted, and very prominent. The impulse of the heart is forcible; both its sounds are prolonged, (and distinctly audible all over the chest,) but the second especially so. They are accompanied

by two loud sawing murmurs, which are heard over the whole præcordial region, but most loudly over the third and fourth sterno-costal articulations, as well on the right as on the left side. There is also strong impulse felt, in this situation, on both sides of the sternum. Immediately after the flap of the valves (which is loud) there follows a sharp click, which is the commencement of the second murmur. This murmur is also heard distinctly over the second sterno-costal articulation. Both sounds are heard over the back of the chest, and down the spine to the sacrum. The heart's action is irregular. Pulsation can be felt at the top of the sternum. The pulse is irregular, about 88—94. During her stay in the hospital, an ecchymotic spot appeared about the middle of each cheek, slightly elevating the skin, and giving a sense of roughness under the finger. She scarcely received any benefit from treatment, but gradually wasted, and sank exhausted on Tuesday, 13th April, at twelve o'clock at noon. While under Dr. Addison's care, the late Mr. Wilkinson King saw her, and from his conversation with her he learned that she was a seven months' child. He then diagnosticated "patescence of the ductus arteriosus."

*Examination of the body, twenty-five hours after death.*—The body emaciated; the feet and ankles slightly œdematous; the superficial veins everywhere very numerous, distinct, and dark; and the ecchymosis on the cheeks was still distinct. The head was not examined. The abdomen contained about a pint of ascitic fluid. The liver was slightly contracted, and rather smaller than natural. The lungs were small—some parts of their edges emphysematous, and some portions of the lungs more fleshy, looking as if they had never been expanded by air, like the lungs of a fœtus. These portions readily sank in water. The pericardium was large, and contained about double the natural quantity of serous fluid. The whole heart was enlarged, and, with the great bloodvessels attached to it, weighed one pound two ounces avoirdupois. Both ventricles are dilated, and their parietes thickened. The mitral valve has a few very small vegetations on its auricular aspect at its insertion in the auriculo-ventricular ring. The lining membrane of the left ventricle is thickened and opaque, but particularly so towards its outlets. The aortic orifice is diminished in caliber, measuring $2\frac{6}{10}$ inches. From the anterior aortic valve there is a large vegetation, about the size of a filbert, occupying about two-thirds of its ventricular surface, attached by a broad root, commencing at its free edge. This vegetation is chiefly bony and cretaceous. At the middle of the aortic surface of this valve there is an opening larger than a quill, leading into this vegetation, and which forms a small aneurism, and which, when the heart was opened, contained very dark coagulated blood. The next valve is perforated by several small openings, (six in number.) On its ventricular surface also there are fibrinous vegetations. The third valve is bound down by a strong band from its ventricular surface to a circular spot, a quarter of an inch in diameter, at about three-eighths of an inch below its ventricular margin. This spot now looks very like an ulceration, the band having been roughly detached from it. Through this valve, which is seven-eighths of an inch in length, there is a large, irregular, but somewhat oval, opening, running along its length, three-eighths of an inch long, and a quarter of an inch broad, about the middle of the valve. Within the aorta, a quarter of an inch above, and immediately opposite, this valve, there is a miniature valve, half an inch in length, and a quarter in depth, with a well-defined sharp edge, forming a little sac. The origin of the pulmonary artery is much dilated, measuring $4\frac{4}{10}$ inches. In the middle valve there are five very small openings, occupying rather its extremities, and there is one minute one in each of the other valves. The aorta is narrowed throughout. Immediately opposite, or perhaps slightly above, the giving off of the left subclavian on the lesser aortic curvature, there is a tight narrow band, more than one-third the circumference of the vessel, very much narrowing its caliber. Immediately beyond this band there is a circular opening, larger than a goose quill, surrounded at its narrowest part by small vegetations, and leading into the pulmonary artery, the remains of the ductus arteriosus. At this spot the two bloodvessels are in perfect apposition, so that, strictly speaking, there is no ductus, but a simple opening. Nearly opposite to this opening, but distal to it on the larger concave surface of the aorta, there is a series of oblong, consecutive patches, two and a half inches in length, elevated fully a quarter of an inch above the surface of the vessel, and projecting into it. Into the most proximal and largest of these, runs the band already described, so that the one appears to be a continuation of the other. There is everywhere much atheromatous deposit throughout the course of the aorta.

Dr. Gull remarked that the case brought forward by Dr. Babington was interesting in connexion with the state of the lungs, which he had examined carefully, and which he found to present, at the lower portions and free margins of the lobes particularly, patches of condensed pulmonary tissue, which he considered to have been atelectatic from birth. That this condition had caused considerable obstruction to the pulmonary circulation, throwing the blood back on the heart, and giving rise to a current from the pulmonary artery to the aorta, by which the patency of the duct had been maintained. In answer to the suggestion of Dr. Williams, that the opening was direct from the pulmonary artery to the aorta, having been the result of inflammation, Dr. Gull remarked, that such a possibility had been considered, but a comparison of this state with similar specimens showed that no length of duct had ever existed, that the forces which acted to keep open the ductus arteriosus would tend to press the vessels together, and that if the canal were carefully examined, the continuity of the structures would be evidenced.

Dr. Williams stated as a sure ground of diagnosis of patent ductus arteriosus, where there is no other very serious lesion to obscure it, is, that the murmur accompanying the first sound of the heart is *prolonged* into the second, so that there is no cessation of this murmur before the second has already commenced. From this sign, taken, of course, in connexion with other symptoms, he was able in two cases which lately fell under his notice, to diagnosticate this lesion, and post-mortem examination proved the accuracy of this diagnosis.

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Dr. Parker exhibited a specimen of

MALFORMED HEART TAKEN FROM A BOY, AGED THIRTEEN, WHO HAD SUFFERED FROM BIRTH FROM CYANOSIS, AND WHO HAD DIED FROM AN ACUTE ATTACK OF PNEUMONIA.

The right ventricle had three times the capacity of the left, the walls being half an inch in thickness. The pulmonary artery large, with normal valves. Deficiency of the upper part of the septum ventriculorum, in the form of a round opening, the size of a fourpenny piece, immediately below the middle pulmonary valve. Aorta small and contracted, about one-third the size of the pulmonary artery, its canal passing obliquely downwards and forwards, and opening into the right ventricle immediately on the right of the septum, and half an inch anterior to the opening of the pulmonary artery. It was furnished with a distinct funnel-shape membrane, apparently arising from the union of the atrophied valves. The state of the ductus arteriosus was not known, but there can be but little doubt that it was patent.

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Mr. Adams exhibited a specimen of

ENCHONDROMA FROM THE ANTERIOR PART OF THE SHEATH OF THE CAROTID VESSELS,

which had been removed by him from a man of middle age during life. He stated that he first perceived it, in the form of a small lump, about a year ago, which gradually increased till it had attained the size of a large walnut. It was imbedded in the cellular tissue of the neck, beneath the angle of the jaw, and was closely connected with the carotid sheath. The lower part of the maxillary gland overlapped it. The case was interesting on account of the great rarity of enchondroma unconnected with bone.

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Mr. Birkett exhibited a specimen of

STRICTURE OF THE URETHRA WITH HYPERTROPHIED BLADDER AND DISEASED KIDNEYS.

The left kidney was three or four times larger than the right, which was about one-third the natural size. It presented a very distended pelvis, filled with puriform fluid and small depôts of pus, both within the cortical and between the tubes of the tubular portion of the organ. Pus might be pressed from the papillæ. The tubular portion was coarse. The right kidney, likewise filled with puriform fluid, presented little cortical or tubular structure. The pelvis was greatly distended. The ureters were both greatly distended with puriform fluid. The bladder contracted, the parietes exceedingly thickened, and it contained a little purulent urine; its mucous membrane red, and in patches ecchymosed and rugous. The power of the ureters was not able to overcome this violent contraction. Hence their great distention. The membraneous portion of urethra distended, and the surface covered with puriform lymph not easily detached. In front of this the caliber of the urethra was closely contracted, so much so, as only to admit the entrance of a very fine probe. This

constriction was half an inch in length. The tissues forming the constriction were of cartilaginous firmness. The urethra in front of the stricture appeared natural. The specimen was taken from a man aged twenty-eight, who had had stricture for five or six years. The symptoms he had while in Guy's Hospital, under Mr. Morgan, were, dribbling away of the urine, which was alkaline and loaded with puriform mucus; great pain over the pubis, the bladder being distended. No instrument could be passed, and it was deemed inexpedient to open the bladder; extensive disease of it and of the kidneys having been diagnosed. He sank on the twelfth day after admission.

## British Medical Journals.

### RESEARCHES ON HYDROPHOBIA.

A late number of the *Veterinary Record* contains the translation of a valuable paper on Rabies by D'Eckel. He made the dogs of Vienna the materials for his investigation, and gives the results in all the forms which belong to statistics of a higher order.

In one year 141 cases of hydrophobia occurred; of these, eighty were of the furious or raging form, thirty-one the taciturn, and thirty died during the violent paroxysms.

"The great number of cases occurred in the months of February and May, in each of these months twenty-one cases being observed; while in April, June, and January, there were only eighteen, seventeen, and sixteen cases respectively; and five and four in September, November, and December.

"The malady almost always manifested itself at the periods of the new and full moon."

Curious as are these facts,—the first being so much opposed to the opinion which assigns very different months for canine madness, and calls them dog-days,—they are not less curious than those which follow:—

"The disease principally attacked dogs belonging to persons in easy circumstances. Thus, twenty-five belonged to noblemen, sixteen to public functionaries, ten to artists, and fifteen to persons unknown. In general, it was more frequently met with in mongrel-bred dogs than in the better breed.

"Among the 141 cases referred to, 126 were males, and fifteen females; making the proportion of dogs to that of bitches as eight and one-fifth to one. No instance was known among castrated dogs. The age of those attacked by this terrible malady was from two to seven years."

All were what are called fancy-dogs. The disease never attacked the watch-dog, or those employed in labour.—[Lucky dogs.]

*The invasion of rabies.*—It is during this period, when the character of the disease has not been recognised, that the chief injury occurs—precautions are not observed, and the morbid animal is, perhaps, accidentally excited; it will therefore be important to know the symptoms of the early stages, thus described:—

"The malady can only be well defined during the period of its development, and that by three characteristic phenomena:—

"1. The accession of fury, with inclination to bite.

"2. The change in the voice, and the bark.

"3. Paralysis of the posterior maxillary jaw.

"These three symptoms are constant and pathognomonic. The invasion can only be perceived by the master of the dog, or one who is intimately acquainted with the natural disposition and habits of the animal, and who submits him to a careful examination. In the room the disease shows itself by the animal exhibiting a great deal of anxiety; he gets up and lies down again—seems uneasy—forsakes his accustomed place—his habits are perverted—one moment he will obey the voice of his master with astonishing punctuality, the next moment he pays not the slightest attention to him, or if he does, it is with repugnance—he keeps constantly near the door—he tries to get out, without having any occasion to satisfy his natural wants. The urinary and fæcal evacuations are scanty; to which may be added, the loathing of food, in particular animal food, and a desire to drink cold water, or cold milk, without, however, partaking of much at a time.

"Out of doors he follows his master with reluctance, and without the least sign of satisfaction or pleasure. Contrary to his usual custom, he walks behind him, and his attention is only excited when he meets with other dogs, cats, or birds, which he tries to reach and even to bite. He picks up and swallows all sorts of filth and rubbish, such as the excrements of other animals, dirt, old leather, bits of cloth, &c.

"These symptoms are aggravated on the second, or at the latest on the third day, when the appetite becomes entirely lost—the animal, when at liberty, furtively forsakes his home, bites all animals it meets with, and even man, if obstructed or tormented by him. After several hours' running he returns to his home exhausted, throws himself in some obscure corner, and allows himself with difficulty to be approached even by his master. It becomes, then, most dangerous to use constraint, but with kind usage he may be made to obey. If in this state he is not watched, he again runs away, and never returns; if, on the contrary, he is carefully watched, he may yet continue to follow his master, but bites all dogs, cats, or other animals in his way, without allowing himself to be intimidated by the voice of his master, after which he will again return to him, and allow himself patiently to be muzzled by him, and will even follow him, if kindly treated. In this manner, observes Dr. Eckel, many dogs attacked with the acute form of rabies have been brought to the Imperial Veterinary Institute of Vienna by their masters, even without muzzle or chain. These dogs are very quiet if treated with kindness; but as soon as they are shut up in their cages, and see other dogs, or even hear them, the accession of rage takes place, and they furiously gnaw their litter, the sides, floor, iron bars, &c., of the cage; and when living animals, such as small dogs, pigs, or sheep, are brought near them, their fury for biting redoubles; their carnivorous instinct then reaches its acme—they put themselves in the position of the tiger ready to spring on its victim. These paroxysms occur several times in the day, even without any apparent existing causes. After each paroxysm dogs will generally gladly lap some clean water, but deglutition is difficult; they either lie down or sit on their haunches, and make themselves heard by a frequent bark, the muzzle being turned upwards. This bark is peculiar and characteristic—*sui generis*. It is something between the ordinary bark of the dog and the howl. In the beginning the voice is sonorous and metallic, afterwards it becomes hoarse. In some cases a slight trembling is perceived, which, according to M. Eckel, never terminates in convulsions, but in a sort of apparent sleep, during which the dogs never cease biting any object presented to them. The desire to bite subsists after the access of furor has subsided.

"On the second day the paroxysms are at greater intervals, less frequent, and of shorter duration. During the intervals the dog remains in a recumbent posture: if he attempts to get up, the posterior extremities seem weak and vacillating—the posterior maxilla drops, and his mouth is half open—drowsiness predominates—the animal expresses no longer a desire for water—he lies quietly with his head on his belly—the sonorous metallic bark is no longer heard, but instead of it a short, hoarse howl is from time to time audible—the external objects which excited him before lose their effect; and it is with difficulty that the animal is made to rise. In ordinary cases this general debility passes at the third, or at the latest the fourth day, into a complete state of paralysis. Then the animal is constantly lying on one side—the head and legs are extended—the mouth and eyes half open, the latter are fixed, the pupil *immobile* and dilated, the cornea dusky and shrunk. Sometimes a fœtid diarrhœa exists, the alvine excretion being of a greyish or blackish colour, and voided involuntarily. The respiration now becomes imperceptible, and in general the animal dies quietly and without a struggle."

We shall take another opportunity of referring to the pathology and treatment of this fearful malady.

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True Philosophy.—"Some good-natured and ingenious retainers to the profession, on the publication of my book of 'Long Life and Health,' proclaimed everywhere that I was turned mere enthusiast, and resolved all things into allegory and analogy, advised people to turn monks, to run into deserts, and to live on roots, herbs, and wild fruits; in fine, that I was at bottom a mere leveller, and for destroying order, ranks, and property, every one's but my own: but that sneer had its day, and vanished into smoke. Others swore that I had eaten my book, recanted my *doctrine and system*, (as they were pleased to term it,) and was returned again to the devil, the world, and the flesh. This joke I have also stood. I have been slain again and again, both in verse and prose; but I thank God I am still alive and well."—*Life of Cheyne.*

# THE LANCET.

LONDON, SATURDAY, MAY 1, 1847.

THE "BILL FOR THE REGISTRATION OF QUALIFIED MEDICAL PRACTITIONERS, AND FOR AMENDING THE LAW RELATING TO THE PRACTICE OF MEDICINE IN GREAT BRITAIN AND IRELAND," is printed verbatim in the present number of our journal. This Bill has been read a first time in the House of Commons, and the second reading is appointed for Wednesday next, the 5th of May; but it is not very likely that the motion can be brought forward on that day. An application will be made to the ministers to appoint a special day for the second reading; and if the Bill should receive the general support of the profession, evinced through the instrumentality of an active and universal system of petitioning, there can be no doubt that the measure will receive the aid of the Government, and be enacted into a law by the legislature. With only a few slight alterations, except in the schedules, a draught of this Bill was printed in THE LANCET of Jan. 2nd last; and not a single argument against either its principles or chief provisions, worthy of the slightest consideration, has yet been published. It has now been known to the whole of the medical profession, and to all the corporations, during a period of several months. It may therefore be fairly inferred that the measure is suited to the wants of the profession, and that it is not hostile to the just interests of any of the corporations. The cause of medical reform, consequently, has assumed a most favourable, as well as a commanding position; and the measure now proposed for the relief of the profession, although it is far from all that could be desired, yet offers so much of present and permanent advantage to the profession and the public, that it appears to us to claim the indefatigable support of the profession. We hope to see some hundreds of petitions presented in its favour—*and without delay.* If the members of the profession cease to take an active interest in their own affairs, they will be seconded in their supineness by the indifference of the legislature. But if the whole body of the profession approve of this Bill, and claim its enactment by Parliament, who can doubt that it will become a law?

In the next LANCET, we shall explain the provisions of the several clauses of the Bill, in language altogether free from the technicalities and peculiar phraseology which custom has unfortunately introduced into our statutory enactments.

At page 470, will be found some forms, which may be adopted in petitioning the House of Commons. Those forms may of course be varied as the views of different petitioners may appear to demand. It should always be remembered that a great number of petitions, each being signed by a single petitioner, would produce an infinitely greater effect in Parliament than a few petitions signed by a large number of petitioners.

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A LATE number of this journal teemed with the disastrous results of quackery. Blood cries aloud against the hideous system. We gave at the time our comments upon the trial in the case of DENNIS CRONIN, for the alleged manslaughter of Miss COLLYER; but we are desirous of adding yet a few words.

SIDNEY SMITH used to say, after a railway accident, "Oh that a bishop had been killed!" as the best means of inducing legislative interference with railways, and a greater care of human life. If such a sacrifice to quackery would quicken the hereditary and elective wisdom of our legislators in medical matters, it would be thought by some a cheap boon to the millions. As it is, the death of a baronet, like Sir F. BURDETT, the near escape of Sir E. L. B. LYTTON, who has now returned to orthodoxy, the destruction of a few ladies of title by homœopathy, seems to produce little effect. It is not to be wondered at, therefore, that the story of the victim at Camden-town should have passed so transiently before the public eye. And yet, the case was remarkable; and some such case must, at no distant time, rouse the public mind to a thorough appreciation of the mischiefs of quackery, in all or any of its forms.

We regretted to be obliged to designate DENNIS CRONIN an apothecary. Of course there is no similarity between this person and the general practitioners. This individual, it is reported, has been known for many years as abandoned to itinerancy and puffing, and the usual routine of advertising quackery—now having an operation, now a specific, to trumpet forth to the gullible public.

In the case of Mr. CORFIELD, we exonerated him from all blame, so far as the hydrocyanic acid was concerned, and we pointed out the absurdity of attributing any portion of the fatal result to the omission of the strychnine powder. Still this brings before us the possibility of a chemist omitting any single article from any prescription. Of the culpability of this there can be no doubt; no patient can be safe, no prescription depended upon, if the dispenser is permitted, at his own discretion, to leave out any ingredient, of whatever quality or insignificance. In this respect, Mr. CORFIELD was to blame. He should at once have rejected the prescription, as soon as he found that any one of its items was unknown to pharmaceutical chemists.

No mean share of the responsibility lies at the door of the College of Physicians. Considering the powers and the pretensions of this body, it is perfectly monstrous, that in such a department of knowledge as medicine, the armamentarium medicum—the Pharmacopœia, has not been revised nor republished for eleven years. Every year improvements in pharmacy are made, and yet the Pharmacopœia of the London College of Physicians is a decade behind. Hence it is, that so many medicaments and nostrums, some valuable, and some altogether useless and quackish, are creeping into the profession. It is disgraceful, that any chemist should be able to testify credibly upon oath to the fact, that the College Pharmacopœia is greatly behind the state of the practice of the day. If anything could stimulate the College of Physicians to a newer and better life, and the resumption of some of their disused but valuable powers of correction, such a trial as the recent one must do it. But the College should not only correct and renovate the Pharmacopœia, but they should purify the College of some of the many quack names which infest it.

Dr. R. VENABLES, upon whose evidence on the trial of CRONIN we commented with just severity, has sent us a letter, nothing to the purpose, in which he affects to consider us in joke when we threw out a hint to the College of Physicians respecting an inquiry into his conduct, and to the different examining bodies respecting the recognition of his lectures. We can assure him that we were never more in earnest, and should be

right glad to see our hint acted upon. Dr. VENABLES does not in any way controvert the newspaper report. He allows that in a single dose of the mixture taken by the unfortunate lady there were very nearly fifty minims of hydrocyanic acid, while if the strychnine had been added, there would only have been $\frac{1}{60}$th of a grain in the entire mixture, and $\frac{1}{480}$th of a grain in the single dose! Yet he has the folly to write that, "physiologically speaking, the influence, whatever the extent, would be that of an excitant to the nervous system, inducing a state incompatible with that of narcotization!" We say, it is a gross delusion to speak of $\frac{1}{480}$th of a grain of strychnine as an excitant at all, a delusion transparent to the merest tyro in the profession. The bravado of this lecturer against his college we extract, as a specimen of the whole communication:—

"Of course you know it would be an imperative duty, not only to myself, but to the public, to resist and set at defiance any attempt to interfere with, or compel, any explanation of the evidence I have given in a court of justice; and I entertain too high an opinion of the bodies themselves to suppose them capable of so gross an indelicacy. If my testimony be culpable or reprehensible, there is but one legitimate mode of proceeding, and that is by INDICTMENT. Let us see who will dare to undertake the office of prosecutor."

## Medical Registration, and Medical Law Amendment.

# A BILL

FOR THE REGISTRATION OF

## QUALIFIED MEDICAL PRACTITIONERS,

AND FOR

## AMENDING THE LAW RELATING TO THE PRACTICE OF MEDICINE

IN

## GREAT BRITAIN AND IRELAND.

*Preamble.*—Whereas the laws relating to the Practice of Medicine in Great Britain and Ireland are numerous, complicated, and contradictory, and the public possess no certain means of distinguishing between legally qualified physicians, surgeons, and apothecaries, and the mere pretenders to a knowledge of medicine; and whereas it is desirable that the names, qualifications, and places of residence, of the legally qualified practitioners in medicine should be duly registered by competent authority:

1. *Registrars to be appointed.*—Be it therefore enacted, by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, That one of Her Majesty's Principal Secretaries of State shall, within *one month* after the passing of this Act, nominate and appoint three fit and proper persons, being at the time of such appointment qualified to be registered under the provisions of this Act, to be the registrars for carrying this Act into execution, one such registrar to be called the "Medical Registrar for England," another, the "Medical Registrar for Ireland," and one, the "Medical Registrar for Scotland," and the said Secretary of State shall also from time to time appoint such clerks and other officers as he shall deem necessary for the assistance of the said registrars in carrying into execution the provisions of this Act; and that the said Secretary of State may at his discretion remove any registrar or other person so appointed as aforesaid; and that upon the death or resignation of any such registrar or other clerk or officer as aforesaid, or other vacancy in either of the offices so filled, the said Secretary of State shall appoint other proper persons to be such registrars, clerks, and officers respectively; and there shall be paid to the said registrars, clerks, and messengers, out of any monies to be received by the said registrars by virtue of this Act, such salaries as shall be from time to time fixed and allowed by the Lord High Treasurer, or the Commissioners of Her Majesty's Treasury, who may also allow such reasonable travelling expenses as may be incurred by any registrar, clerk, or messenger in the performance of his duties under this Act, and such other reasonable expenses for putting and carrying this Act into execution, as the said Lord High Treasurer or the Commissioners of Her Majesty's Treasury shall think fit.

2. *Monies to be paid to Medical Registration Fund of Great Britain and Ireland.*—And be it enacted, that all monies received by the registrars aforesaid, in carrying this Act into execution, shall be paid by them into the Bank of England, at such times and in such a manner as the Secretary of State aforesaid shall direct, to the credit of the Lord High Treasurer, or the Commissioners of Her Majesty's Treasury, and in the name of the "Medical Registration Fund of Great Britain and Ireland."

3. *Registration of Names &c. of persons qualified to practise before the passing of this Act.*—And be it enacted, that the several registrars shall, within *thirty days* after their appointment, and from time to time afterwards, register in books to be kept for that purpose, and without any fee whatsoever, the name and place of residence, together with a description of the legal qualification or qualifications, with the date or dates thereof, of every physician, surgeon, or apothecary, who shall apply to be registered, and who, prior to the passing of this Act, shall have taken a degree in medicine in any English, Irish, or Scotch University, or who shall apply to be registered, and shall produce his diploma, certificate, or licence, or other proof of his having obtained a diploma, certificate, or licence to practise as a physician, surgeon, or apothecary, dated prior to the passing of this Act, and granted by any English, Irish, or Scotch University, College, or Society, or any corporation, sole or aggregate, in England, Ireland, or Scotland, legally entitled to grant the same; and of every person who shall apply to be registered, who was actually practising as an apothecary in England and Wales prior to the first day of August, one thousand eight hundred and fifteen, and who shall sign a declaration according to the form in schedule (A) to this Act annexed, and also of every surgeon and assistant-surgeon of the army and navy, and in the service of the Honourable the East India Company, who shall apply to be registered as aforesaid.

4. *Registration of Persons obtaining their Qualifications after the passing of this Act.*—And be it enacted, that the several registrars aforesaid shall, from time to time, upon the application of any physician, surgeon, or apothecary, who, after the passing of this Act, shall take a degree in medicine as aforesaid, or produce a diploma, certificate, or licence, as aforesaid, dated subsequently to the passing of this Act, and on the payment of the sum of *Two pounds* by the person so applying, register, in the books to be kept as before mentioned, the name and place of residence, together with a description of the legal qualification or qualifications, with the date or dates thereof, of every physician, surgeon, or apothecary, so applying to be registered as last aforesaid.

5. *Registrars to issue Annual Certificates to Registered Practitioners.*—And be it enacted, that the several registrars aforesaid shall issue a certificate, according to the form in schedule (B) to this Act annexed, to every person who shall be registered as aforesaid, and who shall apply for such certificate; and the said registrars shall issue such certificates for those parts of Great Britain and Ireland only for which they shall be severally appointed to act.

6. *Payment of Five Shillings for Certificate.*—And be it enacted, that every person shall, upon his application for such

certificate, pay to the registrar a sum not exceeding *five shillings*, and such certificate shall bear date on the day on which the same shall be issued, and if issued in the year *one thousand eight hundred and forty-seven*, shall continue in force from the date of such certificate, until the thirty-first day of December, one thousand eight hundred and forty-eight, and no longer; and the said registrars, on or before the fifteenth day of December in the year last mentioned, and in every subsequent year, upon the application of any person who shall be then registered, shall issue such certificate to such person in like manner as aforesaid, subject to the payment of a sum not exceeding *five shillings* as aforesaid, which said certificate shall take effect on the first day of January then next ensuing, and shall continue in force during one year, and no longer.

7. *Registrar to keep a Record of Certificates.*—And be it enacted, that each of the said registrars shall duly record an account of every certificate which he shall issue as aforesaid, and in the month of January in every year shall cause to be printed a correct register, according to the form in schedule (C) to this Act annexed, of the names and places of residence, arranged alphabetically, of all persons to whom he shall have so issued certificates during the year then last past, according to the provisions of this Act, together with a description of their legal qualification or qualifications, with the date or dates thereof; and such registers shall be respectively called, "The Medical Register for England," "The Medical Register for Ireland," and "The Medical Register for Scotland;" and a printed copy of the register for the time being, so published as aforesaid, shall be evidence in all courts, and before all justices of the peace and others, that the persons therein specified have obtained certificates according to the provisions of this Act; and the absence of the name of any person from such printed copy shall be evidence, until the contrary be made to appear, that such person has not obtained a certificate according to this Act; and copies of such Medical Registers shall be furnished by the respective registrars to every person who shall apply for the same, upon the payment of a sum not exceeding *one shilling* for each copy.

8. *Persons accidentally omitted from Register may obtain Certificate on paying Twenty Shillings.*—And be it enacted, that if any person entitled by this Act to obtain a certificate as aforesaid, whose name and place of residence, and a correct description of whose qualification or qualifications, with the date or dates thereof, do not appear in such Medical Register as aforesaid, shall at any time apply for a certificate to any of the registrars aforesaid, and shall prove, to the satisfaction of such registrar, either that he is a person whose name, through his own neglect, or mistake, had been omitted from the Medical Register then current, or that he intends commencing or resuming practice, or changing his residence, before the first day of January in the ensuing year, every such applicant shall be entitled to obtain, from the registrar appointed for that part of the United Kingdom in which he resides, upon payment of *Twenty Shillings*, and sending his name and then place of residence, together with a description of his qualification or qualifications, with the date or dates thereof, a certificate as aforesaid, to continue in force until the thirty-first day of December then next ensuing.

9. *Repeal of Restrictions on Practice excepting such as are in this Act.*—And whereas it is just and expedient that all registered persons possessing certificates in force as aforesaid, should be entitled to practise medicine in that part of the United Kingdom for which their certificates are issued; Be it therefore enacted, that so much of any Act or Charter granted before the passing of this Act as prohibits any person from practising medicine, physic, or surgery, in any place without such licence as is mentioned in any such Act or Charter respectively, or that imposes any restriction or penalty on the practice of medicine, physic, or surgery, further than is contained in this Act, shall be and the same is hereby repealed.

10. *Registered persons entitled to Practise where Certificates are issued.*—And be it enacted, that every person who shall be registered, and shall possess a certificate in force, according to the provisions of this Act, shall be entitled, without other licence than such registry and certificate, to practise medicine throughout that part of the United Kingdom for which his certificate was issued.

11. *Registered Practitioners entitled to Charge for Advice, Visits, and Attendance.*—And be it enacted, that all persons who shall be registered and possess certificates according to the provisions of this Act, shall be entitled to demand and recover, in any court of law, with full costs of suit, reasonable charges for medical or surgical advice, visits, attendance, and medicines rendered or supplied by them to their patients without any other licence than such registry and certificates.

12. *None but Registered persons to recover Charges.*—And be it enacted, that after the passing of this Act no person shall be entitled to recover any charge in any court of law or equity for any medical or surgical advice, attendance, or for the performance of any operation, or for any medicine prescribed, administered, or supplied by him, unless he shall prove upon the trial, either that he is in possession of a certificate in force, according to the provisions of this Act, or that he was legally practising in the capacity in which he claims such charge at the time when the debt was incurred.

13. *Repeal of enactment requiring Five years' Apprenticeship to an Apothecary. (Fifty-fifth George III., cap. 194, sect. 15.)*—And whereas, by an Act passed in the fifty-fifth year of the reign of King George the Third, intituled, "An Act for better regulating the Practice of Apothecaries throughout England and Wales," it was enacted "that no person shall be admitted to any examination for a certificate to practise as an apothecary unless he shall have served an apprenticeship of not less than five years to an apothecary;" and whereas the said enactment having been found to obstruct the efficient education of students in medicine, it is expedient that the same should be repealed; Be it therefore enacted, that so much of the said recited statute as requires the serving of such an apprenticeship as aforesaid shall be and the same is hereby repealed.

14. *Summary Penalty against Unregistered Practitioners. (Fifth Geo. III., c. 184, s. 20.)*—And be it further enacted, that if any person shall, after the first day of January, one thousand eight hundred and forty-eight, act or practise as a physician, surgeon, or apothecary, in any part of Great Britain and Ireland, without being duly registered according to the provisions of this Act, and without having a certificate as aforesaid in force at the time of his so practising or acting as a physician, surgeon, or apothecary, he shall, on conviction before any magistrate having jurisdiction in the county, city, or place where the offence was committed, forfeit and pay a sum not exceeding *five pounds*, nor less than *forty shillings*, for every such offence, to be recoverable within three months next after the commission of the said offence, as is hereinafter described.

15. *Penalty on Unregistered Persons for acting as Medical Officers.*—And be it enacted, that every person appointed after the passing of this Act to any medical or surgical office for which he is not qualified according to the provisions of this Act, and who shall act or practise in such office, shall for every such offence forfeit a sum not exceeding *ten pounds*, nor less than *forty shillings*, to be recovered as is hereinafter described.

16. *Expulsion of Registered Practitioners for disgraceful conduct.*—And be it enacted, that if *five* registered practitioners shall at any time complain to the council of any college or other governing body, that a person who had obtained his diploma or other qualification from such college or body had

been conducting himself in a manner calculated to bring scandal and odium on the profession, by publishing indecent advertisements or pamphlets, or immoral or obscene prints or books, or had been guilty of any other disgraceful and unprofessional behaviour, the said council or other governing body aforesaid are hereby empowered to cite the person accused before them, first giving him due notice and a full statement of the charges against him; whereupon the said council or other body, having heard the defendant, and on being satisfied that the charges have been proved, or, in default of his appearance, having decided that the charges have been proved, they are hereby authorized to erase the name of such person from the rolls of the said college or other institution, and shall transmit forthwith to the registrar of that part of the kingdom wherein such college or other institution is situated, an official report of their decision, authenticated by the seal of such college; and the said registrar shall thereupon strike out the name of the offending party from the register in his custody; and it shall ever afterwards be excluded from every register to be kept under the provisions of this Act, unless the council or other governing body by whom the name was first erased shall re-admit it into the rolls of their college or other institution.

17. *Persons not possessing Certificates incapable of acting as Medical Officers in Public and other situations.*—And be it enacted, that from and after the first day of January one thousand eight hundred and forty-eight, no person who does not possess a certificate in force according to the provisions of this Act, shall be capable of holding any appointment in any part of Great Britain or Ireland in the capacity of a physician, surgeon, apothecary, or other medical officer in any hospital, infirmary, dispensary, lunatic or other asylum, lying-in hospital, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish, union, or other public establishment, body, or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age; and the certificate or evidence of any person not possessing a certificate as aforesaid, given after the passing of this Act, shall not be received as the certificate or evidence of a physician, surgeon, or apothecary, or medical or surgical practitioner, in any court of law or equity, or in any matter or thing in which by law or custom the certificate or evidence of a physician, surgeon, apothecary, or medical or surgical practitioner, is or shall be required.

18. *Penalty for wilful falsification of the Record of Certificates by any Registrar.*—And be it enacted, that if any registrar under this Act shall wilfully make or cause to be made any falsification in any matters relating to any register, certificate, or record aforesaid, every such offender shall be deemed guilty of a misdemeanor; and shall, on conviction thereof, be sentenced to be imprisoned for any term not exceeding *six months.*

19. *Penalty for obtaining Certificate by False Representations.*—And be it enacted, that if any person shall wilfully procure or attempt to procure a certificate from any registrar, by making or producing, or causing to be made or produced, any false or fraudulent representation or declaration, either verbally or in writing, or shall by any false or fraudulent means whatsoever, possess, obtain, use, or attempt to possess, obtain, or use, any certificate as aforesaid, every such person so offending, and every person aiding and assisting him therein, shall, upon being convicted thereof, be adjudged guilty of a misdemeanor in England and Ireland, and in Scotland of a crime and offence; and thereupon it shall be lawful for the court before whom such offender shall be tried and convicted, to sentence such offender to be imprisoned, with or without hard labour, for any period of time not exceeding six calendar months.

20. *Penalty for falsely pretending to be a Medical Practitioner.*—And be it enacted, that every unregistered person who shall wilfully and falsely pretend to be, or take or use the name or title of a physician, doctor, bachelor of medicine, surgeon, or apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or apothecary, or a practitioner in medicine or surgery, shall, on being convicted of every such offence before any magistrate having jurisdiction therein, pay a sum not exceeding *ten pounds*, nor less than *forty shillings*, to be recoverable as is hereinafter described.

21. *How Penalties are to be recovered: if not paid, the offender may be committed.*—And be it enacted, that any justice of the peace acting in and for the county, city, or place in which the offence has been committed, or any magistrate appointed by virtue of an Act passed in the second and third years of the reign of her Majesty Queen Victoria, intituled, "An Act for regulating the Police Courts of the Metropolis," or one of the justices of peace courts of Scotland, may hear and determine any complaint charging any person with practising medicine without a certificate as aforesaid, on the oath of one or more witnesses, or by the confession of the accused party, and shall award the penalty or punishment herein provided for such offence. And in every case of the adjudication of a pecuniary penalty under this Act, and of non-payment thereof, it shall be lawful for the said justice or magistrate to commit the offender to any gaol or house of correction within his jurisdiction, for a term not exceeding *one calendar month* when the sum does not exceed *forty shillings*, and for a term not exceeding *three* calendar months when the sum does not exceed *ten pounds*, the imprisonment to cease on payment of the sum due.

22. *Application of penalties.*—And be it enacted, that any sum or sums of money arising from conviction and recovery of penalties for offences committed against the authority and provisions of this Act, shall be paid to the account of the Medical Registration Fund aforesaid, towards defraying the expenses of this Act.

23. *Uniformity of education, qualification, and fees, throughout the kingdom.*—And be it enacted, that the several colleges and other examining bodies shall, from time to time, prepare and lay before the said Secretary of State a scheme or schemes, including the subject of midwifery, of the course of study, and particulars of the examination to be passed by all persons applying to such colleges and other bodies respectively for letters testimonial as a physician, or surgeon, or apothecary, and also an account of the fees proposed to be taken by the said colleges and bodies respectively for such letters testimonial. And whereas it is expedient and desirable that the qualifications and fees for the said testimonials should be uniform, according to the nature thereof, throughout Great Britain and Ireland, such schemes or accounts as aforesaid shall be of no force or effect until they shall have been submitted to her Majesty in council, and shall have received her Majesty's sanction and approval.

24. *Inspection and Supervision of Examinations.*—And be it enacted, that the said Secretary of State may, from time to time, require returns to be made in such form, and including such particulars as he shall think fit, respecting the examinations to be conducted for medical degrees, diplomas, and licences; and it shall be lawful for any person deputed by the said Secretary of State, being a physician, surgeon, or apothecary, registered under this Act, to be present at any of the said examinations, and to report to the said Secretary of State, and if he shall be of opinion that the regulations approved by her Majesty in council for the examination and grant of letters testimonial as physician, surgeon, or apothecary, have been infringed, evaded, or neglected by any of the examining bodies, it shall be lawful for the said Secretary of State to admonish the said offending body; and if such ad-

monition be neglected, then to direct the registrars as aforesaid to refuse to register upon the testimonials of the body so in default, until the conduct of such body shall be altered to the satisfaction of the said Secretary of State.

25. *Examiners may take Candidates to Hospitals &c. for practical Examinations.*—And be it enacted, that the duly appointed examiners of candidates for degrees, diplomas, and licences in medicine, shall be empowered, under such regulations and restrictions, and at such times, as shall be approved by the Secretary of State as aforesaid, to attend with the candidates for examination in the public hospitals, or other public institutions containing sick and diseased persons, and also in any workhouse, with the view of ascertaining the practical knowledge of such candidates in the science of medicine.

26. *Act not to affect examinations of Students of Two Years' standing.*—And be it enacted, that students in medicine who at the time of the passing of this Act shall have been engaged two years and upwards in attending lectures in any medical school, or the practice of a public hospital, or other institution, in conformity with the regulations of any college having power to confer degrees or diplomas in medicine or surgery, shall not be affected, while completing their studies, or in passing their examinations, by anything in this Act contained; but such students shall be entitled to complete their education, and undergo their examinations, as though this Act had not been passed.

27. *Act not to extend to Dentists or Cuppers in business before 1st March*, 1847.—And be it enacted, that not anything in this Act contained shall extend, or be construed to extend, to the profession or business of any dentist or cupper, who was engaged in such profession or business on or before the first day of March, one thousand eight hundred and forty-seven; but every such dentist or cupper shall conduct such profession or business in as free and ample a manner as though this Act had not been passed.

28. *Act not to affect the trade or business of Chemists and Druggists. (Fifty-fifth Geo. III., c. 194, s. 28.)*—Provided always, and be it enacted, that nothing in this Act contained shall extend, or be construed to extend, to prejudice, or in any way to affect, the trade or business of a chemist and druggist, in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale or retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act.

29. *Registered Medical Practitioners exempted from serving on Juries, Inquests, &c.*—And be it enacted, that every person who shall be registered and possess a certificate in force under the provisions of this Act shall be exempt, if he shall so desire, from serving on all juries and inquests whatsoever, and from serving all corporate, parochial, ward, hundred, and township offices, and in the militia, and that the name of such person shall not be returned in any list of persons liable to serve in the militia, or in any such office as aforesaid; and no person shall be entitled to such exemption as aforesaid on the ground of being a physician, surgeon, or apothecary, who does not possess such certificate then in force as aforesaid.

30. *Names of Criminal Practitioners to be erased from the Register.*—And be it enacted, that if any registered physician, surgeon, or apothecary, shall be convicted, in England, or Ireland, of any felony, or in Scotland, of any crime or offence inferring infamy, or the punishment of death or transportation, or if it shall be found, by the judgment of any competent court, that any such physician, surgeon, or apothecary, shall have procured a certificate under this Act by any fraud or false pretence, or that any such physician, surgeon, or apothecary, has wilfully and knowingly given any false statement, evidence, or certificate, in any case in which by law the evidence or certificate of a physician, surgeon, or apothecary is required, every registrar, on the production before him of an office copy or extract of the conviction or judgment of the court, duly certified under the hand of the proper officer of the court, or other proof thereof, shall cause the name of such physician, surgeon, or apothecary, to be erased from the register; and every person whose name shall have been so erased after such conviction or judgment as aforesaid, shall thereby forfeit and lose all the privileges of a registered medical practitioner provided by this Act.

31. *Interpretation Clause.*—And be it enacted, that the words "Medicine" and "medical," when used in this Act, shall also mean and include the words "Physic," "Surgery," and "surgical."

32. *Act may be amended.*—And be it enacted, that this Act may be amended or repealed by any Act to be passed in this Session of Parliament.

## SCHEDULES TO WHICH THIS ACT REFERS.

### Schedule (A.)

Declaration required of a person who claims to be registered as an Apothecary upon the ground that he was in practice as an Apothecary before the first day of August, 1815.

*To the Medical Registrar for England.*

I, [Samuel Baker,] residing at [6, Duke-street, Exeter,] in the county of [Devon], hereby declare that I was practising as an Apothecary at [16, George-street, Hastings,] in the county of [Sussex,] before the 1st day of August, 1815.

(Signed) [*Samuel Baker.*]

Dated this [6th] day of [October] 1847.

### Schedule (B.)

THE MEDICAL REGISTER FOR [ENGLAND.]

*Medical Registration Certificate for* 184 .

By virtue of the powers vested in me by an Act of Parliament passed in the tenth year of the reign of Her Majesty Queen Victoria, intituled, "An Act for the Registration of Qualified Medical Practitioners, and for amending the law relating to the Practice of Medicine in Great Britain and Ireland;"

I hereby certify that

[JAMES HOWARD,]

Residing at No. 15, Ormond-street, Manchester, in the county of Lancaster, having produced, before me, the Diploma of [The Royal College of Physicians of London,] bearing date April 18th, 1840, as [A Fellow of that College,] and also the Diploma of [The Royal College of Surgeons of England,] bearing date August 1st, 1830, and granted to him as [A Member of that College,]

he has been duly registered, according to the provisions of the said Act, as a person who is Qualified to practise Medicine in any part of [England and Wales,] and that he is entitled to exercise all the powers and privileges conferred by the said Act.

This Certificate to remain in force until the 31st day of December, [1848,] and no longer.

(Signed) [*Henry Brown,*]
Medical Registrar for England.

Dated London, 6th October, 1847.

SCHEDULE (C.)

THE MEDICAL REGISTER FOR [ENGLAND,]

*Consisting of the Names, and Places of Residence, (arranged alphabetically,) with a Description of the Qualifications, and the Dates thereof, of all Persons legally qualified to practise Medicine in [England] in the year* 184 .

THE NAMES OF REGISTERED MEDICAL PRACTITIONERS, ARRANGED ALPHABETICALLY.

| NAMES. | QUALIFICATIONS, AND THEIR DATES. | PLACES OF RESIDENCE. |
|---|---|---|
| Addison, James Price | Diploma as a Fellow of the Royal College of Physicians of London, dated 9th August, 1836. | No. 16, Tudor-street, Manchester. |
| Adlard, Hugh ..... | Diploma as a Member of the Royal College of Surgeons of England, dated 4th January, 1822. Licence of the Society of Apothecaries, London, dated 7th March, 1822. | No. 7, Milton-street, Hanover-square, London. |
| Admends, Richard | Licence of the Society of Apothecaries, London, dated 11th June, 1834. | No. 19, Millsom-street, Exeter. |
| Adney, Ralph ..... | Diploma as a Fellow of the Royal College of Surgeons of Ireland, dated 30th October, 1827. | No. 54, Holland-street, Liverpool. |
| Adpart, Edmund .. | Diploma as a Fellow of the Royal College of Surgeons of Edinburgh, dated April 16th, 1819. | No. 40, Tollville-street, Leeds. |
| Adwin, Gilbert .... | Declaration, as required by law, of having practised as an Apothecary before 1st August, 1815. | The Grove, Camberwell, Surrey. |

THE PLACES OF RESIDENCE OF REGISTERED MEDICAL PRACTITIONERS, ARRANGED ALPHABETICALLY.

| PLACES. | NAMES AND ADDRESSES. |
|---|---|
| Bristol ..... | Adams, Edward, No. 24, Somerset-square.<br>Bothwell, James George, No. 1, Thomson-street.<br>Chant, Thomas, Mortimer-terrace. |
| Caversham ..... | Matthews, William, Thames View. |
| Dudley ..... | Frimley, Abel, No. 6, Manchester-street.<br>Noble, George Frederick, No. 64, New-square. |
| Kingston-upon-Hull ..... | Andrews, Walter, No. 13, Humber-street.<br>Dornton, John, No. 9, Albion-street.<br>Edwards, Michael, No. 3, York-place. |
| Liverpool ..... | Smith, John, No. 88, Vauxhall-road.<br>Trinder, Charles, No. 10, Manchester-square.<br>Williams, William, No. 37, Birkenhead-street. |
| Portsmouth .... | Atkins, Charles, No. 14, Mary-street.<br>Bryant, William, No. 5, Wilmot-street.<br>Clipman, Howard, No. 34, Anchor-terrace. |

## THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

FORMS OF PETITIONS FOR PRESENTATION TO THE HOUSE OF COMMONS.

(NO. I.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That your petitioner has examined with great care and attention the provisions of a Bill now before your honourable House, intituled "A Bill for the Registration of Qualified Medical Practitioners, and for remedying the Law relating to the Practice of Medicine in Great Britain and Ireland;" and your petitioner firmly believes, that if such Bill were enacted into a law, it would prove to be a measure of justice to the profession, and one of great utility to the public; that after many years of study and a large expenditure of money, your petitioner passed his examination at the Royal College of Surgeons, and obtained his diploma. But your petitioner, although having thus complied with the legal regulations which controlled his medical education, had scarcely commenced practice before he found that he was beset on all sides by unqualified pretenders, who often assumed the highest titles and privileges of the profession, although they had never received the slightest medical education, but were frequently persons who had been apprenticed to ordinary trades; that the medical practices of such individuals are grossly fraudulent, and often destructive of the lives of the community; and that, unfortunately, the public have now no ready means, by any compulsory system of the registration of medical practitioners, to distinguish those persons who have been regularly educated in the science of medicine from others who are mere pretenders to a knowledge of that science. Your petitioner considers that this is a very grievous injury inflicted upon those members of an honourable profession who have complied, at a great cost both of time and money, with the provisions of the law and the regulations of the colleges and examining boards, but who are now left without any adequate protection in the exercise of the duties of their profession. Your petitioner, therefore, fully believing that the enactment of the Medical Registration and Medical Law Amendment Bill now before your honourable House would provide an adequate remedy for the grievances under which he is now suffering, earnestly entreats your honourable House to enact that Bill into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

(RICHARD ANDREWS.)

(NO. II.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That your petitioner views with interest the proceedings of your honourable House, in relation to the Bill for the Registration of the Legally-Qualified Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland, and your petitioner most earnestly and fervently prays, that the said Bill may without delay be enacted into a law.

And your petitioner, as in duty bound, will ever pray,

(RICHARD ANDREWS.)

(NO. III.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That your petitioner, during the last thirteen years, has been a legally-qualified member of the medical profession. That in order to obtain this qualification, your petitioner incurred a very large expenditure of money, and devoted nine years to the diligent study of the science of medicine, and that, in order to qualify himself, he attended the great hospitals in the metropolis, as well as other public institutions, and finally, after an examination into his acquirements, he obtained a diploma at the College of Surgeons in London, and a licence from the Society of Apothecaries, London; but your petitioner has unfortunately found, from the first hour that he practised, to the present time, that the laws have afforded him no sufficient protection against unqualified pretenders, by whom his own interests have been extensively injured, and the lives of many of her Majesty's subjects endangered, if not sacrificed. Your petitioner having examined the provisions of a measure now before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," and believing that they are calculated to protect him in the honourable exercise of his professional duties, and to shield the public from the nefarious pretensions of unqualified persons, most fervently hopes that it will be the pleasure of your honourable House to pass the Bill into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray,

(RICHARD ANDREWS.)

(NO. IV.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That your petitioner has read with much satisfaction the provisions of a Bill now before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland." That, believing that such a Bill, if it were enacted into a law, would prevent a certain class of qualified medical practitioners from degrading their profession by improper and disreputable practices, and that it also would prevent the great majority of the profession from being injured and disgraced by the dishonest practices of a host of quacks, your petitioner implores your honourable House to enact the said Bill into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

(RICHARD ANDREWS.)

(NO. V.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That in a Bill before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," provision is made for the registration of qualified medical practitioners, and for granting certificates to such practitioners, and also for securing an uniform system of education for students in medicine, and for the examination of candidates for diplomas and licences to practise medicine throughout Great Britain and Ireland; and that, believing such provisions to be highly just, and fully expedient on public grounds, and believing also that the possession of an acknowledged qualification, conferring the right to practise in any part of the kingdom, should be equally effective and operative in all parts of the kingdom, your petitioner most sincerely and anxiously hopes that the said Bill may be passed into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray,

(RICHARD ANDREWS.)

(NO. VI.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

THE humble petition of (Richard Andrews,) residing at No. ( ,) Newhall-street, Birmingham, member of the Royal College of Surgeons of England, showeth,—

That your petitioner is decidedly of opinion that the enactment of the Medical Registration and Medical Law Amendment Bill, now before your honourable House, would prove of much advantage to the members of the medical profession, and of still greater benefit to the public; and your petitioner therefore anxiously hopes that the said Bill may be passed into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray,

(RICHARD ANDREWS.)

The petition should be rolled up and left open at both ends, secured in an envelop, as newspapers are transmitted; and if the town residence of the Member who is to present it be not known, it may be addressed to him at the House of Commons. Being thus sent, it will reach him through the post-office, free of expense. When the opportunity offers, the petition should be written on parchment, or on thick cartridge paper; or when these cannot be obtained, on stout foolscap letter paper. At the head of the address these words should be written,—"Petition to Parliament."

## THE DISCOVERY OF THE APPLICATION OF ETHER AND OTHER VAPOURS TO SURGERY.

*To the Editor of* THE LANCET.

SIR,—I beg to enclose the following pamphlet, which I have just received from Mr. Horace Wells, of Hartford, by the last American Steamer. It appears to me that the documents which it contains fully substantiate the claims previously asserted by that gentleman to the position of originator of painless operation. They also certainly prove that it was Mr. H. Wells who directed the attention of Messrs. Morton and Jackson to the subject.*—I remain, Sir, your obedient servant,

H. BENNET.

Cambridge-square, April, 1847.

TO THE EUROPEAN AND AMERICAN PUBLIC.

I PROPOSE, in the briefest manner possible, to give, in the following pages, a true and faithful history of the discovery which is at present causing an unparalleled excitement throughout the whole medical world. I refer to the administering of exhilarating gas, or vapour, to prevent pain in surgical operations. It is very unfortunate that there should be more than one claimant for the honour of the discovery; but so it is: and the only alternative now is for the man who considers himself entitled to this honour, to present his proofs, that a discriminating and impartial public may "give credit to whom credit is due."

Reasoning from analogy, I was led to believe that surgical operations might be performed without pain, by the fact, that an individual, when much excited from ordinary causes, may receive severe wounds without manifesting the least pain; as, for instance, the man who is engaged in combat may have a limb severed from his body, after which he testifies that it was attended with no pain at the time; and so the man who is intoxicated with spirituous liquor may be treated severely without his manifesting pain, and his frame, in this state, seems to be more tenacious of life than under ordinary circumstances. By these facts I was led to inquire if the same result would not follow, by the inhalation of some exhilarating gas, the effects of which would pass off immediately, leaving the system none the worse for its use. I accordingly procured some nitrous oxide gas, resolving to make the first experiment on myself, by having a tooth extracted, which was done without any painful sensations. I then performed the same operation for twelve or fifteen others, with the like results. This was in the fall of 1844. Being a resident of Hartford, Connecticut, I proceeded to Boston, in December of the same year, in order to present my discovery to the medical faculty; first making it known to Drs. Warren, Hayward, Jackson, and Morton, the last two of whom expressed themselves in the disbelief that surgical operations could be performed without pain, both admitting that this modus operandi was entirely new to them; and these are the individuals who now claim to be the discoverers!

By invitation of Dr. Warren, I addressed his medical class upon the subject. I embraced the opportunity, and endeavoured to establish the principle that the system, when wrought up to a certain degree of nervous excitement, by any means whatever, would thus be rendered insensible to pain, which would admit of surgical operations being performed without any disagreeable sensations. In proof of my theory, I then related my experience in extracting teeth under the influence of nitrous oxide gas, stating that, with one or two exceptions, all on whom I had operated (numbering twelve or fifteen) assured me that they experienced no pain whatever; and, in further proof of the truth of this principle, I cited analogous cases, as the man who is excited by passion, or he who is much intoxicated by liquor; stating that individuals under these circumstances uniformly testify, when wounded, that such injuries were inflicted without pain. I stated, also, that I was making use of nitrous oxide gas simply because I considered it more harmless than anything else which could be used for this purpose; assuring them that the same result would follow, let the nervous system be excited sufficiently in any manner whatever. I remained several days in Boston in order to have an opportunity of administering the gas to a man who was expecting to have a limb amputated, but the operation was postponed. I was then invited to extract a tooth for a patient in presence of the medical class, which operation was performed, but not entirely successful, as the gas-bag was removed too soon; and as the man said he experienced some pain, the whole was denounced as an imposition, and no one was inclined to assist me in further experiments.

The excitement of this adventure immediately brought on an illness, from which I did not recover for many months being thus obliged to relinquish entirely my professional business. I will now, in a few words, state how the names of Jackson and Morton came into notice, as being connected with this discovery:—

Dr. Morton, who is a dentist in Boston, was instructed in

* The originals are in the possession of Dr. C. S. Brewster, of Paris, (No. 11, Rue de la Paix,) who will have the charge of them until this question is settled.

his profession by myself, about five years since; and I subsequently assisted in establishing him in the city of Boston; and after I had made the above discovery, I had frequent interviews with him; and he, being aware that I had relinquished my professional business in consequence of a protracted indisposition, requested me to instruct him how to prepare the gas which I had been giving so successfully in Hartford, stating that he wished to make a trial of it in Boston. As this interview was in Hartford, I told him to request Dr. Charles T. Jackson (with whom we were both acquainted) to prepare him some of it, as he was a chemist. Accordingly, Dr. Morton went to Dr. Jackson for the gas, who gave him the ether, as being attended with the least trouble. After one or two teeth were extracted, it was then introduced into the Massachusetts General Hospital, where a capital operation was performed under its influence with perfect success, which fact was immediately published in the principal newspapers of the day, with the names of Jackson and Morton (who had, by a written contract, entered into a sort of copartnership business in this matter) as the discoverers; and Dr. Jackson, as I have since been informed, immediately sent letters to London and Paris, to be read to the several academies, where he takes all the credit to himself, not even mentioning the name of Morton, his partner by written contract, which contract was signed and executed on the 27th of October, 1846. In this agreement, Dr. Jackson acknowledges that Dr. Morton made the discovery "in conjunction" with himself, as the following extract from the paper signed by Jackson fully proves:—

"To all persons to whom these presents shall come: Whereas I, Charles T. Jackson, of Boston, in the State of Massachusetts, chemist, have, in conjunction with William T. G. Morton, of said city, dentist, invented, or discovered, a new and useful improvement in surgical operations on animals, whereby we are enabled to accomplish many, if not all operations, such as are usually attended with more or less pain and suffering, without any, or with very little, pain or muscular action, to persons who undergo the same," &c. &c.

After the fact came to the knowledge of Morton that Jackson had sent privately to Paris, as a natural consequence he became very indignant; and each of these individuals now deny that the other has had anything to do with the discovery, which was at first claimed by both, "acting in conjunction." I will here make a quotation from the *Boston Advertiser*, of March 6th, 1847, which contains Dr. Morton's reply to Dr. Jackson. Dr. Morton proceeds as follows:—"In the letter to M. Beaumont, of Paris, from which I have already made extracts, Dr. Jackson says—'Five or six years ago, I remarked the peculiar state of insensibility into which the nervous system was plunged by the inhalation of the vapour of pure sulphuric ether,'" &c.

Previously to this, he had already stated, under oath, in the preamble to the specifications which bear date the 27th of October, 1846, that the same hath not, to the best of his knowledge and belief, been previously known. Now Dr. Jackson either did know, previous to this time, that sulphuric ether would produce insensibility to pain, or he did not. If he did, as stated in his letter to M. Beaumont, then I have to remind him of his oath, under the solemnity of which he states that, according to the best of his knowledge and belief, "the fact had not been before known." But if he did not, then I remind him of his statement to M. Beaumont, in which he says that he had known it for "five or six years." And the learned Doctor may take either horn of the dilemma he may prefer. It is not known that Dr. Jackson ever made more than one experiment in inhaling ether; and then he used it as an antidote to the vapour of chlorine which he had accidentally breathed, but, from his own statement, in the *Advertiser*, it did not answer the purpose—the deleterious effects returning with the return of consciousness. But, supposing he had known of it six years or six months before Dr. Morton applied it in practice, is it not inexcusable in him to have withheld from suffering humanity this inestimable boon so long—a boon by the gift of which such an incalculable amount of misery might have been saved? Or is it within the limits of probability, that if he had been so long in possession of a discovery which, if made known, would in four months call down blessings on his head from ten thousand hearts, and from all civilized lands, and which, from present prospects, would make him to be remembered and cherished by the side of Jenner by all coming generations, and to all coming time? I say, is it probable, had he known of this noble gift, that he would not have been more zealous in publishing it to the world? If he did make this discovery, is it not a remarkable coincidence that Dr. Morton should have made it at the same time, and still more remarkable, that Dr. J. should leave to another the honour to make his discovery known? But to settle this whole matter, and it might have been done in the outset, to the satisfaction of any candid mind:—After Dr. Morton begun to use the ether in his practice, and for some weeks, it is well known to a large number of our most respectable citizens, that Dr. Jackson clearly and distinctly repudiated and washed his hands of the whole thing. He, on many occasions, as it is well known to his friends, disclaimed all connexion with the discovery or use of ether in surgery. A gentleman of high standing asked Dr. J., in presence of several others, if he "knew that, by the inhalation of ether, such a state of insensibility could be produced as that the knife could be applied, and the patient feel no pain?" Dr. J. replied, "No, nor Morton either, nor any one else; it is a humbug; and it is reckless in Morton to use it as he does." In speaking to two other persons at different times, on this subject, he said, "I don't care what he (Morton) does with it, (the discovery,) if he does not drag my name in with it." At another time, he said, he "did not know how it would work in pulling teeth, but he knew its effects at college upon the students, when the faculty had to get a certificate from a physician that it was injurious, to prevent them from using it." Many other statements, on this point, can be given, but it is deemed wholly unnecessary. The above, and other statements even stronger, can be verified by affidavits.

When it was announced in the Boston papers that Drs. Jackson and Morton claimed this discovery, the citizens of Hartford were taken by surprise, for it was well known here that I had put in practice the same more than two years before, and not only this, but it was generally known that I had long since made a journey to Boston exclusively on this business, in order to present it to the medical faculty. Dr. P. W. Ellsworth, a son of the Hon. W. W. Ellsworth, ex-governor of Connecticut, who was acquainted with the circumstances above mentioned, immediately published an article in the *Boston Medical and Surgical Journal*, stating those facts that came under his personal observation—which accord perfectly with what I have already stated. Dr. E. E. Marcy, of this city, also published an article in the *Journal of Commerce*, about the same time, stating that he was knowing to my making the discovery, and going to Boston in 1844, when I had an interview with Dr. Jackson, who said that he did not believe that surgical operations could be performed without pain, when I informed him of the discovery I had made. Dr. Marcy quoted Dr. Jackson's language to me, and in his (Jackson's) reply, he does not deny that I had this interview with him, but simply says that he did not use the words which are credited to him in the quotation marks. He does not deny but that the substance of those words were said by him; and, furthermore, he cannot deny this.

This letter of Dr. Jackson, in reply to Dr. Marcy, requires still further notice. He says that he had merely heard that I had tried some experiments with nitrous oxide gas, but had never heard that they were successful. Now I am fully persuaded that Dr. Jackson does not remember the circumstance of his being informed and assured in November, 1844, that my operations were uniformly successful, with but one or two exceptions; but such was the case, and the individual who informed him of this fact will make the statement under oath, if necessary. Dr. Jackson was then informed that I had operated on twelve or fifteen patients by the use of nitrous oxide gas, without causing the least pain in but two instances.

Dr. Jackson claims that the nitrous oxide gas and the vapour of ether are essentially different in their effects when inhaled. He asserts, in this letter, that sulphuric ether, as it is used in Boston, does not act as a stimulant, but has the reverse effect. In reply to this statement, Dr. Marcy quotes an article from the *Boston Medical and Surgical Journal*, where Dr. J. C. Warren, of the hospital, in his report, proves that ether, as given in Boston, acts as a stimulant; but in order to prove even to the satisfaction of Dr. Jackson himself that he was mistaken, I will quote his own language, from an article published in the *Boston Advertiser* of March 3, 1847. He says, "We are aware that ether ranks in the pharmaceutic books and dispensatories as a diffusible stimulant, and that its fumes or vapour produce intoxication of short duration." The fact is, that nitrous oxide gas and the vapour of ether are identical in their effects; first exhilarating, then, when continued to excess, the reverse effect follows, acting as a sedative, throwing the person into a deep sleep or stupor.

This discovery does not consist in the use of any one specific gas or vapour; for anything that will cause a certain

degree of nervous excitement is all that is required to render the system insensible to pain; consequently, the only question to be settled is, which exhilarating agent is least likely to do harm! I have confined myself to the use of nitrous oxide gas, because I became fully satisfied from the first that it is less injurious to the system than ether. In the fall of 1844, after I had tried several experiments with nitrous oxide gas with perfect success,—then wishing to use a substitute which would be attended with less trouble in its preparation, —I advised with Dr. E. E. Marcy, of this city, at which time we discussed the comparative merits of nitrous oxide gas and sulphuric ether. Knowing that both had the same effects upon the system, so far as causing insensibility to pain was concerned, the object of the discussion was to ascertain which would do least harm. I had, previous to this, inhaled ether as well as nitrous oxide gas, and found their effects upon the nervous system to be precisely the same; but I found it very difficult to inhale the vapour of ether in consequence of the choking sensation. For this reason, and for the reason that Dr. Marcy and myself came to the conclusion that nitrous oxide gas was not so liable to do injury, I resolved to adhere to this alone. Let it be observed, however, that at this time, (November, 1844,) while we had the subject under consideration, a surgical operation was performed at Dr. Marcy's office, under the influence of sulphuric ether, as is proved by affidavit. The Doctor then advised me, by all means, to continue the use of nitrous oxide gas.

If the question is asked, why so much time has elapsed since its first discovery, without its coming into more general use, I can only say, that I have used my utmost endeavours, from the first, to influence physicians and surgeons to make a trial of it, assuring them that my operations were numerous, and perfectly successful. But all were fearful of doing some serious injury with it; and not wishing to incur the responsibility of administering this powerful agent without the co-operation of the medical faculty, and also for the reason that I was obliged to relinquish my professional business, in consequence of ill-health, my operations have been somewhat limited. On making the discovery, I was so much elated respecting it, that I expended my money freely, and devoted my whole time for several weeks, in order to present it to those who were best qualified to investigate and decide upon its merits, not asking or expecting anything for my services, well assured that it was a valuable discovery. I was desirous that it should be as free as the air we breathe; but judge of my surprise, after the lapse of many months, when I was informed that two individuals (Drs. Jackson and Morton) had claimed the discovery, and had made application for a patent in their own names.

After making the above statement, and submitting the following testimonials and affidavits, I leave it for the public to decide to whom belongs the credit of this discovery.

Respectfully, HORACE WELLS.

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TESTIMONIES.

Boston, March 23rd, 1847.

WE, the undersigned, residents of Boston, Massachusetts, testify, that in the fall of the year 1844, while attending lectures given by Dr. J. C. Warren, of the Massachusetts General Hospital, the students were informed by Dr. Warren, at the close of his lecture, that Mr. Wells, of Connecticut, was present, and would address them upon the subject of rendering the system insensible to pain, during the performance of surgical operations, by the inhalation of exhilarating gas. The students accordingly retired to an adjoining room, where we were addressed upon this subject by Mr. Horace Wells, of Hartford, Connecticut, who invited us to meet in the evening, to witness an operation, which operation was performed in our presence, while the patient was under the influence of the gas.

THOMAS WM. KENNEDY, M.D.
P. B. MIGNAULT, M.D.
CINCINNATUS A. TAFT, M.D.

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Boston, March 13th, 1847.

I hereby certify, that the following gentlemen attended my Lectures on Anatomy and Surgery, in the season of 1844-45 —viz., Thomas Wm. Kennedy, Pierre Bazille Mignault, and Cincinnatus Anthony Taft.

JOHN C. WARREN,
Professor of Anatomy and Surgery.

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I do hereby testify, that Horace Wells, of Hartford, Connecticut, with whom I have been acquainted for several years, came to Boston in the year 1844, (I think in November or December,) and informed me that he had made a valuable discovery, which enabled him and others to perform surgical operations without pain. He then informed me of the result of his experiments, which he assured me were numerous, and perfectly successful. I accompanied him to a hall in Washington-street, where a large number of medical students had assembled, as I understood, to witness an operation, to be performed by Dr. H. Wells, upon a patient, while under the influence of exhilarating gas, which was the discovery above referred to. The gas was administered, and the tooth extracted under its influence by the said Wells, in presence of myself and many others. I am not able to say whether the patient experienced any pain or not. There was certainly no manifestation of it, yet some present expressed themselves in the belief that it was an imposition.

I was subsequently informed that his operations in Hartford, prior to 1845, were uniformly successful under the influence of gas. DANIEL T. CURTIS.

Boston, March 23rd, 1847.

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I hereby certify, that Horace Wells, dentist, has for more than two years had the reputation, in this city, of having made a discovery which enabled him and others to extract teeth without pain, by the use of exhilarating gas. I have conversed with several gentlemen, whose reputation for honour and veracity places them above suspicion, who have had these operations performed by the said Wells, in the fall of 1844; and they assure me that the operation was attended with no pain whatever. There is no doubt in my mind that the said Wells discovered and made the first practical application of this principle in surgical operations. By comparing dates of the several claimants, there can remain no doubt of this fact.

Hartford, March 25th, 1847. S. FULLER, M.D.

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As attempts have been made to deprive Mr. Horace Wells, dentist, of the honour of discovering the effects produced by certain gases in allaying pain, I feel it my duty to state the facts in the case. Dr. Jackson does not claim an earlier discovery than the latter part of 1846, and even then only suggested to Mr. Morton that ether might answer the purpose, and says that the first trials of Morton were successful, "proving exactly as I had predicted."— The first trial of Morton, according to his own (Morton's) statement, was on the 30th of September, 1846. Now, I hereby declare, that to my full knowledge, nitrous oxide gas was administered two years earlier than this—viz., in 1844— by Mr. Wells, and that many teeth were extracted, without pain, under its influence; and that Mr. Wells went to Boston at that time, as I was then informed, for the purpose of introducing the gas to the attention of surgeons in that city. Moreover, in an article published June 18th, 1845, in the *Boston Medical and Surgical Journal*, I referred to it as a thing well known and established—the article being headed, "On the Modus Operandi of Medicine," written to show that many, if not all, local diseases are cured by specific stimulants. Now, when it is known that Mr. Morton was instructed in his profession by Mr. Wells, and introduced into business by him, we can easily trace the manner in which Mr. Morton *might* have derived his information. It is to be borne in mind, also, that Jackson and Morton have, through the public prints, each denied the other his claim—a thing easily settled, one would think, if it in justice belonged to either. In my own mind, there is not a shadow of doubt that the whole merit of the discovery of this thing rests with Wells, and with him alone, although others may have experimented with ether before him. The idea and its practical application are his, and let the public concede that to him which his generosity, unrestricted with patents, demands, and which has been, as far as possible, wrested from him. The claimants in Boston I do not know, and should be unwilling, in any manner, to injure their feelings, but I must say that they are labouring under an hallucination at least; though I cannot but hope they may be able to establish some claim to originality—a task somewhat difficult, as the case appears to stand. These statements are given, not from any personal considerations, but simply as an act of justice; and I hope that the profession, after due deliberation, will give a righteous award.

Hartford, March 25th, 1847. P. W. ELLSWORTH, M.D.

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I take pleasure in certifying, that more than two years since, at the request of Horace Wells, Esq., of this city, I visited his rooms for the purpose of witnessing the extraction of a tooth from a man while under the influence of the nitrous oxide gas. The idea was novel to me, and I took occasion to

be present during the operation. The gas was administered by Mr. Wells, and the operation performed without any apparent suffering on the part of the individual operated upon. I afterwards questioned him in regard to his sensations during the extraction, and he assured me that he had not experienced the slightest degree of pain. At this time, the comparative merits of the gas and of rectified sulphuric ether-vapour were discussed, and I gave it as my opinion, that the nitrous oxide gas was the safest, inasmuch as the after-effects of this gas are not so unpleasant as from the ether-vapour. I also take this occasion to assert, from my positive knowledge, that the ether-vapour was administered very soon after this period, and prior to 1845, for the performance of a surgical operation.

In conclusion, I beg leave to offer it as my opinion, that the man who first discovered the fact that the inhalation of a gaseous substance would render the body insensible to pain during surgical operations, should be entitled to all the credit or emolument which may accrue from the use of any substances of this nature. This is the principle—this is the fact—this is the discovery. The mere substitution of ether-vapour, or any other article, for the gas, no more entitles one to the claim of a discovery than the substitution of coal for wood in generating steam would entitle one to be called the discoverer of the powers of steam.

Hartford, March 21st, 1847. E. E. Marcy, M.D.

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This is to certify, that during the last two or three years I have been familiar with the successful operations of Mr. Horace Wells, and other dentists of this city, in extracting teeth, without pain, by the aid of nitrous oxide gas, and he alone was regarded as the author of this discovery.

Hartford, March 27th, 1847. G. B. Hawley, M.D.

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I, John M. Riggs, surgeon-dentist, of the city and county of Hartford, State of Connecticut, in the United States of America, being of lawful age, and duly sworn, do depose and say:—

That on or about the first of November, one thousand eight hundred and forty-four, I was consulted by Horace Wells, surgeon-dentist, of the city, county, and state as aforesaid, as to the practicability of administering nitrous oxide gas, prior to the performance of dental or surgical operations.

Thinking favourably of the suggestion, it was decided to make trial of the gas in question; and on the day following, per agreement, the protoxide of nitrogen was administered to Horace Wells, aforesaid, at his request, and I extracted one of his superior molar teeth, he manifesting no signs of suffering, and stating that he felt no pain during the operation.

Encouraged and gratified with the success of the first experiment, the aforesaid Wells and myself continued to administer to various individuals the said gas, and to extract teeth while under its influence, in the presence of several gentlemen, until fully satisfied of its usefulness and applicability in surgical operations. I further affirm, that the said Wells avowed his intention to communicate the discovery to the dental and medical faculty, and, in pursuance of that intention, proceeded to the City of Boston, State of Massachusetts, for that purpose: whilst I continued to use the said gas with great success—the patients assuring me they felt no pain.

John M. Riggs.

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I, the undersigned, resident of Hartford, Connecticut, do hereby testify, that more than two years since I submitted to the operation of having a tooth extracted, while under the influence of nitrous oxide gas. According to the best of my recollection, this was in the month of November, 1844. The gas was given, and the tooth extracted, by Horace Wells, dentist, of Hartford; and I do further testify, that the operation was attended with no pain whatever.

Mylo Lee.

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During the winter of 1844, I learned that Dr. H. Wells, dentist, Hartford, Connecticut, had discovered the mode of extracting teeth without pain. This was accomplished by administering to the persons operated upon, exhilarating gas or vapour, which, it was asserted, rendered the human system insensible to pain. At first, I was incredulous of the fact, and received the assertions of individuals familiar with the operation, with a degree of distrust. Being, however, by invitation, a personal witness of the process of extracting teeth without pain, under this new mode, discovered and practised by Dr. Wells with so much apparent success, I was induced to submit to a personal operation, that I might test its utility. The Dr. was most successful—extracting for me a large, firmly-set bicuspid tooth, without the slightest sensation of pain.

I also witnessed, soon after, a repetition of the same process, by Dr. Wells, upon several individuals, accompanied, in every instance, with perfect success. F. C. Goodrich.

Hartford, March 27th, 1847.

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Hartford, March 27th, 1847.

I hereby testify, that more than two years prior to this date, on being informed that Horace Wells, dentist, of this city, had made a valuable discovery, by which means he could extract teeth without pain to the patient, which consisted in the use of stimulating gas or vapour, I inhaled the exhilarating gas, and under its influence had six extracted without the least pain. I would further state, that for more than eighteen months from the time I first submitted to this operation by the application of gas, I heard no other name mentioned as the discoverer, except that of the above-named Horace Wells. J. Gaylord Wells.

184½, Main-street.

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A little more than two years since, I learned that Dr. H. Wells, dentist, of this city, had made the discovery, that by the use of an exhilarating gas, or vapour, he could render the nervous system insensible to pain under severe surgical operations, and that he was using it in his practice with success. Having an opportunity to witness its effect upon several persons, during the operation of extracting teeth, I was so delighted and surprised with its manifest success, that I desired a trial of it upon myself. The gas was accordingly administered, and two carious teeth were extracted from my lower jaw, without the least suffering on my part, though ordinarily, owing to the firmness with which my teeth are fixed in my jaw, I suffer extreme pain from their extraction.

Hartford, March 25, 1847. Wm. H. Burleigh,
Editor of the "Charter Oak."

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To whomsoever it may concern:

We, the undersigned, physicians of the city of Hartford, State of Connecticut, U.S.A., do hereby certify, that we know, and have conversed with, the persons whose names are appended to the above affidavits—viz., Wm. H. Burleigh, J. G. Wells, F. C. Goodrich, Mylo Lee, and place implicit reliance upon the statements made therein by each of them, to wit:—That the operation of extracting one or more teeth, without producing any pain whatever, was performed upon each of them by Horace Wells, surgeon-dentist, of this city, at or about the time specified by them respectively, in their several affidavits above referred to.

We take pleasure, also, in expressing our entire confidence in the integrity of the said Horace Wells, than whom no person in our city is more favourably known as a gentleman of honour and integrity. We know, moreover, that he has for several years past successfully devoted himself to subjects pertaining to invention and discovery.

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| S. Fuller, M.D. | David S. Dodge, M.D. |
| George Sumner, M.D. | P. W. Ellsworth, M.D. |
| Benj. Rogers, M.D. | Gurdon W. Russell, M.D. |
| L. B. Beresford, M.D. | G. P. Hawley, M.D. |
| H. Allen Grant, M.D. | E. R. Hunt, M.D. |
| Wm. James Barry, M.D. | David Crary, M.D. |
| E. E. Marcy, M.D. | John Schue, M.D. |
| C. A. Taft, M.D. | Henry Lee, M.D. |

I certify that the foregoing document is subscribed by the principal surgeons and physicians of the city of Hartford, in the State of Connecticut, U.S.A. Isaac Toucey,

Hartford, March 29th, 1847. Governor of the State of Connecticut.

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## Correspondence.

### EXTERNAL EMPHYSEMA.

*To the Editor of* The Lancet.

Sir,—I believe the occurrence of external emphysema as a complication in phthisis is very rare. I therefore make no apology for forwarding you some particulars of a case which I recently met with.

W. W——, a young farmer, aged sixteen, came under my care in November last, with the ordinary symptoms of incipient phthisis. He had had a cough about six months; there was emaciation, quick pulse, and the other general symptoms, with a dull sound on percussion under the left clavicle, and complete absence of the respiratory murmur at that part.

The right lung appeared healthy. The case went on in the usual way, and after about a month, signs of tubercular softening became evident, and hectic more completely set up; while gurgling and pectoriloquy were heard where the respiratory murmur was first absent. There were no sputa, the patient swallowing all. About the 9th of February, dyspnœa became very urgent, and soon increased to orthopnœa. On the 16th I noticed considerable tumefaction of the face, particularly about the left eye, which I found, on touching, to be emphysematous. This same condition I traced down both sides of the neck, and over both shoulders, but it was more distinct on the left side. The dyspnœa now was somewhat decreased. The next day the emphysema had extended down the arms and over the whole of the chest, behind and before, and also over some portion of the abdominal parietes. On the 18th I noticed, under the left scapula (clavicle? Ed.) a spot about an inch in diameter, acutely sensible to the touch; gargouillement was also loudly audible in that situation. He died suddenly on the 19th. Notwithstanding my urgent entreaty, a post-mortem examination was not allowed.

*Remarks.*—The orthopnœa seemed to indicate perforation of the lung, and consequent pneumothorax, which might be followed by ulceration and perforation of the pleura costalis. Or, the communication might have been caused by an abscess making its way to the surface through an adhesion between the pleuræ; in which case the purulent collection could not have been contained in the usual sac of condensed cellular membrane. Did the painful spot under the clavicle indicate the situation where the abscess would have burst, if it had reached the skin in the ordinary way? Or, lastly, it is possible that the air might find its way by the side of the great vessels in their course up the neck, the tumefaction being most evident on the left side of the neck, in the first instance.

M. Louis does not mention the occurrence of emphysema as a sequence of perforation of the lung. Mr. Kelly (*Edin. Med. Commentaries*) mentions a case of anomalous disease of the lungs, in which emphysema followed on the second day, after a violent fit of coughing. The pleura was tapped and the patient recovered; but dying a twelvemonth subsequently, after six weeks' illness from cough, hectic, &c., an examination disclosed an extensive adhesion in the situation where pain had been felt at the time emphysema occurred. In the "Cyclopædia of Practical Medicine," two cases are recorded; one, by Dr. Duncan, no post-mortem appearances mentioned; the other, by Dr. Halliday. In the latter the patient had not been ill more than two or three days before the appearance of emphysema, after coughing and great dyspnœa. It was ascertained that a vomica had found its way by a small opening into the sac of the pleura, and that the air which escaped thence had passed through another small opening in an inflamed spot on the pleura costalis. My friend, Dr. Dymock, of Louth, who saw the preceding case with me, stated that he had met with a solitary case, where an affection of the chest was followed by an abscess pointing at an intercostal space, the spontaneous opening of which was preceded by diffuse emphysematous swelling on the anterior parietes of the thorax. This patient recovered.

I do not find any cases recorded, in the few works to which I have access, of emphysema interrupting the usual course and hastening the fatal termination of tubercular phthisis.—I am, Sir, your obedient servant,

Lincolnshire, April, 1847. R. U. West.

## FRACTURES AND AMPUTATIONS.

*To the Editor of* The Lancet.

Sir,—I was much gratified with the cases of injuries of bones, &c., related by J. Prior, Esq., in your valuable periodical. I have been induced thereby to offer a few practical observations relating to that subject; for I fear that old rules of practice are too much observed, and the knife too frequently resorted to.

Having lived several years at one of the largest ironworks in the world, I have had frequent opportunities of seeing the most severe accidents, and I can bear ample testimony to the successful termination of many such, even where the joints, muscles, and vessels, have been extensively involved, and which, at the first glance, seemed to require amputation. Such an operation, however, the patient dreads, and implores you to preserve his limb even at the cost of his life. After this appeal the leg would be placed in the most favourable position, and I can safely add, that in three cases out of four, such cases would terminate satisfactorily; Nature aiding the cure in a manner not to be credited save by those who have witnessed it. To those gentlemen who practise in the country, and who are obliged to trust entirely to their own judgment, and have seen but few serious accidents, I would say—Before you amputate, let your patient take his chance, provided his constitution is good; and I am sure, from my experience, that the result will not disappoint.

But when severe accidents happen to the inhabitants of large towns, who lead dissipated lives, dwell in ill-ventilated courts, and are badly fed and clothed, and whose constitutions are consequently vitiated, they are not likely to do well, and, therefore, amputation may, in general, be resorted to as the safest and best remedy.—I remain, your obedient servant,

J. David, M.D.,
Formerly Assistant-Surgeon to the Nantyglo and Beaufort Ironworks.

## THE AGE OF MANUALS.

*To the Editor of* The Lancet.

Sir,—The times are strangely altered, and the profession strangely degraded, since the Royal College of Physicians could entertain the idea of sending forth its splendid edition of the works of Harvey in its original Latin.

Where would such a work find its readers and purchasers now?

So far from being able to read a work, however transcendent its merit, in *Latin*, we have even works—and such works!—translated from the *French*, for our fallen profession in the present day. Is it not lamentable that any amongst us should be found incapable of reading the work of Louis in his own words?

I saw even Bell's immortal work in English, and in his own peculiar style, advertised to be sold at *half price* a few months ago.

But this is the age of Manuals. Our pupils must have medicine "made easy" for them, just as you give pap to infants; something very light of apprehension and digestion. The noble work of Müller, though placed before them in excellent English, is too difficult for them, forsooth, and they purchase, in its place, every trumpery Manual and compilation by persons who never did anything but *read* on physiology.

All this excludes, in their turn, every good and original work and monograph; it makes superficial students, and degrades our profession in its very principles.

The fault lies with our examining bodies. Let them only require the student to be "up" and well read in certain well-selected original works, written by authors who have *seen* the things they describe; let them, in a word, exact from candidates for medical honours and privileges a thorough acquaintance with standard medical works, and reject all cramming or grinding from manuals, compilations, or other trashy books of this kind, and all will be well. Then will our students possess solid and enduring attainments; then will they go forth worthy of our profession and its great names; then will appropriate and worthy books be written and published for them; then will our profession be raised indeed.

I am, Sir, your obedient servant,

London, April, 1847. A Looker-On.

# House of Commons.

## THE MEDICAL PROFESSION.

Mr. WAKLEY brought in his Medical Profession Bill, and it was read a first time.

On the proposition that it be read a second time, on Wednesday week,

Mr. WAKLEY expressed his hope, that on the second reading of so important a Bill, he should have the support of her Majesty's ministers; and that they would not refuse what was termed a government night for one of its stages.

## MEDICAL REGISTRATION COMMITTEE.

Several correspondents have suggested that such a committee should be immediately formed, for the express purpose, and for that purpose only, of organizing a system for instantly petitioning Parliament in favour of the Medical Bill now before the House of Commons. We certainly should be glad to see such a committee formed, and we would aid its labours by every means in our power. But by whom is the work to be commenced? Two or three gentlemen have stated that they shall attend at the Freemasons' Tavern, Great Queen

Street, on Monday evening next, May 3rd, at eight o'clock, for the purpose of consulting as to what ought to be done; and they have requested us to invite other qualified practitioners to join them on the occasion.

## Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted Members of this Institution on Friday, the 23rd instant—viz., Messrs. George Frederick Jones, Clifton, near Bristol; Thomas John Tudor Williams, Ilsley, Berkshire; Walter Dowley Eddowes, Loughborough; John Waddington Hubbard, Leicester; John Lucas Worship, Long Melford, Suffolk; Thomas Armstrong, Brecon; Augustus Robert Henry Padmore, Silton, near Barnstaple, Devon; Arthur Stewart Willocks, Fettecairn, Kincardineshire; John Ferguson, Liverpool; and William Holland Baylis, Cheltenham.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination and received certificates to practise on Thursday, April 22nd, 1847:—Morgan Thomas, Vale of Neath, Glamorganshire; Henry Turner, Sherborne, Dorset; Hubert Shelley, Epsom; Charles Thompson, Salisbury; Peter Eade, Blofield, Norfolk; George Hother, Lewes, Sussex; George Browne, Reading, Berks.

KING'S COLLEGE, LONDON.—The annual distribution of prizes, in the medical department, took place on Saturday, April 24th; the Bishop of London in the chair.—*Senior Scholarship:* P. Eade. *Second Year:* G. R. Cubitt. *First Year's Scholarships:* 1st, H. H. Salter; 2nd, J. Wood; 3rd, G. A. K. Lake.—*Anatomy:* prize, J. C. Lynch; certificate, J. D. Chepnell.—*Physiology:* prize, W. C. Lake; certificate, J. C. Lynch.—*Chemistry:* prize, James Vaux; certificate, J. C. Lynch.—*Materia Medica:* prize, J. C. Lynch.—*Medicine:* prize, S. J. A. Salter; certificate, W. H. Cook.—*Surgery:* prize, W. B. Gill; 1st certificate, W. H. Cook; 2nd certificate, Norman Bethune.—*Midwifery:* prize, S. J. A. Salter; 1st certificate, W. H. Cook; 2nd certificate, J. B. Ruck.—*Medical Clinical Prizes:* 1st, P. Eade; 2nd, W. H. Cook.—*Surgical Clinical Prize:* W. H. Cook.—*Forensic Medicine:* prize, W. H. Cook; 1st certificate, C. Thompson; 2nd certificate, J. T. Arlidge.—*Botany:* prize, P. Eade; certificate, S. Griffith.—*Comparative Anatomy:* prize, C. W. Wray.—*Leathe's Prizes:* 1st, J. N. Coffin; 2nd, D. Ferguson.—*Warneford Prizes:* 1st, J. T. Arlidge; 2nd, C. W. D. Williams; 3rd, H. B. Johnson.—*Associates elected:* J. T. Arlidge, P. Eade, W. B. Gill.—The meeting was honoured by the attendance of his Royal Highness the Duke of Cambridge, as well as by several members of the Episcopal bench, and by Lord Eldon, Sir H. Inglis, &c.

DEATHS FROM PUNCTURES IN DISSECTION.—From accurate researches it appears, that during a period of twenty-one years, from 1826 to 1846, thirty-three students belonging to the Faculty of Medicine of Paris died from suppurative fever, arising from punctures received in dissection. It appears also, that while, during the same period, the rate of mortality was only one in eighty among students of law, and one in seventy-five among the students of the Polytechnic (Military) School, it was at least one in fifty among students of medicine.

COLLEGE OF SURGEONS.—A short time since, a gentleman of the name of Kayat, a native of Syria, presented himself before the Court of Examiners, in company with two natives of Calcutta, as a candidate for the diploma of this College. They were all so fortunate as to obtain, after a rigid examination, the object of their ambition. The Council, on being informed that Mr. Kayat had merely entered the profession as an amateur, have, with a liberality that deserves commendation, presented that gentleman with the whole of their valuable works, handsomely bound, with the following suitable inscription in each volume, signed by the President,—viz., "Presented to Assaad Yacoob Kayat, of Beyrout, by the Council of the Royal College of Surgeons of England, in testimony of their appreciation of his zeal and industry in having, as an amateur student, obtained the diploma of the College, and, at his own expense, sent four young Syrians to this country for the purpose of studying surgery." Mr. Kayat is also a member of the Council of the Syro-Ægyptian and other scientific societies.—On the 20th of March last, we gave insertion to a letter from Mr. Seaton, denying a statement in the pages of this journal, that Mr. Kayat had brought over at his own expense the gentlemen alluded to in the above presentation. We gave the notice on good authority; it will be seen that the above confirms our statement.

MIDDLESEX HOSPITAL.—The disputes relating to the management, or rather the mismanagement, of this hospital, continue unabated, and if the parties concerned are not careful of their proceedings, it must fall into much the same position as the Westminster. An inefficient board of management, unlimited despotism in the election of the medical officers and the lecturers of the school, drunken nurses, quarrelsome surgeons, and inefficiency in the posts of secretary, house-steward, and matron, are the serious evils which affect the Middlesex Hospital, and call for prompt amendment.

RABELAIS AND THE MEDICAL PROFESSION.—At Montpelier, the privileges of the medical profession were abolished by order of the Chancellor Duprat. Rabelais was resolved, by means of a private interview, to induce the chancellor to repeal that order. But the question was, how access to the chancellor could be obtained, for it was almost impossible to get that favour. Rabelais, however, hit on an admirable expedient, which proved successful. He addressed the porter at the gate of the chancellor's palace in Latin; the man immediately sent for a secretary who understood Latin, but to him Rabelais spoke Greek; and when a third person, conversant in the Greek language, was fetched, he accosted him in Hebrew. In this manner he went through several ancient languages. The whole house was soon in motion; the chancellor was told there was a man at the gate who had the gift of tongues, like the apostles on the day of Pentecost. He admitted him, and Rabelais addressed him with such masculine eloquence on behalf of the rights of his faculty, that he won the chancellor, and gained his point. In memory of the event, his doctor's gown was long held in great honour at Montpelier, and it was worn by every one on the day on which he was admitted to the degree of doctor.

## CORRESPONDENTS.

*Amicus.*—There is no truth whatever in the statement alluded to by our correspondent, of a party having secured a "fellowship" in the College of Surgeons by "false medical certificates."

Numerous important communications are in type, and are necessarily postponed from press of matter.

*Corrector.*—The Jacksonian Prize Essay for the year, "On Asphyxia," was written by Dr. Edward Hulme, Physician to the Exeter Dispensary.

*Dr. R. Mayne* should not despond. We may rest assured the fruit of his labours must appear in due time. Reform in nomenclature is almost as difficult as the reform of the coinage.

*Mr. Gorringe.*—The wishes of our esteemed correspondent shall be complied with. The paper was intended for publication in the present number.

*Mr. Collins* may rely on our discretion.

*Dr. Berncastle's* case shall be published at an early period.

The questions proposed by *A Young Hand* shall be answered next week.

We had not intended to publish *Mr Beckingsall's* first note, and therefore shall not be able to avail ourselves of the correction. Mere personalities between professional men are best avoided; and we are sure if there was anything really offensive in the communication of Dr. Chambers he would be the first to regret it.

*Amator Justiciæ.*—We had hoped to proceed with the publication of the able series of papers of our correspondent, but the application of ether, and the pressing subject of quackery, have so crowded our pages, as to exclude them, as well as many other valuable communications. They shall shortly be left as desired.

*Army Surgeons.*—We are unable, this week, to insert the speech of General Sir Howard Douglas, but will take an early opportunity of re-publishing it.

*Dr. Thomas Williams.*—The elaborate and valuable communication has been safely received, and shall very shortly appear in THE LANCET.

*Cato.*—Any one may take on himself to practise surgery, as the College has no powers of prosecution.

ERRATA.—In our account of the proceedings at the Royal Sea-Bathing Infirmary, the following errors occur:—In the thirteenth line from the bottom, *took* for take; in the fifteenth, *ended* for ends.

Communications have been received from—Dr. Robert H. Powell, (Tunbridge Wells;) Ch. H., with circular; Amator Justiciæ; An Army Surgeon; Mr. J. B. Brown; Dr. Thomas Williams, (Swansea;) Dr. J. C. Hall, (East Retford;) Dr. R. Mayne, (Leeds;) Mr. G. L. Cooper, with the excellent report of patients treated at the Bloomsbury Dispensary; Mr. Gorringe (Truro;) Mr. Collins; Dr. Berncastle, (Croydon;) Mr. J. Edward Fosbrooke, (Nottingham;) A Quondam Dispensing Chemist; Dr. Addison, (Great Malvern;) F.R.C.S., with quack circular; Dr. Haygarth, (Canada;) Dr. T. B. Baillie, (Peru;) Mr. Thomas Lee, (Bexley Heath;) M.R.C.S., (Norwich,) with quack card; Mr. S. H. Wraith; Mr. S. A. Philbrick, (Colchester;) Mr. T. Hunt, (Herne Bay;) Mr. R. Druitt; E. J. B.; Mr. J. D. Jones, (Dalston;) Mr. J. Barlow; Mr. W. J. Cumming, (Birmingham;) Mr. E. W. Tuson; Mr. W. F. Haines.

We have to acknowledge the receipt of the *Exeter and Plymouth Gazette*, the *Manx Sun*, the *Birmingham Journal*, and *Woolmer's Exeter Gazette*.

MEDICAL TRANSFER AND PARTNERSHIP.

## Mr. Orridge, Medical Transfer Agent,

30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the honour of being allowed to refer TO THE WRITTEN TESTIMONY of upwards of forty gentlemen of the highest respectability, (between many of whom he has been professionally engaged in matters of transfer,) as a guarantee of the sincerity of his endeavours to conduct business in an honourable and straightforward manner.

Mr. Orridge takes leave to point out that his Agency offers particular advantages to gentlemen ABOUT TO RELINQUISH PRACTICE, EITHER WHOLLY OR IN PART, by placing them in direct communication with applicants for purchase of suitable professional standing and pecuniary resources, an INDISCRIMINATE publicity being carefully avoided.

Gentlemen ABOUT TO COMMENCE, who favour Mr. Orridge with the nature and extent of their wishes regarding purchase, may depend on being informed of appropriate opportunities as they occur.

Assistants provided on the plan formerly observed at Apothecaries' Hall.

TO SURGEONS AND CHEMISTS.

## To be Disposed of, in one of the most

populous districts at the west-end, a well-established CHEMIST'S BUSINESS, returning about £750 per annum, and presenting great opportunity (in the hands of a qualified man) for combining Practice. The House is large, convenient, and low rented. The present proprietor is a Druggist only. Coming in about £800.—For particulars, apply to Mr. Orridge, Chemist, 30, Bucklersbury.

## For Disposal, an Old-established and

increasing Practice, in a densely populated part of London. The actual receipts of the Practice are £1000 per annum, and the outgoing practitioner (whose reasons for relinquishing the Practice will be found satisfactory) will remain from six to twelve months, which will amply suffice to introduce a successor.—Apply for further particulars to Messrs. Lane and Rathbone, Medical Agents, 13, John-street, Adelphi, London, if personally, between the hours of Twelve and Four.

TO THE BENEVOLENT.

## An earnest appeal is made to the

Public, and more particularly to the Medical Profession, on behalf of the Widow of a Professional Man, who practised for upwards of Forty Years in Kent and London with the greatest success, and most highly respected; but in consequence of severe losses in business, and his sudden decease, was unable to make any provision for his family.

His Widow is now advanced in years, entirely destitute, and without the slightest means of future support; so that unless she receives some assistance from a generous public, (which she thus unwillingly solicits,) in order to forward her future views, her ruin must be inevitable.

The truth of the above statement may be ascertained on application to Messrs. Hatchards, Piccadilly, by whom subscriptions will be most thankfully received.

## Wanted immediately, a Visiting and

Dispensing ASSISTANT in the Country.—Apply by letter to Mr. John Davies, Surgeon, High-street, Coleshill, Warwickshire.

## A General Medical Practitioner, having

a good Retail Business annexed, is desirous of entering into PARTNERSHIP with a qualified gentleman, with a view to his succeeding to the whole in a short time.—For address, if by letter, apply to A. B., at Messrs. Drew and Co., Wholesale Druggists, Bush-lane, Cannon-street, London.

## Wanted, by a Medical Man of some

years' standing, an ASSISTANCY in a large practice, with a prospect of a more permanent arrangement.—Address, T. G., LANCET Office, Strand.

## Wanted, by a Gentleman possessing

the College Diploma, a Situation as VISITING or VISITING and DISPENSING ASSISTANT to a respectable Practitioner in the Country. The Advertiser is the son of an eminent medical man deceased, and has seen much union as well as private practice.—Address, prepaid, L. M., Messrs. Holmes and Pottle, News Agents, Royal Exchange, London.

## A Physician, Surgeon, or other Gen-

tleman, is required to join in a special department of Medicine, promising very large returns, without the labour and anxiety of ordinary practice. £400 to £500 necessary.—Address, V. V. V., Mr. Bulgin, 221, Regent-street.

TO SURGEONS, &c.

## A Gentleman, aged thirty, of consider-

able experience, and well acquainted with parochial practice, being about to leave his present situation, wishes for a RE-ENGAGEMENT; in or near London preferred. Highly satisfactory references can be obtained.—Address, stating full particulars, to W. H. K., 34, Beauvoir-terrace, Kingsland-road, Middlesex.

## Albemarle-street.—To be Let, at Mid-

summer next, an excellent FAMILY HOUSE.—For particulars, apply to Messrs. Smedley and Rogers, No. 40, Jermyn-street, St. James's.

MEDICAL.

## An M.R.C.S. & L.A.C., of extended

professional education, wishes to enter into PARTNERSHIP with a Gentleman in large Practice, where an active Partner is required. He would not object to act as ASSISTANT for six or twelve months. The highest testimonials can be produced.—Address C. A. B., Post-office, Pershore, Worcestershire.

## An M.B. Lond., M.R.C.S., & L.A.C.,

possessing high testimonials, and accustomed to London practice, wishes for a situation chiefly as VISITING ASSISTANT in a respectable practice; with a gentleman who might require a partner, or be relinquishing the profession in a year or two would be preferred. Salary less an object than gentlemanly treatment.—Address, pre-paid, S. T., THE LANCET Office, 423, Strand.

## Medical Practice to be Disposed of,

established many years, within twelve miles of London. Applicants must be married men, and command £1000. References to Mr. Churchill, who is well acquainted with the proprietor, and the character of the Practice, 46, Princes-street, Soho.

MEDICAL.

## The Private and Counter Practice of a

General Practitioner, in a populous neighbourhood, near Islington, is for Sale at the mere value of a good stock of drugs and the necessary fittings, &c., the present possessor leaving for the country. The whole has been established some years, and will admit of much improvement. To a gentleman commencing practice this affords an excellent opportunity.—Address, pre-paid, to Medicus, Messrs. Davy and Co., 100, Upper Thames-street.

## To be Disposed of, upwards of £500

per annum, actual receipts, by a Surgeon in Worcestershire, who, from ill-health, now offers his PRACTICE, valuable Furniture, and everything necessary for the carrying on of his Practice, for £1500.—Apply to A. V. Z., Post-office, Worcester.

## A Gentleman who intends to commence

his studies at University College, next Winter Session, is desirous of obtaining a Situation as DISPENSING ASSISTANT to a respectable Surgeon in that neighbourhood.—For further particulars, apply, by letter, prepaid, to T. H. C., Mr. Milligan's, Surgeon, Keighley, Yorkshire.

ETHER.

Just published, price 2s.,

## A Practical Treatise on the Inhalation

of Ether. Containing full Directions for Preparing and Administering the Ether; with a numerous collection of important Cases in England and Scotland, with Names and Remarks of the Operators, &c.

"To the author of the above treatise, his assiduity and kindness in assisting operating surgeons in their early employment of this agent, as well for his exertions in thus putting together the facts connected with its history and administration, and results, we are much indebted."—LANCET.

Webster & Co., 60, Piccadilly, London.

In a few days will be published,

## A New Edition of Mr. Babington's

MANUAL of BRITISH BOTANY. 12mo, price 10s.

John Van Voorst, 1 Paternoster-row.

HENFREY'S BOTANY.

## Outlines of Structural and Physio-

logical Botany. By ARTHUR HENFREY, F.L.S., &c., Lecturer on Botany at St. George's and the Middlesex Hospitals. With eighteen plates, fcap 8vo, 10s. 6d.

John Van Voorst, 1, Paternoster-row.

Just published, with plates, 8vo, cloth, 10s. 6d.,

## The Pathology and Treatment of

Scrofula. By ROBERT M. GLOVER, M.D., Lecturer on Materia Medica in the Newcastle Medical School.

"Hence the value of a practical work of this description, which must stand the test of time."—EDIN. MED. AND SURG. JOURNAL.

"This work is conceived in the true spirit of rational medicine, being based upon observation and experiment. It has nothing to do with fallacious statistical data, and the subject is sought to be investigated in the only legitimate manner—namely, by anatomical, chemical, and clinical researches. . . . It is the publication of monographs of this character that tends to the advancement of medicine; and the one we have now noticed is in itself sufficient to confer honour upon the institution of the Fothergillian Medal. We confidently recommend it to the perusal of our readers."—MONTHLY JOURNAL OF MEDICAL SCIENCE.

John Churchill, Princes-street, Soho.

SOUTH ON ACCIDENTS.

Just published, fcap. 8vo, price Five Shillings, with Woodcuts,

## Household Surgery; or, Hints on

Emergencies. By JOHN F. SOUTH, Surgeon to Saint Thomas's Hospital.

EXTRACTS FROM AUTHOR'S PREFACE.

"The object of this work is to give some useful hints as to the means which all people have it in their power to employ when accidents happen which require immediate attention, and no medical man is at hand, and cannot be obtained for hours. Such cases are neither few nor unimportant, and many serious consequences, nay, even death, may be prevented, if a judicious person, having been put on the track, make use of the simple remedies almost every house affords.

"As my work ran on, it struck me that I might render it more extensively useful, by giving some simple rules for the treatment of broken limbs and other accidents of not unfrequent occurrence on board ship and in the outskirts of colonies, where doctors are not to be had. The rules I have laid down will be easily comprehended, and will answer in most cases."

C. Cox, 12, King William-street, Strand.

# Royal College of Surgeons of England.

The Council of the College has determined that a Student in Human and Comparative Anatomy be appointed in JUNE next.

Candidates for the Appointment must be Members of the College, under Twenty-six years of age, and are required to transmit to the College, on or before the 19th of MAY next, certificates of character and professional acquirements, signed by two members of the Medical Profession.

The conditions under which the appointment is held, and other particulars relating thereto, may be obtained by application at the College.

27th April, 1847. EDMUND BELFOUR, Sec.

# Royal College of Surgeons of England.

Mr. PAGET, Professor of Anatomy and Surgery to the College, will begin his Course of LECTURES on TUESDAY next, the 4th of MAY.

EDMUND BELFOUR, Sec.

# University College, London.—Faculty

of Medicine.—The SUMMER TERM will commence on the 1st of MAY.

Classes in the order in which the Lectures are delivered during the day.

BOTANY—Professor LINDLEY, Ph.D.

MIDWIFERY—Professor MURPHY, M.D.

COMPARATIVE ANATOMY AND ZOOLOGY—Professor GRANT, M.D.

MEDICAL JURISPRUDENCE—Professor THOMSON, M.D.

PRACTICAL CHEMISTRY—Professor FOWNES.

ANALYTICAL CHEMISTRY—Under the superintendence of Professor GRAHAM and Professor FOWNES.

PATHOLOGICAL ANATOMY—Professor WALSHE, M.D.

MEDICAL CLINICAL LECTURES—By Dr. WILLIAMS, Dr. THOMSON, and Dr. WALSHE.

SURGICAL CLINICAL LECTURES—By Mr. LISTON and Mr. QUAIN.

Hospital Practice daily.

Prospectuses may be obtained at the Office of the College.

ROBERT LISTON, Dean of the Faculty.
CHARLES C. ATKINSON, Secretary to the Council.

April 16th, 1847.

# Practical Chemistry.—University Col-

lege, London.

FORTY LESSONS, OF ONE HOUR each, will be given by Mr. CAMPBELL, Demonstrator, under the direction of Professor FOWNES, on Mondays, Tuesdays, Wednesdays, and Thursdays, from Three to Four P.M., commencing on May 4th. The Course, in which all the processes and operations are repeated by the Students, will include the most important ordinary operations of the Laboratory, Chemical Manipulation, Preparations, Quantitative and Qualitative Analysis. Payments, including the cost of materials, by Students who are perpetual to the Class of Chemistry, £3; by other persons, £5.

ROBERT LISTON, Dean of the Faculty of Medicine.
HENRY MALDEN, Dean of the Faculty of Arts.
CHARLES C. ATKINSON, Secretary to the Council.

April 27, 1847.

# Middlesex Hospital.—The Summer

Session at this School will commence on MONDAY, MAY the 3rd.

FORENSIC MEDICINE—Dr. R. G. LATHAM, daily at Ten.

BOTANY—ARTHUR HENFREY, F.L.S., daily at half-past Two.

DISEASES of CHILDREN—Dr. WEST, Monday, Wednesday, Thursday, and Saturday, at Nine A.M.

On the APPLICATION of CHEMISTRY and the MICROSCOPE to PHYSIOLOGY and PATHOLOGY—Dr. DAY, daily at Eleven.

Hospital Practice, daily at Twelve.

For further particulars apply to the different Lecturers, to Mr. DE MORGAN, the Honorary Secretary, or to Mr. CORFE, the Apothecary at the Hospital.

27, April, 1847.

# St. Bartholomew's Hospital Medical

College. The SUMMER SESSION will commence on MONDAY, MAY 3rd.

LECTURES:

BOTANY—F. J. FARRE, M.D., F.L.S.

MIDWIFERY—E. RIGBY, M.D., F.L.S.

COMPARATIVE ANATOMY—Mr. M'WHINNIE.

FORENSIC MEDICINE—W. BALY, M.D.

PRACTICAL CHEMISTRY and NATURAL PHILOSOPHY—Mr. GRIFFITHS.

Five Clinical Lectures will be delivered in each week: those on Medicine, by Dr. ROUPELL and Dr. BURROWS; those on Surgery, by Mr. LAWRENCE, Mr. STANLEY, and Mr. LLOYD.

COLLEGIATE ESTABLISHMENT.—Students can reside within the hospital walls, under the collegiate system, of which the Rules may be obtained from the warden, Mr. Paget.

Further information may be obtained at the Anatomical Museum, or the Library of the Hospital, or from any of the medical or surgical officers or lecturers. The annual presentation of the Scholarships, Prizes, and other honours, will take place in the hall of the hospital, on Wednesday, the 5th of May.

# Medical Jurisprudence.—Dr. Barnes

will commence his LECTURES on MEDICAL JURISPRUDENCE and PRACTICAL TOXICOLOGY, on MONDAY, MAY the 3rd, 1847, at Twelve o'clock noon.

32, Tavistock-place, Tavistock-square.

# Charing-Cross Hospital Medical School

West Strand, London.

The SUMMER SESSION of Lectures will commence on MONDAY, MAY 3rd, 1847.

BOTANY—Dr. WILLSHIRE.—Monday, May 3rd, at Nine o'clock A.M.

FORENSIC MEDICINE—Dr. CHOWNE and Dr. GAVIN.—Tuesday, May 4th, at Three P.M.

HOSPITAL PRACTICE—Medical and Surgical, Six Months, £10 10s.; Full Period, £15 15s. Both Medical and Surgical, £26 5s.

Further particulars and Prospectuses to be had at the Hospital.

April, 1847. JOHN ROBERTSON, Hon. Sec.

# St. George's Hospital.—The Summer

Session will commence on the 1st of MAY.

BOTANY—Mr. HENFREY, F.L.S.

MEDICAL JURISPRUDENCE—Dr. BENCE JONES, F.R.S., and Mr. H. CHARLES JOHNSON.

MEDICAL CLINICAL LECTURES—Dr. NAIRNE.

SURGICAL CLINICAL LECTURES—Mr. CÆSAR HAWKINS.

Further information may be obtained from the apothecary of the Hospital.

# Theatre of Anatomy and Medicine

*adjoining* St. George's Hospital.

The SUMMER SESSION will commence on SATURDAY, MAY 1st, on which occasion, the Prizes and Certificates of Honour will be presented at Half-past TWO o'clock, by Sir JAMES CLARK, Bart., F.R.S.

MEDICAL JURISPRUDENCE—Mr. ANCELL and Mr. WARDER.
BOTANY—Dr. LANKESTER, F.R.S., F.L.S.
PRACTICAL CHEMISTRY—Mr. RODGERS.
PRACTICAL MIDWIFERY—Mr. BLOXAM.

Further particulars respecting the School, may be obtained on application at the Theatre, 1, Grosvenor-place, or to the Honorary Secretary, Dr. W. V. Pettigrew, 30, Chester-street.

# Aldersgate School of Medicine, 58,

Aldersgate-street.

The SUMMER SESSION will commence on MONDAY, the 3rd of MAY, when the following lectures will be delivered:—

FORENSIC MEDICINE—Dr. SNOW.

BOTANY—Dr. ARLIDGE.

ANIMAL CHEMISTRY—Dr. GARROD.

PRACTICAL CHEMISTRY—Mr. HOLMES.

COMPARATIVE ANATOMY—Dr. RAYNER and Mr. PITTARD.

Clinical Lectures, on important cases occurring in Hospital or Dispensary Practice, will be delivered during the Session.

# Dr. J. Hall Davis, Physician to the

Royal Maternity Charity, will commence his LECTURES on MIDWIFERY and the DISEASES of WOMEN and CHILDREN, for the Summer Session 1847, on TUESDAY, the 4th of MAY, at Nine A.M., in the Theatre at his Residence, 17, Russell-place, Fitzroy-square.—For further particulars see the prospectus.

# Lectures on Diseases of the Uterus.—

On WEDNESDAY, MAY the 26th, at Four P.M., Dr. HENRY BENNET, Obstetric Physician to the Western General Dispensary, (New-road, Lisson-grove,) will commence a Course of Lectures on Diseases of the Uterus. The Course will consist of about eight or ten lectures, to be delivered at the Dispensary, at the hour stated, on the Wednesdays and Fridays, and will be FREE TO STUDENTS AS WELL AS TO MEMBERS OF THE PROFESSION.

# Dr. West will commence his Lectures

on the Diseases of Children, at the Middlesex Hospital, on MONDAY, MAY 3rd, at Nine A.M., and will continue them every Monday, Wednesday, Thursday, and Saturday, at the same hour. Fee for the Course £2 2s.

Gentlemen entering to these lectures will have the opportunity of attending Dr. West's practice at the Infirmary for Children.

# Pauper Lunatic Asylum for Somerset-

shire. — Persons desirous of becoming Candidates for the Joint Appointment of RESIDENT MEDICAL OFFICER and SUPERINTENDENT of the above Asylum, are requested to transmit their Testimonials (addressed to the Committee of Visitors of the Pauper Lunatic Asylum for Somersetshire) to the Office of Mr. EDWIN LOVELL, Clerk of the Peace, Wells, Somerset, on or before Wednesday, the 12th day of May next.

Candidates are required to be between the ages of Twenty-seven and Forty-five; Graduates in Medicine of any University in the United Kingdom, Licentiates of the College of Physicians in London, or Members of the Royal Colleges of Surgeons of London, Edinburgh, or Dublin, or Licentiates of the Company of Apothecaries; and their Testimonials must state their past medical career, and the extent of their experience, if any, in the treatment of the Insane.

The Salary will be £350 per annum, payable quarterly, with a residence at the Asylum, free from rates and taxes, and with coals, candles, and the usual rations, or a fixed sum in lieu thereof.

It is desirable that the person appointed should enter upon his office as soon as possible.

The Asylum is calculated for the reception of about 350 patients.

It is particularly requested that there may be no canvass, either personally or by letter, made to the Committee of Visitors; but testimonials may be sent to them.

EDWIN LOVELL,
Clerk of the Peace, and Clerk to the said
Committee of Visitors.

Wells, 5th April, 1847.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

ALLUSION has already been made, on more than one occasion, to the pulmonary complications of fever. The following case was not completed in time sufficient for it to be placed along with the others in the early part of this series. The severity of the abdominal complication, however, gives sufficient reason for placing here a case which, on account of several interesting particulars, it is as well not to omit altogether.

FEVER, WITH ABDOMINAL DISEASE; PNEUMONIA; MILIARY RASH; RECOVERY.

CASE 54.—William R——, aged twenty-one; admitted Oct. 15th, 1846, John back ward. A tall, well-made man; face distressed; skin covered with a mottled red rash, with which are intermixed numerous miliary vesicles; tongue moist, a white fur on the dorsum, the tip and edges red; pulse 116, small and soft; respirations 26; bowels relaxed; abdomen tympanitic; has cough, pain in the chest, and occasional delirium of about three weeks' duration.

*History.*—A miller, from a marshy district. Three weeks ago he caught cold when heated. Next day had a rigor, followed immediately by heat and perspiration, which have continued, and in a few days by cough. He has been under medical treatment. On auscultation, large crepitation is audible through both lower lobes behind, with impaired resonance on percussion. Ordered, milk diet, with arrow-root; to take five grains of compound mercury-and-chalk pill twice a day; and a saline draught, with half a drachm of aromatic spirits of ammonia, every four hours.

Twenty-third day.—He had some sleep, but talked during the night; tongue dry and chapped; bowels not open; abdomen tender, gurgling on pressure in the right iliac fossa; pulse 104, soft, full, and jerking; skin perspiring; the miliary vesicles filled with an opaque yellow fluid. He has still cough, with a tawny adhesive expectoration. On auscultation, there is abundant smallish crepitation in the lower right lobe behind, and decidedly impaired resonance on percussion to the same extent. Ordered to be cupped to a few ounces beneath the right scapula; to take wine, four ounces; and beef, one pound, for tea daily; and to continue.

Twenty-fourth day.—Noisy and restless during the early part of the night; now he is composed, and answers questions rationally; he has less cough, but still expectorates a bloody, adhesive mucus; tongue moist, chapped, cleaner; bowels open three times, the last evacuation solid; pulse 102, small and soft; the rash is very abundant. Ordered to continue; to increase the quantity of wine to six ounces daily.

Twenty-fifth day.—He slept well; he has had one dark, half-solid evacuation; pulse 108, small and soft; he complains of no pain, only of the stinging of the rash, which is very abundant all over him; his skin is profusely perspiring over the upper half of his body; tongue brown and dry. Auscultation, as far as it can be practised, detects sibilus throughout the front of the chest, and the axilla on the right side. Ordered, to take wine, ten ounces, daily; sesquicarbonate of ammonia, three grains; and tincture of squills, twenty minims, with mint water, every four hours; to continue the pills; and to have a large blister plaster applied to the right axilla.

Twenty-sixth day.—Little sleep, restless; the blister drew well; the cough and expectoration continue as before; face anxious, profusely perspiring; tongue rather moist, with a brown fur; lips covered with sordes; pulse 116, full, soft, fluttering; one relaxed, rather dark motion; abdomen tender; he has slight subsultus tendinum. Ordered to continue.

Twenty-seventh day.—Broken sleep, talking all night; face flushed and anxious; tongue coated with a dry yellow fur; pulse 102, small, very soft; one relaxed evacuation from the bowels; abdomen tense and tender. Ordered to take the pill every six hours, and to continue.

Twenty-eighth day.—Better and quieter sleep; bowels not open; right hypochondrium tender on pressure; tongue with a dry brown fur; pulse 96, small, vibratory; cough as before; respirations 26, laboured; he is dull, pale, and languid. Ordered to continue; to have eight leeches applied to the right hypochondrium.

Twenty-ninth day.—He does not ascribe any relief to the application of the leeches. He was noisy, and had very little sleep during the night. Two solid evacuations; abdomen rather tender in the right lumbar region; cough easier, with looser expectoration; respirations 28; pulse 100, feeble; still pale and languid. Ordered to take the pill thrice a day, and to have a saline draught, with camphor mixture, every six hours.

Thirtieth day.—Slept at intervals; face flushed; tongue dry and chapped; pulse 96, with more power; bowels scantily open; abdomen still rather tender; skin warm and dry; the rash continues. Auscultation detects freer admission of air, with some crepitation, into the lower right lobe in front. Ordered to continue; to have six leeches applied to the right hypochondrium.

Thirty-first day.—Quiet sleep; tongue cleaner; pulse 112, small, jerking; skin warm; some fresh vesicles on each flank; bowels not open; he has still pain in the epigastrium, and right hypochondrium; respiration still difficult; the cough remains, accompanied by viscid, tawny expectoration. Ordered to reduce the daily amount of wine to six ounces, and to continue.

Thirty-second day.—Slept well, but talked much in his sleep; tongue dry, rough; pulse 102, with more power; bowels not open; tenderness in right hypochondrium; expectoration viscid, but of a lighter colour. Ordered to continue; to have four leeches applied to the right hypochondrium.

Thirty-third day.—Slept well; his appearance is much improved; bowels not open; abdomen hard, still rather tender; tongue moist, with a streak of white fur down each side; pulse 96, with good power. Ordered to continue.

Thirty-fourth day.—Good sleep; face flushed, but composed; bowels still confined; abdomen softer, tolerant; tongue dry in the centre, clean and moist at the sides and tip; some fresh vesicles in the axillæ. Ordered to reduce the daily amount of wine to four ounces; to take two drachms of castor oil at once, and to continue.

Thirty-fifth day.—Good sleep; two fæcal, partially solid evacuations; tongue dry, cleaner; skin moist; pulse 108, with more power. Ordered to take two ounces of wine daily, and to continue.

Thirty-sixth day.—Noisy during the night; skin warm and moist; he has two small collections of pus in the glutæal region; he feels his appetite returning. On auscultation, a little crepitation, with irregular creaking sounds, are audible over the right side of the chest behind. Ordered a mutton chop daily; to leave off his other medicines, and to take half a drachm of aromatic spirits of ammonia every six hours.

Good sleep, increasing appetite, a soft pulse, gradually falling in frequency, and bowels acting regularly without medicine, is the import of the few remaining notes of his symptoms, the treatment consisting in the exhibition of quinine with nutritious food. The abscesses burst of themselves within two or three days of their having been first observed, and all that remains to be noticed till his discharge, is a slight cold which he caught on first getting up, which delayed his convalescence for a few days, and the appearance of anasarca in his feet towards evening about the same period. On his discharge, air entered both lungs equally well, with only perhaps a little longer expiration on the right than on the left side.

There are some points in the above narrative presenting peculiarities different from what has been remarked in the common run of cases. Of these, the long continuance of the attack, and persistence of the ordinary rash, with the very abundant vesicular rash, need be hardly further noticed, than just to call attention to their description in the detail of the case. There is another point which seems to need a little explanation. On the thirty-first day, after a quiet night, he had pain in the abdomen, and there was a jerking or irritable condition of the pulse. Connecting these symptoms together, he was supposed to be rendered irritable by an undue amount of stimulants, the general irritability being perhaps accompanied by increased action around the ulcers which were supposed to exist in his intestines. The wine was therefore slightly diminished.

The same idea still prevailing, that the local cause for all the symptoms lay in the condition of the intestinal mucous membrane, caused any symptom bearing such a meaning to be immediately acted on; so, on the thirty-second day, leeches were applied to the abdomen; and on the thirty-fourth and thirty-fifth days the wine was again diminished. On the thirty-sixth day, the symptoms were all explained by the discovery of two softened spots on either side of the sacrum, which subsequently swelled, and spontaneously discharged a small quantity of pus. It is a less usual form of bed-sore

when the pus collects under the skin, than when the affection begins at once from the surface by the sloughing of the skin; and thus far is clear how the existence of any affection of the back was overlooked by nurses used to another form of disease. But the matter of greatest interest was to find thus satisfactorily explained that little something which only obscurely appeared through the symptoms, and had modified the treatment and the prognosis, and given occasion to unfavourable anticipations where all besides was going on so well; though it would be greatly underrating the intimate sympathy which subsists between all the lesions in fever, at once to presume, that in these collections of pus lay the immediate cause of all the symptoms—of those, for instance, referrible to the abdomen.

It is not that we can always hope to find a cause for all that we observe, and to refer each symptom correctly to each suffering part, but a case is not fairly made out till we have done so. Is it not this need of daily inquiry, this constant attention kept up to the last, which gives so lively an interest to the study of fever, and because, too, what is thus gained is so immediately applicable to the treatment of disease generally? For it is not in fever only that a series of symptoms which have puzzled the practitioner for some days are at last explained by the appearance of an abscess, suspected, perhaps, and frequently looked for, but long undiscovered.

This series commenced by the narration of a case (32) where there was reason to doubt whether the disease was not originally measles, for which certainly, with whatever reason, it was taken in the first instance. Considering how like the typhus rash is to that of measles, it is rather to be wondered at that the difficulty of diagnosis does not more frequently arise. Practically, the difficulty of diagnosis lies between scarlatina and typhus; the diagnostic characters of each are sufficiently plain, generally speaking, but the rules occasionally fail in their application.

And this may be because scarlatina has a tendency to take on a typhoid form, or, it may be, that the rules of diagnosis do not fail us, but the grounds are removed in the actual merging of one disease in the other. But leaving the consideration of this abstract question as to what may be, it will be of interest to inquire what was the exact nature of the affection in the following case, where the above difficulty hung over the diagnosis.

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FEVER, WITH DUSKY RASH, FOLLOWING SCARLATINA (?); DEATH ON THE EIGHTEENTH DAY; DISSECTION.

Case 55.—Maria B——, aged eighteen; admitted October 8th, 1846; Mary back ward. Face flushed and dusky; skin hot, partially desquamating, with a diffused dusky redness over the chest; extremities cold; bowels relaxed; abdomen tender on pressure; pulse 120, small and soft; tongue clean, dry, red, and chapped; respiration hurried; complains of deafness, pain in the head and limbs, thirst, loss of sleep and appetite, of about two weeks' duration.

*History.*—Always short-breathed, but otherwise healthy, till twelve days ago, when, the children in the family where she lived having been taken ill with fever, accompanied by aphthæ and sore throat, she was seized with a sensation of tightness of the chest, then came rigor, sore throat, and pain in the head. Four days ago she menstruated, as usual; within the last three days she has become deaf, and it is only to-day that the surface of the body has become dusky, having hitherto been quite pale. Till last night she has had no sleep. Her throat is dry and red, but apparently not swelled, and she swallows easily. On auscultation, air seems to enter freely everywhere. Ordered milk diet with arrow-root; four ounces of wine daily; and five grains of compound mercury-and-chalk pill to-night.

Fourteenth day.—She slept well, and is now drowsy; face dusky; skin generally hot, extremities quite warm; bowels not open; abdomen distended, tender; tongue moist, with prominent papillæ; pulse 120, small and soft; respirations 40. Ordered to leave off the wine. To take an effervescing draught every four hours.

Fifteenth day.—Slept quietly and well; face still flushed; skin hot and perspiring, distinctly mottled on the abdomen; tongue clean and dry; pulse 120, small and soft; respirations 54; bowels much relaxed; abdomen tense and painful. Ordered to continue.

Sixteenth day.—Broken sleep; wandering at night; now she is drowsy, but quite rational; she had a slight rigor this morning; face still flushed and dusky; tongue dry, chapped and tremulous; skin cool; pulse 132—140, very small; urine and fæces passed unconsciously; abdomen tense and painful. Ordered to have a blister plaster applied to the abdomen. To take four ounces of wine, and one pound of beef, for tea, daily; and five grains of compound mercury-and-chalk pill thrice a day.

Seventeenth day.—She lies on her back; paler, but still very dusky; less deaf, and quite rational; she sleeps much; pulse as before; bowels not open; tongue dry and chapped; respirations very irregular, 38—60. Continue.

Eighteenth day.—Last evening she seemed quite cheerful; she slept well during the night; bowels open two or three times; the evacuations light-coloured. At six A.M. she said that she saw figures in black, then sunk rapidly, and died in about four hours.

*Body examined, twenty-five hours and a half after death.*—Neck relaxed, limbs rigid, blood coagulated, the surface of the body very dusky. The brain was externally rather dark, owing to the loaded state of the large veins, and the plexus choroides were also dark; but the substance of the brain was quite firm and healthy. The fauces were dusky, though not evidently loaded with blood; no ulceration appeared anywhere. The lungs, behind, were dark and hard, and raised into little lobular masses, which, on section, appeared dark and dry, contained no air, and sank in water. The posterior parts were thus affected generally, without relation to the divisions of the lobes. The front of the lungs was slightly emphysematous. The pericardium contained a few drachms of clear fluid; the heart was healthy. The mucous membrane of the stomach was softened, and here and there slightly injected. The intestines, small and large, were quite healthy, excepting the lowest three feet of the ileum. In this space, going from above downwards, the Peyer's patches appeared to be raised,—then they were slightly injected,—then the edges appeared as fungous rims round the patches. Now, the affection was concentrated in one or more points of these patches, which were dusky and livid, almost sloughing. Just round the ileo-cæcal valve were a few ulcerous spots, stained yellow by adherent fæcal matter. Among the patches rose hard, round knobs, indicative of the affection of the solitary glands. The mesenteric glands were dark and congested, but very little enlarged. Spleen very large, dark, and soft. Liver soft, otherwise healthy in appearance. No changes were noticed in any other organs bearing any particular relation to the disease of which she died.

If we look at the history of the case—at the symptoms of the disease in the children from whom, or at least from the same source as whom, this patient may fairly be supposed to have received it—at the few symptoms which she herself suffered in the early part of the attack—and lastly, at the desquamation by which those symptoms were followed, it appears most likely that she had, in the first place, scarlatina.

But she did not die of scarlatina; she died of typhus, with the symptoms and the morbid changes specifically referrible to that disease; she had the rash during life, and the enlargement of the Peyer's patches discovered after death, such as is found in no acute disease besides typhus. (See Louis, Fièvre Typhöide, tome i. p. 198, ii. p. 107.)

Then the whole case stands thus: that there is good reason to suppose that she had scarlatina at first, but that during that period typhus fever commenced, which terminated her life on the eighteenth day of her illness, and probably at a somewhat earlier period of the existence of that fever. A means of calculation, imperfect though it be, is supplied by the appearance of the rash, which is seen generally about the eighth day. Here it was first noticed on the fifteenth; but if this occurrence, and the death on the eighteenth day, be placed a week earlier, the case stands well as one of continued fever, fatal on the eleventh day, occurring during convalescence from scarlatina.

The condition of the lungs was very remarkable, and in some degree to be connected with the livid dusky hue of the surface of the body. But it cannot be admitted as the complete explanation of that appearance; for the same may be seen in cases of fever, where the lungs are quite pervious, as if the fault lay more in the chemical than in the mechanical part of the respiratory act. It is only necessary to guard against one inference—that the appearance of the skin had anything to do with the supposed presence of scarlatina; for the skin had been pale during the period which the scarlatina may have existed, and desquamation, more clearly to mark the distinction, was taking place at the same time as this duskiness, the precursor of the regular typhus rash, became visible.

Of this condition of the lungs, however, it is not easy to give an exact explanation. One thing only is clear, that they admitted less air than they naturally should have done; but

whether this state was the first step towards any further change, as pneumonia under peculiar circumstances; or retrograde, an attempt at the removal of previous hypostatic congestion; or, lastly, the habitual condition of her lungs, connected with the shortness of her breath, bearing a resemblance, in some respects, to the atelectasis pulmonum of children, there is no evidence to determine.

Only one more remark seems called for. Having taken every occasion to observe upon, and illustrate, the necessity of studying each case of fever day by day, and of prescribing directly for the symptoms, as they arise and threaten danger, it is necessary to point to this case as one of a contrary description, as one of those where the information supplied by contemporary cases is at least as valuable as that obtained from examination of the symptoms of the particular case. She apparently died of that sudden overwhelming collapse to which we have before alluded as occurring in more than one case about this time, a collapse from which no amount of stimulants could raise the patient, and in comparison with which all dangers from local inflammations sink into nothing.

## Original Papers.

### PRINCIPLES OF TREATMENT IN PLACENTAL PRESENTATIONS.

By J. Y. SIMPSON, M.D.,

PROFESSOR OF MIDWIFERY IN THE UNIVERSITY OF EDINBURGH.

In a late very interesting and very able paper, on unavoidable hæmorrhage, published in The Lancet for March 27th, I observe that the author, Mr. Barnes, argues on the idea that I recommend the complete separation and detachment of the placenta before the child, as a general rule of practice in all cases of placental presentation. Many other members of the profession appear to have taken up the same impression. I have always, however, maintained a very different doctrine. From the first observations which I published on the subject, up to the present time, I have upheld that the practice of detaching the placenta before the child, in unavoidable hæmorrhage, was a method to be had recourse to in cases where the other recognised modes of management were insufficient, or unsafe, or altogether impossible of application; and I have always looked upon this new method as possessing especial value, from its thus presenting to us a rational means of treatment in precisely those more formidable varieties of this obstetric complication, in which all former plans of practice were attended with extreme hazard or extreme difficulty.

As I am anxious to avoid future error and misconception on this head, I would beg leave here to take the liberty of enumerating briefly, and without entering into special details, the different general principles of treatment which, in my humble opinion, ought to guide our practice in this important and anxious class of cases.

Setting aside, then, those minor and palliative measures for moderating the attendant flooding that are generally adopted by practitioners in all cases of uterine hæmorrhage, where time permits of their employment, (such as quietude, the supine position, cold, &c.,) I hold that our management of placental presentations, when either labour or such severe flooding as demands interference does at last supervene, should be regulated on the following principles:—

I. *In some cases no active interference is required.*—In placental presentations, we deem ourselves called upon to interfere operatively with the avowed object and purpose of saving the patient from the dangers of the attendant hæmorrhage. Hence it necessarily follows that it would not be requisite to adopt any special form of artificial aid or delivery, if, in any case or cases, this complication were accompanied with little or no flooding. Now, in some instances of partial presentation of the placenta, the flooding ceases altogether, or abates to a safe degree, when, during the natural progress of labour, the membranes rupture and the head descends. And in some rare cases of complete presentation of the placenta, where the vascular bleeding structure of the placental mass has become obstructed and obliterated previously to the supervention of labour, little or no hæmorrhage has accompanied the process of delivery. In other instances, before any operative aid can be applied, the hæmorrhage suddenly and entirely ceases in consequence of the placenta becoming totally separated, and expelled by the advancing head of the infant. Under such circumstances, and others, where the present or prospective dangers attendant upon operative interference would be evidently greater than the present or prospective dangers attendant upon the existing degree of hæmorrhage, any form of forced delivery would, I believe, be improper. But cases of placental presentation in which we can thus leave the delivery altogether to Nature are rare. Generally, we require to adopt some active measures, with the special object of saving the patient from the actual or threatened dangers of the hæmorrhage. These measures should, I conceive, be one or other of the plans which I have now to proceed to mention—viz., 1, the artificial evacuation of the liquor amnii; or 2, the artificial extraction of the child; or 3, the artificial separation of the placenta.

II. *Artificial Evacuation of the Liquor Amnii.*—In partial presentations of the placenta, rupturing the exposed portion of membranes (according to those principles that are generally followed in accidental floodings) is a measure which sometimes proves quite adequate to arrest or abate the hæmorrhage to such an extent, that the delivery may be afterwards entirely committed to the efforts of Nature. Various old authors, as Daventer, Deleurye, and Astruc, have described this same plan of treatment as applicable to complete, as well as to partial, presentations of the placenta, with this difference, that in the complete variety, the liquor amnii is evacuated, not by puncturing the membranes only, but by perforating the opposing placental structure with a trocar, catheter, or other analogous instrument. And the later records of midwifery contain several cases in which this perforation of the placenta has, in complete presentations of the organ, been successfully adopted, both as regards the mother and the infant.

Several high authorities, however, in midwifery, have altogether repudiated the evacuation of the liquor amnii, both in partial and in complete placental presentations. They have done so principally under the idea, that if this measure failed to suppress the flooding, the previous escape of the waters would render any subsequent practice that might be required more difficult of execution. This objection certainly applies to turning, as a subsequent practice, but it does not apply to artificial detachment of the placenta as an ulterior measure of treatment.

The artificial evacuation of the liquor amnii, by perforating either the placenta or membranes, affords assuredly a simple, but by no means a certain, method of restraining the flooding in placenta prævia. It is a practice which is undoubtedly attended with less success in unavoidable than in accidental hæmorrhage. But still I believe it to be a mode of treatment, to which we may occasionally have recourse with great advantage, especially if there is originally a large quantity of liquor amnii present, and if the flooding is great, while the os uteri is still small and undilatable. We must beware, however, of trusting too much or too long to this, or to any mere palliative measures. Whatever we do, should, if possible, be always done before the hæmorrhage is allowed to proceed to such an extent as to induce any very marked symptoms of constitutional debility and depression in our patient. If a decided state of exhaustion has been allowed to supervene, either of the two remaining and ulterior measures—extraction of the child, or extraction of the placenta—will be but too liable to prove futile and unsuccessful in their results.

III. *Artificial Extraction of the Child.*—This forms the general principle of management upon which unavoidable hæmorrhage has hitherto been treated by most authors and practitioners. The professed object of the practice is this: by forcing the delivery of the child, and thus emptying the uterus, the organ is thrown into full contraction, and hence further loss of blood prevented. The mode in which the indication is fulfilled is in some degree regulated by the state of advancement of the infant, its presentation, &c. In a great proportion of cases the accompanying hæmorrhage requires interference at so early a stage of the labour, that the only proper and possible mode of delivery is by the operation of turning; and various authors, as Drs. Denman, Burns, Hamilton, Conquest, and others, speak of turning as the *sole* and *only* mode of treatment applicable to cases of placental presentation. The great objection to it is the imminent danger which the mother necessarily runs, from the risk of some laceration of the cervix uteri during this mode of forcible delivery; and any degree of laceration of this part is especially dangerous in placental presentations; for in placenta prævia the structure of the cervix is extremely vascular, being permeated with those numerous and enlarged vessels which are always developed, in a high degree, in the uterine walls opposite the seat of the placenta. The lacera-

tion of these vessels leads to immediate danger, from draining hæmorrhage after delivery, and to more remote danger, from inflammation being liable to spring up in the torn and wounded sinuses of this part, and extreme uterine phlebitis following as a direct consequence. But still I hold turning to be the proper mode of practice in unavoidable hæmorrhages which cannot be restrained by less active measures, and where immediate delivery is demanded, with the os uteri well dilated, or easily dilatable, and the child still alive, or presenting transversely.

Besides turning, other modes of artificial delivery of the infant are occasionally resorted to in placental presentations. If the attendant flooding is such as not to require forced delivery till after the waters are evacuated, and the head well advanced in the passages, then version would be dangerous and inapplicable, and the use of the forceps offers the safest and easiest mode of extracting the infant. Further: in original pelvic presentations extraction may be at any time effected, when required, by seizing and dragging at the feet of the child.

V. *Artificial Separation of the Placenta.*—The arrestment of unavoidable flooding by total detachment of the placenta should, I believe, be our line of practice when the combination of circumstances is as follows—viz., the hæmorrhage is so great as to show the necessity of interference, and is not restrainable or restrained by milder measures, (such as the evacuation of the liquor amnii;) but, at the same time, turning, or any other mode of immediate and forcible delivery of the child, is especially hazardous or impracticable, in consequence of the undilated or undeveloped state of the os uteri, the contraction of the pelvic passages, &c. Or, again, the death, prematurity, or non-viability of the infant, may not require us to adopt modes of delivery, for its sake, that are accompanied (as turning is) with much peril to the mother, provided we have a simpler and safer means, such as the detachment of the placenta, for at once commanding and restraining the hæmorrhage, and guarding the life of the parent against the dangers of its continuance. Hence, as I have elsewhere stated, I believe that the suppression of the flooding by the total detachment of the placenta will be found the proper line of practice in severe cases of unavoidable hæmorrhage, complicated with an os uteri so insufficiently dilated and undilatable as not to allow of version being performed with perfect safety to the mother: therefore, in most primiparæ; in many cases in which placental presentations are (as very often happens) connected with premature labour and imperfect development of the cervix and os uteri; in labours supervening earlier than the seventh month; when the uterus is too contracted to allow of turning; when the pelvis or passages of the mother are organically contracted; when the child is dead; when it is premature, and not viable; and where the mother is in such an extreme state of exhaustion as to be unable, without immediate peril of life, to be submitted to the shock and dangers of turning, or forcible delivery of the infant. This enumeration is far from comprehending all the forms of placental presentations that are met with in practice; but it certainly includes a considerable proportion of the cases of this obstetric complication, and among them, all, or almost all, of the most dangerous and most difficult varieties of unavoidable hæmorrhage. In adopting the practice, one error, which I would strongly protest against, has been committed in some instances. Besides completely detaching and extracting the placenta, the child has subsequently been extracted by direct operative interference. If the hæmorrhage ceases, as it usually does, upon the placenta being completely separated, the expulsion of the child should be subsequently left to Nature, unless it present preternaturally, or the labour afterwards show any kind of complication, which of itself would require operative interference under any other circumstances. Both to detach the placenta and extract the child would be hazarding a double instead of a single operation.

*Comparative Mortality attendant upon Turning, and upon the total Separation of the Placenta.*—One circumstance which strongly led me to advocate, in unavoidable hæmorrhage, the preference of the detachment of the placenta to the operation of turning the child, was the fact of the great mortality which followed the latter operation, as contrasted with the few mothers that died when the placenta was spontaneously expelled, or accidentally extracted before the infant. In speaking of the relative maternal mortality resulting from the two modes of practice, Mr. Barnes very properly points out, that when I spoke of the mortality attendant upon the separation of the placenta before the child as amounting to one in fourteen only, (ten in 141 mothers having died,) I had included cases in which the placenta was thrown off spontaneously before the child, along with others in which it was artificially detached; and he doubts if the results would not be "widely different" if the statistics comprehended the latter class of cases only, "in which the severe operation of detaching the placenta, by the introduction of the hand, had been resorted to." The best answer to this objection consists in a statement of the results hitherto obtained from the practice of artificially detaching the placenta.

"Seventeen cases," says Dr. West,* "have been recorded in the English journals, during the past fifteen months, of detachment of the placenta before the birth of the child in cases of placenta prævia. In the case recorded by Dr. Simpson, to whom it had been communicated by Mr. Cripps, the placenta was removed by an ignorant midwife, and ten hours elapsed before the child was born, during which time, however, no hæmorrhage took place. In sixteen out of the seventeen cases, the bleeding is said to have ceased immediately on the detachment of the placenta; but Dr. Everitt mentions, that although the flooding abated on the separation of the placenta, it did not entirely cease until after the application of cold externally; and he insists on the fact as proving, in cases of this kind, the hæmorrhage comes from the uterine as well as the placental ends of the lacerated veins. The life of the mother was preserved in every case but one, (out of the seventeen,) and then the previous hæmorrhage had been so profuse as almost to exhaust the patient, who died three hours after delivery. All the children were still-born, except in the case related by Mr. Stickings."

I do not stop to inquire whether in one and all of these seventeen cases the artificial detachment and extraction of the placenta ought to have been followed. At present I adduce them, not as affording evidence of the propriety of the practice, but as affording evidence of its safety.

In proof of the maternal mortality under the old and recognised forms of practice being greatly higher than under the proposed plan of the extraction of the placenta before the child, Mr. Barnes refers, apparently with some hesitation, to the statistics collected by Dr. Churchill and myself, as showing that one in every three mothers was usually lost in placental presentations. Among 174 cases of unavoidable hæmorrhage collected by Dr. Churchill, forty-eight mothers died. I have now before me a carefully collected list of 654 cases of placental presentations reported by Mauriceau, Portal, Giffard, Smellie, Rigby, Clarke, and Collins, Schweighauser, Lachapelle, Drs. John and Francis Ramsbotham, Lee, Lever, and Wilson. Among these 654 cases, 180 mothers died, or 1 in $3\frac{6}{10}$. In corroboration of the correctness of the statistical view which Dr. Churchill and I have taken of the extent of maternal mortality in unavoidable hæmorrhage, I would further beg to refer Mr. Barnes to the observations of Dr. Robert Lee. In his Midwifery Lectures, (pp. 370, 371,) published in 1844, Dr. Lee states a number of statistical facts regarding uterine hæmorrhage from placental presentations, and, amongst other matters, he mentions the result to the mothers in a considerable number of cases. I shall throw all his evidence on this last point into a tabular form.

*Maternal Mortality in Seventy-two Cases of Placental Presentations noted by Dr. Lee.*

| Reporters. | No. of cases reported. | No. of mothers lost. |
|---|---|---|
| Dr. Clarke..... | 14 | 1 |
| Dr. Collins..... | 11 | 2 |
| Dr. Ramsbotham... | 19 | 8 |
| Dr. Lee ..... | 38 | 14 |
| | 72 | 25 |

Hence, according to Dr. Lee's collection of statistics, the maternal mortality in unavoidable hæmorrhage, amounting to twenty-five in seventy-two cases, is rather more than one in three. And this evidence of Dr. Lee will probably be regarded as the stronger, seeing that it is totally unprejudiced in its character; for in 1845, Dr. Lee called into doubt the accuracy of all collections of statistical data made by others, and which led to the idea, that the general maternal mortality in unavoidable hæmorrhage was so great, as to approach one in three. At that time he was, I believe, unaware of the general result of his own previously published collection of statistical data relative to the point in question.

Edinburgh, May, 1847.

* See his able Midwifery Report for 1845-46, in Dr. Forbes's Review for January, 1847, p. 286.

# ON INFANTILE SPASM OF THE WINDPIPE.

ILLUSTRATED BY CASES.

By JAMES REID, M.D.,
PHYSICIAN TO THE INFIRMARY OF THE PARISH OF ST. GILES AND ST. GEORGE, BLOOMSBURY.

(*Concluded from p.* 460.)

I was not long since called, in consultation with a highly respectable surgeon, to see an infant five months old, who had had several attacks of this complaint. We found that, although the child was nominally suckled by the mother, the pap-boat was frequently used during the day, and as the infant cried after this, they attempted to quiet it by repeating the feeding. By the use of purgatives, &c., the infant became much better in two or three days, and I then strongly recommended the mother, as she had a very insufficient supply of milk, to engage a wet nurse, which she promised to do. About a week afterwards I was called up to it at night, but found, on my arrival, that it had in the meantime died during a paroxysm, the same system of feeding having been continued.

Nurses in general, who have the charge of young infants brought up by hand, have an invincible objection to thin food, as the object is to make the child look as fat and hearty as possible, and we have to struggle against this prejudice sometimes in cases even of imminent danger.

In most of these cases we find the alvine dejections to consist of a thick, pasty mass, without a proper admixture of bile, constipation being a frequent accompaniment; and it is not till the secretions become less consistent, and of a better colour, that we observe decided signs of amelioration as to the spasmodic attacks.

The generality of authors who have written on this subject allude to this state of bowels.

Dr. Underwood mentions, that he has known some of the largest and finest infants he had ever seen, die suddenly *within the month*, immediately after the nurse had boasted of their having taken "three boatfuls of victuals."

There are numerous cases, also, of general convulsions occurring soon after being fed with thick food. In the family before alluded to, in which twelve children were successively subject to this disease, they were all fed by hand, principally owing to the mother having sore nipples.

*Post-mortem appearances.*—If spasm of the windpipe is essentially dependent upon morbid nervous action, arising from derangement of distant organs, which is functional only, we may be prepared to find an almost total absence of organic change, either in the part directly implicated, or in others more remotely concerned.

Thus I have not been able to detect any perceptible change about the glottis or larynx in those cases which I have examined; and the same result, I believe, has occurred in the examinations of most other practitioners. In one case, examined by Mr. Powell, the thyroid gland was much enlarged, the left lobe pressing the carotid artery out of its proper situation, and also on the recurrent nerves; the cervical glands were large, but the glottis presented no unusual sign. I have not, however, discovered, in my own cases, the enlarged glands of Dr. Hugh Ley; and although I examined carefully both the lungs and throat, I could detect nothing unusual in their appearance. In the brain, no greater amount of pathological effect could be observed than might be reasonably expected to accompany any case of sudden death; and in some instances we shall be surprised to find so little evidence even of this. The same result as to this organ has been noted by Dr. Merriman, Dr. H. Davies, Dr. Marsh, and several other writers. I believe that, in some cases, a morbid change in some portion of the brain has been remarked, especially at the medulla oblongata; but in future cases which may prove fatal, I should feel more disposed to expect a morbid alteration of structure in the ileum and other intestines, than in any other part of the body. In a case of laryngeal angina, described by Billard, in his "Traité des Maladies des Enfans," he found not only intense inflammation of the larynx, but he adds, "quatorze plaques folliculeuses sont enflammées dans l'ileon, et le colon est parsemé de stries brunes très nombreuses."

*Prognosis* I pass shortly over. Gooch says the disease was fatal in one-third of those attacked; but this I find to be a far greater proportion than has fallen under my own observation, as I can call to mind only five fatal cases in a large number of those attacked by the complaint. The most distressing circumstance connected with it, is the uncertainty as to the period of attack, and there are no symptoms on which we can depend to assure us that the next attack may not prove fatal, as the child for days previously may be in better health than usual. Should general convulsions supervene, the danger is much increased. A guarded prognosis should be given in all cases, and the possible danger explained: it is essentially necessary, in fact, to do this, as without this intimation we shall often find it difficult to have our remedial measures properly attended to. It is astonishing, in some cases, how many attacks, both of the spasm and of convulsions combined, may take place during the twenty-four hours, without proving fatal. I have known them to occur on every slight noise in the room, so that the mere moving any article on the table would cause a paroxysm. Those children who are of a leuco-phlegmatic temperament, or of nervous, irritable fibre, seem most liable to the disease. It appears to me that this complaint is more frequent than formerly, if I may judge by my own practice. I have met with three cases of it within the last week.

*Curative Means.*—As these attacks, with very rare exceptions, occur during the period of dentition, our first care should be, to examine the gums, and lance them freely, if there is the slightest appearance of fulness or tenderness. If called during the paroxysm, we should dash cold water in the face, and expose the infant to an open window, so as to excite the respiratory action, as in asphyxiated newly-born infants. Some authors have recommended the repeated daily lancing of the gums; but I think this may be in some cases carried too far, and that the intense fright of the child, on seeing the preparations for the operation, so frequently, may cause more danger of a severe paroxysm than is met by the corresponding benefit. One of the most severe attacks I ever saw, came on immediately after I had freely lanced the gums.

The chylopoietic viscera seem to me to be the organs which require the greatest care and attention in this complaint; and it is important to unload the bowels as speedily as possible, improving the secretions at the same time. A calomel purgative, followed in a few hours by a dose of castor oil, will be the best form; and a warm-water injection thrown up the rectum will relieve that bowel at once from its irritating contents. Small doses of calomel or grey powder may afterwards be given, at longer intervals; and as the secretions present a more bilious character, we shall find great benefit from antispasmodics. The following mixture is that which I usually prescribe:—Half a drachm of fœtid spirit of ammonia; five minims of dilute hydrocyanic acid; seven minims of tincture of henbane; one drachm of the spirits of aniseed; four drachms of the syrup of orange-peel; and one ounce and a half of water. A teaspoonful twice or thrice daily.

In some cases, also, an embrocation similar to the following will produce most beneficial effects, when the other remedies do not succeed at first, if applied occasionally to the spine and chest:—A drachm of tincture of cantharides; a drachm of tincture of opium; an ounce of soap liniment.

In one case which I saw last week, in consultation, the best results attended from its employment, as it was the first remedy which checked the spasm of the hands and feet.

Assafœtida enemata, likewise, will be found to relieve the little patients from some of the troublesome symptoms.

*Depletion* is not required, unless general convulsions attack the infant at the same time; and even then, in many cases it may be safely dispensed with. Mental and bodily quiet, with avoidance of all excitement, are essentially requisite.

*Change of air* appears, of all others, to be the most beneficial remedy even in very severe cases, after the bowels are fully relieved. I have known several instances of infants suffering from hourly paroxysms, complicated with general convulsions, in which, notwithstanding the employment of all the usual medicinal remedies, no progress was made until the child was removed out of town, which acted like a charm, the spasmodic action of the epiglottis, and the convulsions, either ceasing immediately, or in the course of a few hours. In the case of Dr. Marsh, previously alluded to in this paper, no benefit resulted from any treatment, until the child was removed to the country, when the paroxysms immediately ceased.

Dr. Underwood's case shows that some peculiar exciting cause existing in the air respired, may produce these attacks; and a removal from the house itself may therefore, at least, be prudent under such circumstances. The infant alluded to, was seized, when fourteen days old, with an attack which evidently was spasm of the glottis, though not recognised as such by Dr. Underwood, but described as "the infant awaking in a convulsion." The parents kept a liquor shop; and as every

remedy given was unsuccessful, the child was removed to the country. After some time, when quite well, it was brought home again; and on being taken into the bar-room, it was seized with "a kind of spasm in the chest," and died in two or three seconds, "evidently from asphyxia."

Dr. Marsh mentions a somewhat similar case, having its origin apparently in the exposure to the atmosphere of a newly-painted room, as the attacks returned when the child was again brought back to it.

In one or two cases which I will select from many, and read at the termination of this paper, the extraordinary effect produced immediately by this change will be apparent.

I have already alluded to the fact of this complaint being much more common in the vitiated atmosphere of towns than in the pure air of the country; and there are practitioners living in rural districts who, in a long course of practice, have never seen an instance of the disease.

In the registrar-general's reports of mortality we seldom observe the disease mentioned, and it is evidently included under the heads of dentition and convulsions.

By an inspection of the first report, however, it will appear that the deaths from teething amount to a number, in the metropolitan unions, six times greater than that of an equal population in a rural district. Even in the second year of life we find, from the same report, that the mortality amounts to one-eighth of the whole number, taking both town and country population.

The following cases, which I attended with the father of the children, a very intelligent practitioner, I will give the account of, in his own words:—

"The eldest child, weaned at seven months, and at the age of nine months had a severe attack of bronchitis, simultaneously with the invasion of the disease. During its progress and decline, there were repeated attacks of spasm of the glottis, attended with a long-drawn crowing inspiration; but not being acquainted with the disease, I did not recognise its real nature, but considered it as a part of the inflammatory affection.

A fortnight after recovery from the bronchitis, the child appeared heavy and irritable for a day or two, with very confined bowels, the motions being solid, and formed like those of an adult, and he was suddenly seized with a spasm of the glottis, attended with the usual loud inspiration. The attacks were very frequently repeated during the day, but there was no cough, and the breathing was perfectly natural in the intervals. The real nature of the disease was now recognised. The child was removed to Brighton, where he remained three weeks, without experiencing another attack, although, during that period, the weather was very unfavourable, with north-east winds, and two teeth made their appearance, with great discomfort to the child.

Four weeks after his return home, the gums were swollen, the child lost flesh and colour, and the spasms again returned. The gums were freely lanced, aperients administered, and great attention paid to diet; but the spasms still continuing, the child was removed to Sydenham, where the attacks directly ceased. After the age of fourteen months, no further attacks were experienced.

I have written this case out at length, as I wished to show, that although the irritation of teething might have been a cause of the general disturbance of the system, yet it was not a direct cause of the spasms. Whenever they occurred, the gums were freely lanced, but without any improvement. Attention to the bowels, and change of air, never failed in completely removing the disease for the time. The number of attacks in the second instance was about six or eight a day. From the instant of his arrival at Brighton they totally ceased.

The second child, a girl, almost entirely brought up by hand. At nine months the same attacks occurred, without any visible cause. The bowels were not particularly confined, and the gums were not swollen; but they were, however, repeatedly lanced—sometimes having the effect of producing an attack. She generally awoke with a spasm, and one was easily excited at any time by fright. These attacks continued, varying in frequency during two months, when we took her abroad. One attack occurred in the crowded cabin of a steamboat, after which she had no return whatever of them. The first tooth did not appear until she was eighteen months old.

The third and fourth children had each a wet nurse, and the disease never appeared in them, although the younger had an attack of bronchitis.

The fifth child had a wet nurse, but not a healthy one, being subject to flatulence and disordered bowels, and very nervous. In November, the child had a severe attack of bronchitis, from which he completely recovered. The following January he was attacked with screaming fits, and was generally disordered. Slight attacks of catching of his breath then came on, which, after a time, proved to be spasm of the glottis, but differing from the attacks the other children had experienced, in being unattended with noisy inspiration. It was more a gasping for breath, with discoloration of the lips and face, and a firm clenching of the gums. Sedative medicine, with an alkali, removed them in three days. The nurse was changed. The attacks have, however, reappeared occasionally, but always attended with disordered bowels and swollen gums. Previously to the first attack, the child's nurse was awakened in the night with a severe attack of dyspnœa, attended with loud crowing inspiration, (hysterical laryngismus.)

The following is the most intense case I have ever witnessed, and in it, none of the usual remedies (and I believe that all were employed by Dr. Locock and myself) appeared to have any beneficial effect whatever, until the combination of change of air, the wet nurse, and a powerful antispasmodic, were simultaneously had recourse to, when the cessation of the disease itself was almost sudden, though the debilitating effects of it only gradually disappeared. The case occurred some years since, and the little patient has since grown up to the age of ten years, although he is still rather delicate in conformation and health.

A somewhat delicate male child, born 4th August, 1838, weaned 26th January, 1839, and continued well until 21st February.

Feb. 21st.—He had his first fit at six o'clock in the morning, and continued in strong convulsions for about twenty minutes; but was a much longer time before he quite recovered himself. A wet nurse was immediately tried; but the child would not go near her. Asses' milk was then used, after repeated attempts with wet nurses had failed. For a week there was no return of the convulsions; but there was a good deal of crowing, and the child was evidently very uncomfortable, and suffered to a great extent from flatulence. He was on two occasions during that week seized with, what the mother described, fainting fits, or something of that nature, turning perfectly cold, apparently senseless, and deadly pale. He remained in this state about half an hour. Sal volatile, friction of the chest and spine, with the hot bath, seem to revive him; but he never recovered from either of these fainting fits, or from the convulsions, without having previously expelled a considerable quantity of wind.

Feb. 28th.—He had a second fit, which lasted nearly an hour; and on the following day, he had a most severe one, which lasted upwards of two hours, and from the effects of which he did not seem to recover. The crowing became worse, and the fits continued for a fortnight to increase daily both in strength and number, notwithstanding the various remedies prescribed by Dr. Locock and myself. On Friday, the 17th of March, and Saturday, the 18th, he was not an hour, night or day, without a recurrence of the fit. His eyes were quite closed, except during the convulsions, and he was so weak, that he could not lift his finger to his mouth. On Sunday, at twelve o'clock, laudanum was ordered as a *dernier remède*, and he took the first dose of one drop, five minutes after which, he went into the strongest convulsions he had ever had. After an hour he recovered, was wrapped in blankets, and taken in the carriage to Hampstead. On arriving there, before leaving the carriage, he was slightly convulsed; but recovered before the hot bath could be prepared. The drop of laudanum was repeated every four hours, I think, and the assafœtida injections continued. On that evening, or the following day, the lady's sister contrived to make the child take the breast, he being then unable to open his eyes, and apparently only suffering from intense thirst. A wet nurse was immediately procured, and, of course, all other food taken away. After reaching Hampstead, he had no return of convulsions, or of fainting fits, and the crowing gradually disappeared. The laudanum was continued, but the quantity was never increased. At first it was given every four hours, and then gradually at longer intervals, at night and in the morning, and whenever we thought, from a return of the great restlessness and agitation, (which had invariably preceded an attack,) that the convulsions were likely to appear again, which, however, they never did. The child left Hampstead on the 2nd of April, and went to Surrey. The laudanum was continued certainly for two or three weeks after leaving Hampstead.

Bloomsbury-square, May, 1847.

## ON OVARIAN DROPSY.

By I. B. BROWN, Esq., Consulting-Surgeon to the Paddington Lying-in Charity

In the report, in THE LANCET, of the meeting of the Medico-Chirurgical Society, held on the 23rd March last, where a paper was read from Mr. H. E. Burd, "On the successful removal of an ovarian tumour, complicated with pregnancy," I find some remarks respecting my plan of treatment which demand comment. In the observations made by Dr. Locock, after stating "that he had seen several cases in which pressure had been tried with the most favourable results," he goes on to say, "he thought that the cases treated by Mr. Brown deserved the attention of the profession, though he thought that Mr. Brown was wrong in giving mercury and diuretics, for they were not only useless, but did positive harm. In his (Dr. Locock's) cases, Mr. Brown's plan was followed, but no mercury was given, and they went on well." I am glad to have this opportunity of stating that these remarks very much coincide with my present opinion, and I have for some time discontinued the use of mercury in treating patients for ovarian dropsy; and in the last case to which I was called by Dr. Locock, and which he alludes to in the following words,—"Four months since, another case had occurred to him; the cyst was simple, the health good, eleven pints of fluid were drawn from the tumour, and firm pressure was applied, and had been kept up to the present time,"—I did not use mercury in any form. I intend very shortly to publish more fully my reasons for altering the plan of treatment in this respect, and illustrating such reasons by unsuccessful cases. This leads me to the remarks made by Mr. Cæsar Hawkins at the same meeting—"He had put a question to Dr. Locock respecting a patient of his, because he had doubts regarding the success of Mr. Brown's treatment. Thus, two of the cases returned as cured, Mr. Lee had discovered were dead, a third had died from suppuration in the sac, and he (Mr. Hawkins) had heard of a fourth case which was fatal." When I read this, knowing that *not one of the cases I had published as successful had since died*, I waited on Mr. C. Hawkins for an explanation, and he very politely referred me to Mr. Thomas Safford Lee's book, page 161, where I find the following words:—"This plan of treatment has been given to the profession, and apparently sanctioned by a number of successful cases, but I am bound to add, that some of those cases called, and published as successful, have come into other hands; and I am authorized by a physician to state, that two of Mr. Brown's cases have come under his charge; one died of ovarian dropsy, and on a post-mortem examination, the cyst was found still to exist as large as before; the other is still ill; the cyst has refilled, and this gentleman has been obliged to have recourse to tapping. This fact reduces considerably the value of Mr. Brown's cases." After reading these remarks, which, although much modified from Mr. C. Hawkins's statement, were equally unfounded, as far as regards any cases published by me, I also waited on Mr. Lee, who said that he was authorized by Dr. F. Bird to make the remarks he had made in his book. I then called on Dr. F. Bird, who assured me there was some mistake in the report of his observations, as made by Mr. Lee; for that he did not say, "any cases I had published as successful had since died," but that "several cases had come under his notice, after being treated by me, one or two of which had died in his hands, as he (Dr. F. Bird) believed, from the effects of my treatment." I subsequently received the following note from Mr. Lee:—

"I have communicated with Dr. F. Bird on the subject of your letter to me, who at my request has again read the passage of my work to which you refer, and he agrees with me in thinking that the word "published" does not necessarily apply to the observations contained in the lines 28 and 33, page 161, (the lines I have marked,) and Dr. F. Bird wishes me to allude to this point, as explanatory of the want of correctness he at first thought I had permitted to escape me. Perhaps you will again peruse the passage referred to, and if you are not fully satisfied, I will willingly publish a much more full explanation than may even seem necessary."

It will thus be seen that the whole statement, which emanated from Mr. Cæsar Hawkins, was founded in error, and, although unintentional on his part, is calculated very materially to damage the mode of treatment I advocate. I take this opportunity of stating that the last case (that of Mrs. D——) which I published as successful, has not proved so; the fluid returned, and a most malignant scirrhus disease of the uterus has developed itself, which renders it most improbable that she will live much longer. In 1845, I published the case of Miss E—— as successful, wherein it will be remembered there were three cysts, and each cyst contained different coloured fluids: this lady married a year afterwards and became pregnant, and at the full time I delivered her of a healthy child, and then discovered that a fresh dropsy had returned, probably from the formation of a new cyst, because the fluid drawn off was of a different character from that drawn from either of the former ones. My plan of pressure was steadily persevered in, and no mercury was given. She has since continued to suckle her child, and when I last saw them, seven months after her confinement, both mother and child were well, and no appearance of a return of fluid was perceptible. In concluding these remarks, I would wish to observe that all the other cases I have published as successful are still well, and not one has had any return of fluid in the cyst.

Oxford-square, Hyde-park, May, 1847.

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CONTRIBUTIONS TO THE

## PATHOLOGY, DIAGNOSIS, AND TREATMENT OF OVARIAN TUMOURS.

By FREDERIC BIRD, M.D.,

LECTURER ON DISEASES OF WOMEN AT WESTMINSTER HOSPITAL, ETC.

NO. I.

"Nullus autem hydrops gravior est illo, qui in fœminis ovorum conceptacula occupat. Hinc rarissime cedit morbus remediis."

*Monita et precepta Medica.*

Although the following clinical notes may do little more than illustrate the truthfulness of the aphorism of Mead, they may yet assist, in some degree, to determine the question of medical treatment of ovarian disease, which, from the opposite opinions recently expressed, would seem to be influenced more by empiricism than by any recognised principles of practice. Having reference more especially to the differential diagnosis of tumours of the ovary, and their removal by extirpation, it becomes a proper preliminary to precede these remarks by an inquiry into the reputed efficacy of certain therapeutic and mechanical means supposed to be adequate to the cure of one, at least, of the several forms of disease occurring in that organ.

Mercury, diuretics, and mechanical pressure, have, in common with other means, been long since unavailingly employed; but within a recent period, it has been said that the combination of such agents will effect the good which, separately administered, they fail to produce; and several instances have been recorded in the medical journals of the last two years, under the title of the "Successful Treatment of Ovarian Dropsy without the Abdominal Section," as evidence of the advantage to be gained by their simultaneous employment. A comprehensive title, explanatory of the means adopted, and of the immunity of the patients from abdominal sections; but without reference to their subjection to abdominal punctures.

The result of my own experience obliges me to be sceptical of the utility of such practice, as well as of the value of the evidence by which it is said to be supported. Of the cases recorded, the majority are surrounded by so many sources of fallacy, that no conclusive inferences can be derived from them; and in certain instances to which I shall have occasion to refer, the patients pronounced to be permanently cured have again become the subjects of dropsical accumulations. The form of treatment to which I allude, although of older date, was published by Mr. I. B. Brown in THE LANCET for May 4th, 1844, and is described as consisting of "mercurials administered internally as alteratives, and externally by friction over the abdomen, and continued till the gums are slightly, yet decidedly, affected; and this affection must be continued for some weeks. I lay," writes Mr. Brown, "particular stress on this point. At the same time diuretics must be given, and after the first week, tonics with them." "The careful and constant application of tight flannel bandaging, so as to produce considerable pressure over the tumour, with accurate padding and tight bandaging over the cyst and body generally, for two or three weeks after tapping, and the medicine and friction continued for at least six weeks," completes the prescribed treatment.

From the reports of the cases published subsequently to Mr. Brown's first paper, it may be inferred that the form of treatment in question is limited in its application to that variety of ovarian disease usually described as unilocular, the frequent occurrence of which seems to be more assumed than proven; for, excluding the class of tumours formed by cystic accumulation of fluid, either beneath the serous covering of the ovarium, or developed in the broad ligaments, simple

one-celled ovarian tumours are but rarely met with. Often, indeed, a remarkable inequality exists in the relative proportions of the cells of an ovarian sac. The secondary cells may be small, perhaps minute; whilst the parent cyst is large, and filled by much fluid. The greater portion of the lining membrane may present no secondary growths; yet it often happens that an examination of the lesser or basic portion will detect numerous small cysts or cells, either clustered together, or scattered, varying in size, and often filled by secretions, not only differing from each other, but also from that by which the external sac is filled. It is at least probable that the unilocular cyst is often but the primary or initial stage of the multilocular, and that although in many cases the uniformity of fluctuation, and the complete subsidence of the abdominal intumescence after tapping, may seem to point to the unilocular species, yet it commonly occurs that secondary cells soon present themselves, requiring to be perforated at the next performance of paracentesis, or being left, demonstrate their presence by persistent enlargement of the abdomen. To illustrative cases I shall hereafter have to refer.

Admitting that such simple forms of ovarian tumour do sometimes occur, and admitting also that all Mr. Brown's cases were of this class, (although the details of some of them prove that they were not,) it remains to inquire whether or not such forms of disease can be cured by the practice he has advocated, and whether the cases recorded have been examples of success or failure. It is almost unnecessary to remark, that in the published cases, the expression of "cure" of ovarian disease is strictly incorrect; for the last reports, given in several instances, speak of the readiness with which the hardened cysts could be felt in the pelvis. Accurately speaking, such cases can be only regarded as instances of arrested cystic secretion—the ovary, whenever it was the seat of disease, having been left in a morbid state; there consequently can have been no cure, but at most a modified condition of disease. Cases to which I shall allude will tend to demonstrate the importance of this distinction.

If it were alone required to show the insufficiency of the cases adduced by Mr. Brown, a simple reference to the relative dates of their occurrence, and almost simultaneous publication, would suffice for their rejection as evidence of the value of his mode of treatment; but it can be also shown that not only have mercurials, diuretics, tapping, and tight bandaging, failed to do good, but have been followed by positive mischief—the evil resulting in some cases not having been solely limited to the local malady, but, extending its influence over the whole system, has impaired the general health, and thus either served to accelerate intrinsic changes in the affected organ, or has caused the supervention of other and more acute disease.

The slowness or rapidity with which an ovarian cyst may become refilled by fluid, after the first tapping, depends, probably in great measure, upon the general health, as modifying the character of the secretion; yet it would seem to be almost as a general rule, that in cases of ovarian dropsy, unaffected by the injudicious application of severe therapeutic or mechanical treatment, the time occupied by the refilling of the sac will bear a direct ratio to the time during which abdominal distention had previously existed. Thus, in cases in which three years have been occupied in the distention of the abdomen, by the ovarian secretion, it not unfrequently happens, after a first tapping, that the patients remain free from any evident reaccumulation, for four, five, or six months. In instances in which a much longer period has been occupied in the development of the disease, a comparatively longer period elapses before fluid is again detected. Such a result might *à priori* have been inferred, but has failed to influence those medical writers who, in their zealous advocacy of certain forms of treatment, have passed to the conclusion that cases are cured because, after the lapse of months, and sometimes weeks, from the first tapping, they have not presented indications of reaccumulated fluid.

In a case occurring to myself, (*Medical Gazette*, Aug. 18th, 1843,) in which the diseased ovary was extirpated, the patient had been previously tapped ten times, and after the fifth tapping, had passed over a period of seven years, without having any return of fluid.

In the case of H—— T——, hereafter related, upwards of seventeen years had been occupied in the distention of the abdomen; tapping was at last called for and performed; and for nearly twelve months there was no evidence of fluid having again collected.

Case 1.—Miss S——, aged twenty-seven, whom I saw, with Mr. Mosgrove, of Finsbury, two years ago, had for five years suffered from ovarian tumour, the abdomen having been fully distended during nearly the whole of that period. The presence of other and unassociated disease forbad extirpation; she was tapped; a large quantity of light, viscid, ovarian fluid removed; neither medicine given nor pressure employed; and there has been no reaccumulation.

Case 2.—Mrs. ——, aged forty-seven, has had ovarian tumour for more than six years, during which time, the abdomen has been fully distended by fluid. On January 4th, she was seen by Dr. Ferguson, Dr. Murphy, and myself, and two or three days afterwards I punctured the sac, evacuating about twenty pints of ovarian fluid, thick, and of brown colour. No treatment other than good diet and the air of Brighton was employed; and there is not yet (April 12th) any perceptible fluctuation to be detected by the most careful manipulation.

These examples will suffice to show that a very considerable lapse of time may occur after a first tapping, independently of all remedies, before fluid is again secreted, and that it is opposed to correct reasoning, to ascribe the absence of reaccumulation to the assumed efficacy of any empirical treatment employed, inasmuch as the same results may ensue in the absence of all treatment. These examples serve to point out a great source of fallacy; the following illustrate its application.

The first of Mr. Brown's published cases of cure of ovarian dropsy to which I shall allude, is described as that of Mrs. D——, who, for nearly nine years, had suffered from tumour, her abdomen having been greatly distended during nearly the whole of that time. She was salivated, tapped, and had her abdomen flattened by a compress of books and towels; the "Life of Nelson" in napkins. In a few weeks, the case was quoted as one of cure; in a few months, it was printed as such. Yet, long before that case was published, I had ascertained that fluid was returning, though in small quantity, and now the patient lies with her abdomen as much distended as it ever was, her whole system shattered by suffering, and the little of strength that is left, fast sinking beneath the influence of malignant disease.

Another case published by Mr. Brown, as "cured by pressure, mercurials, and diuretics," (The Lancet, April 5th, 1845, p. 379,) and printed two months and eighteen days after tapping, affords another example of failure. Mr. Brown is aware that the patient was not cured by his treatment, and that the fluid again collected. A little delay might have spared him from making an assertion of cure upon such unsafe and insufficient data. Two months and eighteen days having been deemed sufficient to justify the publication of cure, it becomes an interesting inquiry to learn how much time must elapse to justify the publication of failure. This lady had suffered from ovarian tumour for many years—from puberty, it is said; and her age was twenty-seven when she was tapped. It was probable, if no remedies had been employed after tapping, that she would have passed over an interval comparatively long; pressure, mercury, and diuretics, were used, and the interval was comparatively short.

To several other cases in which Mr. Brown's plan of treatment has not only failed to do good, but has been followed by positive mischief, I shall have to allude, as illustrations of certain points of interest connected with the pathology of ovarian disease.

The first element in this treatment is mercurial influence maintained during several weeks, tight bandaging being simultaneously employed, and, as it is stated, with the effect of causing a diminution of three or four inches in the abdominal circumference. That such a result occurred there can be no doubt, but it is equally true that it depended upon other causes than that to which it has been attributed. The following observation may tend to supply a more satisfactory explanation:—

Three hospital patients, whose abdomina were more or less distended from accumulations, probably fæculent, flatulent, and fat, were swathed in the manner directed by Mr. Brown; tight bandages and pads compressed them; they took no medicine and simple diet. In less than a fortnight each of these women presented a diminution of abdominal girt of three or four inches. They grew smaller by pressure alone. It is not wonderful that in Mr. Brown's cases an equal diminution should have occurred when, superadded to pressure, there existed the depressing influence of mercury, the tax of diuresis, and impaired nutrition; but it is obvious that the diminished size of the abdomen could have been caused by pressure alone in the removal of intestinal repletion and probable absorption of tissue.

The patients having been mercurialized, are then tapped—a step in the treatment which seems to have been one of supererogation. If the ovarian tumours were becoming rapidly less under mercury and tight bandaging, patience and perseverance might have been preferred to puncture. If mercury and bandages will cause a reduction of four inches in the size of a tumour, they will effect more. Nevertheless, abdominally compressed and mercurialized they are then tapped—a practice wholly opposed to the recognised principles of medical treatment, and fraught with danger.

"The system of tight bandaging and padding, (writes an able reviewer,) after a patient has been salivated, is very formidable; and the recital of suffering and danger to which (Mr Brown's) patients have been exposed is sufficient to make any judicious practitioner seriously pause before he sanctions it." (*Med. Chir. Rev.*, April, 1847, p. 505.)

Still bandaged for a few weeks after the tapping, the patients are examined, and too small a quantity of fluid being present to be detected by fluctuation, are declared to be cured. Freed from the miseries of salivation, they think so.

The mischievous effects resulting from mercurialization are well illustrated by some of the published cases, but still more fully by others that have not been published. To two of the former—one wholly under Mr. Brown's care, and the other treated by himself and Mr. Hunt, of Herne Bay—reference is thus made by Dr. West, in his excellent "Report on the Progress of Midwifery:"—

"The patients are stated to have eventually recovered, though the treatment adopted appears to have placed the lives of both in imminent hazard. In both, the mercury produced most distressing ptyalism, and the diuretics excited painful and almost incessant vomiting. The extremely tight bandaging after tapping induced in Mr. Brown's patient suppuration of the cyst, from which, on a repetition of the tapping, ten pints of pus escaped. The life of the patient was for many weeks in great danger; but when she got well, the size of the abdomen was found to be much diminished, and the cyst was felt, collapsed, hard, and painless."

In ovarian disease, there exists, as Dr. Copland has well remarked, indications of strumous diathesis, and there is seldom much tolerance of mercury; the system is soon affected—soon prostrated by it; salivation is quickly produced, and cachexia rapidly follows. In cases in which Mr. Brown's treatment had been previously employed, I have found, that when the constitutional powers of the patients had been thus prostrated, the cystic secretion became completely changed in character; the same structure which had before secreted thin fluid, of low specific gravity, and containing little free albumen, had, under the depressing influence of mercury, poured out pus in large quantity, whilst the comparatively unimportant symptoms of simple ovarian dropsy have become replaced by those of extensive suppuration, leaving the patient to sink as from the effects of a gigantic abscess.

It may, as a general conclusion, be said, that mercury, administered in all the cases published by Mr. Brown, in no case effected any benefit; but that, in certain instances, the patients nearly died from the suffering it produced; and in some unpublished cases still more unhappy consequences resulted. It may also be remarked, that the object with which it was said to have been given never seems to have been attained. Mr. Brown first speaks of the mercurial doses as alteratives, (THE LANCET, May 4th, 1844;) yet uses them to produce salivation, (THE LANCET, Jan. 10th, 1846.) He explains their action as exciting absorption, (THE LANCET, May 4th, 1844;) and gives them to cause adhesive inflammation, (THE LANCET, Jan. 24th, 1846.) Given to cause adhesive inflammation, they have been followed by suppuration, (THE LANCET, Jan. 10th, 1846.) Emphatically spoken of as forming a most important part of the treatment, (THE LANCET, May 4th, 1844,) they are now admitted to be useless.

[Since the preceding notes were written, Mr. Brown has informed me that he has abandoned the use of mercury in the treatment of ovarian dropsy, being now convinced of the inutility of that portion of his tripartite treatment.]

Brook-street, Grosvenor-square, May, 1847.

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It is gratifying to have to record, that Mr. Snow Harris, so well known for his electrical and meteorological researches, has just had the dignity of knighthood conferred upon him by her Majesty. For the credit of Great Britain, when compared with Foreign Powers, we should like more frequently to convey similar information respecting the award of honours and dignities to distinguished scientific individuals.

## Reviews.

*A Manual of the Principles and Practice of Ophthalmic Medicine and Surgery.* By T. WHARTON JONES, F.R.S. Churchill.

THIS is another of that valuable series of works on the different branches of medical science, issued by Mr. Churchill, and which go under the title of manuals. The propriety of the title, "Manual," to some of these works may be questioned, as, indeed, it may be with reference to "Brand's Manual of Chemistry"—a ponderous octavo volume, which one would be loth to hold long in the hand, and which is an elaborate treatise on the subject. As the application of the term "Manual" to Brand's treatise is really a contradiction, so we think the work before us, on ophthalmic medicine, to be worthy of another appellation, since it forms a comprehensive treatise on the subject.

At the outset of the work, the author gives a brief sketch of the history of ophthalmic medicine and surgery, and afterwards proceeds to give directions for the proper and efficient exploration of the eyes, in order to a diagnosis, which afford much valuable advice. When speaking of the cornea, and the state of its margin, Mr. Jones alludes to the bluish-white ring which sometimes encircles the cornea, and is particularly observable in arthritic iritis. He explains the origin of this ring in a very pretty manner, by reference to the anatomical structure and relations of the several parts of the eye about the margin of the cornea. He says,—

"In reference to the cause of the appearance, it is to be remembered that the insertion of the ciliary ligament is at some little distance from the apparent margin of the cornea; that the vessels which form the red zone of the sclerotica in the internal inflammations of the eye, and in inflammation of the proper substance of the cornea, are vessels which send branches inwards to the iris, opposite the ciliary ligament, branches outwards to anastomose with those of the conjunctiva; and lastly, branches which, following the original direction, go to be continued into those newly developed in the proper substance of the cornea. These vessels are not apparent in the healthy state, and one set of them only may become apparent in inflammation. Thus, in inflammation of the iris, they will be apparent only as far as opposite the insertion of the ciliary ligament. Between this and the clear part of the cornea is the opaque overlapping part of the sclerotica, which, of course, not being in the way of the progress of the vessels towards the inflamed part, remain white as usual; and the cornea not being affected, there are no vessels developed in its proper substance. Hence the overlapping part of the sclerotica is seen in contrast between the abruptly terminating red sclerotic zone and the transparent cornea, and forms the bluish-white ring."

"From this explanation," he observes, "the bluish-white ring round the cornea ought to exist, more or less, in all internal inflammations of the eye, unless obscured by vascularity of the conjunctiva in inflammation of the cornea. So it does;" but, as he states, it requires an old or broken-down constitution in order to manifest itself; for in a sound one "the overlapping sclerotica is so transparent, and sometimes also so narrow, that it is not strongly contrasted by the transparent cornea." Further, since in old age, or in a decayed constitution, any inflammation "often presents what is called the arthritic character," this explains why the appearance has been associated with arthritic iritis as a distinguishing mark, but to which, in fact, it is not peculiar.

Our author, having made us acquainted with the various diagnostic marks to be looked for in the different tissues of the eyes, and having added many valuable directions *how* to look for them, proceeds to give an account of the general doctrines of inflammation—its varieties and terminations. Now although we make no objection to the knowledge here conveyed, we nevertheless think it is out of place in a work on ophthalmic medicine; much more so than would have been a description of the anatomy and physiology of the eye. But as the latter is omitted, and, consequently, it is implied that the reader is acquainted with it previously to entering

on the study of the work, so we think that this section might have been left out, as it ought to be supposed the reader would not come to the study of ophthalmic medicine until he was conversant with general pathology. We know that Mr. Jones has particularly studied the intimate process of inflammation, and that he had a precedent for the introduction of the subject in the work of Mr. Lawrence; yet we shall still adhere to our opinion, as expressed, that an inquiry into the process of inflammation in general, its varieties and consequences, belongs to no special branch of medicine, but properly to general pathology.

But to proceed: Our author next gives an account of ophthalmic inflammation in general, as it affects the different tissues of the eyes—and of its causes and treatment; then passes to the special consideration of the various ophthalmiæ, comprehending under that term the inflammations of the several parts of the eye, and of the whole eye. When speaking of sclerotitis, he doubts whether this affection consists not wholly in inflammatory congestion, and whether it should be deemed an inflammation, since there is no exudation of lymph nor subsequent organization. He says—

"By repeated congestions, the sclerotica is, indeed, left in a somewhat altered state; but it is the cornea or iris which is principally the seat of exudation of lymph, and the changes consequent on it."

We ourselves think that a congestion in any organ should be distinguished from actual inflammation, the best proof of the existence of which is the exudation and organization of lymph; and that the affection called sclerotitis is rather inflammatory congestion of a rheumatic character than true inflammation.

Our author gives a very good account of scrofulous ophthalmia. We would ask—Is not the intolerance of light too much insisted upon as a symptom of this disease? We have seen cases in which it has, by no means, been so extreme as is generally represented; and cases in which phlyctenulæ have formed, and opaque spots on the cornea followed.

We have seen, moreover, very good results follow, in scrofulous ophthalmia, from a frequent brisk purge, and when other remedies seemed to be losing power. We mention this, as Mr. Jones has only briefly alluded to the use of purgatives.

We consider the explanation of the production of staphyloma of the cornea and iris, as given by the author, very satisfactory, and as much nearer the truth than the old one. Supposing the iris to be brought into contact with the cornea, or to protrude through it at the seat of a penetrating ulcer from any cause, "the prolapsed part of the iris and the ulcerated part of the cornea, are involved in one cicatrice. The opening in the cornea being thus closed, the aqueous humour again collects, and the anterior chamber is restored, though somewhat diminished, in consequence of the partial adhesion between the iris and cornea, (synechia anterior.) There is no prominent distention on the front of the eye in this case, because, as the inflammation subsides, the small protruded portion of iris shrinks and flattens; but if the destruction of the cornea has gone on further, . . . . . and considerably more of the iris has protruded, the prolapsed portion does not shrink when the inflammation abates, as in the former case, but remains, and forms a projection at the part of the cornea implicated, which is generally the lower or lateral. This projection is at first merely a bag of the iris distended by the aqueous humour, and is called staphyloma iridis; but by-and-by, its exposed surface becomes covered by an opaque, firm tissue, of the nature of the tissue of cicatrice, and this tissue is incorporated at the base of the tumour with the sound cornea." Such is partial staphyloma. "It is not a distention of the cornea itself, but a protruded portion of the iris covered by a new tissue" in the place of the cornea. "The mode of origin of a total staphyloma is essentially the same, but differs only in degree."

In order to cure total staphyloma, it is necessary to remove the membrane of the posterior aqueous chamber which secretes the fluid: this Mr. Jones has effected by the extraction of the lens, and the object was thoroughly answered. In the operation for cataract, the author gives very good advice as to cases in which it is to be performed, and the time and mode of performing it; and he conveys this information in a very easy way, and amply illustrates it by diagrams. We much approve of the method of contrasting symptoms, in a tabular form especially, which Mr. Jones has adopted in the case of cataract and its distinction from amaurosis and glaucoma, as it is the one, in our apprehension, best fitted to impress on the memory the diagnostic symptoms of diseases likely to be confounded together. A useful tabular arrangement, or index, is likewise furnished, of the states of the eye in which the formation of an artificial pupil is warranted, and of the mode of operation in the several conditions.

We are unable to direct our readers' attention to any more of the many interesting observations and facts which Mr. Jones has put forward in a clear, or in a new light; but we would recommend them to make themselves acquainted with the work, as it is one well adapted to fulfil the intention of the author (as stated in the advertisement) in producing it—viz., to serve "as a text-book for students, and as a book of reference for practitioners."

The type of the present volume is larger than that of the others in the series of text-books it belongs to, and consequently can be read with greater facility; but we think that the engravings have not that finish which is seen in other works of the series. However, we must commend that broad and distinct kind of diagram which is used to illustrate the differences in the vascularity of the conjunctiva and of the sclerotica.

A work in the shape of a text-book on ophthalmic medicine and surgery was a desideratum, since, in such a form, it is more likely to be perused by medical students, who are very apt to be frightened from a subject when it comes to them in the imposing shape of octavo volumes; and it is very important that those special departments of medicine, as ophthalmic and aural medicine and cutaneous disease, should not be neglected as hitherto. We fear that the study of these special branches of medicine is much impeded by the host of hard names which the student encounters, and we think Mr. Jones has evinced a needless partiality for them in his treatise. We should like to see many of the terms used set aside, for they are Greek compounds, most awkward to pronounce, and difficult to comprehend or remember, and might be well supplied by ordinary English words. As examples we may instance—aphtheiriasis, lagopthalmus, anchyloblepharon, madarosis, distichiasis, panopthalmitis, &c. A glossary is very usefully added to the work.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

April 27.—J. M. Arnott, Esq., F.R.S., President.

On the Comparative Weights of Organs in Natives of India, and Europeans. By E. A. Parkes, M.D., Assistant-Physician to University College Hospital, and late Assistant-Surgeon to H. M. 84th Regiment.

The results contained in the paper are derived from twenty-three observations in male Asiatics, chiefly Hindoos, and thirty-eight European soldiers. The tables show a considerable preponderance of weight, on the part of the Europeans, in the following proportions, (the weight in the Hindoos being taken as unity:) of the cerebrum, as 1 to $1\frac{1}{20}$th; the cerebellum, as 1 to $1\frac{1}{18}$th; the right lung, as 1 to $1\frac{1}{20}$th; the left lung, as 1 to $1\frac{1}{14}$th, nearly; the heart, as 1 to $1\frac{1}{14}$th; the liver, as 1 to $1\frac{1}{4}$; the spleen, as 1 to $1\frac{1}{3}$; the pancreas, as 1 to $1\frac{1}{3}$rd; the right kidney, as 1 to $1\frac{1}{4}$; and the left kidney, as 1 to $1\frac{1}{5}$.

As the weight of organs in the same race and sex vary according to the age and the height, it is necessary to reduce

these conditions to the same standard. (Tables are given of these particulars.)

Age and height being equalized, the disproportion between the two races is reduced, but not entirely got rid of. Assuming the weights in the Asiatics to be as unity, they are, to the Europeans, as follows: of the cerebrum, as 1 to $1\frac{1}{9}$th; the cerebellum, as 1 to $\frac{1}{11}$th; the right lung, as 1 to $1\frac{1}{3}$th; the left lung, as 1 to $1\frac{3}{11}$ths; the heart, as 1 to $1\frac{1}{3}$th; the liver, as 1 to $1\frac{3}{4}$ths; the spleen, as 1 to $1\frac{1}{4}$rd; the pancreas, as 1 to $1\frac{2}{3}$ths; the right kidney, as 1 to $1\frac{1}{3}$rd; and the left kidney, as 1 to $1\frac{1}{2}$, nearly.

After considering these points at some length, and deciding that the differences between the weights in Europeans and Asiatics are not attributable to differences of height, age, or unfavourable hygienic conditions, on the part of the latter nation, the weights in the Asiatics are examined more in detail.

The author observes, that the numbers examined are so few, that he should have hesitated to bring them before the Society, but that, first, he was unaware of similar observations having been made, and he therefore hoped his cases might afford assistance to any one who had the opportunity of pursuing the subject; and, secondly, that though the observations are on so limited a scale, he was struck by the great uniformity of result.

As from the tables given in the paper it appears the inferiority of the weights of the organs of Asiatics is not attributable to differences in age or height, the author thinks it a fair inference, that the form and general conformation of the body—such as the respective length of the trunk and extremities, &c.—are the circumstances which exert the greatest influence on the size and weight of the several organs—i. e., the inferiority in weight is explained by reference to inherent differences of race and nation.

What, then, is the cause of this difference? Is it to be presumed (the author inquires) that this is acquired from the peculiar mode of living, the usual food, the accustomed occupations, and the several influences of climate and situation? These points are dwelt upon at some length, and the author concludes by expressing a hope, that the medical officers of the army whose field of observation lies within the tropics will shortly supply us with additional means of deciding upon the correctness and importance of his few observations.

Dr. Babington inquired of the author of the paper whether he had determined the weights of the individuals, as well as the organs to which the production referred. This was, in his opinion, a most important element in the inquiry, and one which must have much influence in determining the real value of the investigations.

Dr. Leonard Stewart considered the paper likely to lead to important results, but thought that the author had used the term "Asiatics" too vaguely, for it was well known that the food of the natives of the north parts of Asia differed materially from that of those of the south, the former using much animal diet, the latter subsisting almost entirely on vegetables.

Dr. Cursham said that the paper had been only read in abstract, consequently, many important details were necessarily omitted. He might state, that the author had not the opportunity of making complete observations, either as regarded the weight or the height of the individuals who were the subjects of his researches.

Professor Owen regarded the details laid before the Society as of the greatest interest. Such inquiries were much neglected, but he hoped that the Society would give them every encouragement. The observations of Dr. Parkes, regarding the influence of vegetable diet on the size of the liver, was corroborated by what we observed in the mammalia, for it was well known, that the ox, camel, and other graminivorous animals, had livers smaller in proportion by one-eighth than those animals which fed on animal diet, as the lion and the tiger. These facts also established the accuracy of the able reasoning of Liebig, respecting the influence of diet. The value of researches similar to those of Dr. Parkes were dependent on the number of our observations, and the extent of the basis on which they were formed.

Dr. C. J. B. Williams observed that the paper was one of much interest, in a pathological as well as a physiological point of view. Facts were constantly presented to us, showing the effect of diet on the size of the liver. He did not know that there was sufficient in the paper to show that the size of the liver of Asiatics was more dependent on diet than on climate. The author thought that diet was the cause, and he (Dr. Williams) had seen cases to prove the truth of this opinion. He had been struck with the observation of the difference in the size of the liver of persons when under different articles of diet, in which there was no disease of the organ. Thus, he had observed a very remarkable enlargement of the liver, without any sign of disease, in those persons who had taken the cod-liver oil to any extent. The organ, in some cases, was so much enlarged, as to give rise to the idea that the liver must be diseased; but there was no sign or symptom of such disease, besides the enlargement. He thought the author's researches of great importance.

Mr. Chalk had given the cod-liver oil to a considerable extent, but had not noticed the effects on the liver mentioned by Dr. Williams.

Dr. Babington remarked, that another fact to be borne in mind in this inquiry, was the smaller size of the Asiatic than the European generally. It was necessary to take this into account in our inquiry. Besides, the lower classes in India eat large quantities of clarified butter, pork, &c.

Mr. Busk said that the average weight of the lascar was so much less than that of the European as to explain satisfactorily the difference in the size of the organs. Lascars usually lived on rice, but if necessary, and under certain circumstances, would eat fowls, &c., if they were permitted to kill them themselves.

Dr. Parkes replied to the chief of the observations made. All the persons on whom he had made his inquiries were vegetable feeders; they were prisoners, and allowed only the gaol diet, which consisted entirely of vegetable matter. The majority of these persons, too, were of a high caste, and had, probably, never tasted animal food. He was aware that many of the lower classes in India did indulge in animal diet. It was to be remembered that the liver and kidneys in the persons he had examined were less in proportion to their size, whilst the cephalic and thoracic organs were not so.

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## On Fracture of the Lower Extremity of the Radius.

By Professor Fenger, of Copenhagen.

*(Translated from the Danish by* H. M. Shaw, Esq., *and communicated by* Dr. Hodgkin.)

The author commences his paper by deprecating the love of display which he attributes to men of science in the present day, and which, he says, too often renders discoveries, in their estimation, secondary in importance to the notoriety of the discoverer. To this cause he assigns the want of interest with which the observations of Dupuytren and Malgaigne on fracture of the radius were first received. He then directs attention to a tabular view of 149 cases of fracture which came under his notice during nine months that he was on duty as first surgeon to the Royal Frederick's Hospital, of which it appears that thirty-one were fractures of the radius, and only one of the ulna alone; and from this table he infers that the radius is more frequently fractured than any other bone, and more than twice as often as the fibula. To the difficulty attending the diagnosis, the author attributes the long neglect of this fracture, and the frequency of its contusion with sprains of the wrist. Under the head of "Causes" of this peculiar fracture, the author gives another table of the thirty-nine cases which came under his notice, from which it appears that the accident was rather more frequent in men than in women, and that age predisposes to this lesion. In treating of the symptoms of fracture of the radius low down, the author associates great importance with the deformity, as a diagnostic sign by which the injury in question may be distinguished from sprain. The straight line extending along the radius and metacarpal bone of the forefinger appears to be broken in two places,—first, closely over the styloid process of the radius; secondly, between the carpus and metacarpus. This line is hereby divided into three parts, of which the superior and inferior portions are parallel, and the centre and shortest one forms an angle with the other two, thus forming a figure something like the letter Z. Of these two angles, the upper one is always present in this fracture, and remains unchanged by any position of the arm. Fracture of the lower extremity of the ulna, extravasation into the articulation, and luxation of the radius from the ulna, constitute the complications which Professor Fenger has met with in cases of fracture of the radius low down. In the greater number of the cases, the author found that the fracture was oblique, beginning on the palmar side of the lower end of the radius, a little above the articulation, and proceeding upwards towards its dorsal aspect, where it terminated from an inch to an inch and a half above the joint. He believes, however, that the fracture is more often transverse than is generally supposed.

After commenting on the splints and treatment recommended by Dupuytren, Stromeyer, Velpeau, and Blandin, and stating his opinion of their insufficiency in difficult cases, the author

proceeds to describe the plan of treatment he has found most successful. He states, that as the deviation occurs in a curve, with its centre upon the fracture, it is desirable to counteract the deformity by extension acting in a direction according to the tangent of that curve. This end he thinks is best attained by acting through the medium of the hand and of the capsular ligament which is attached to the lower end of the radius. The hand is first to be brought into a position of strong flexion, and the forearm is then placed on an oblique plane, with the carpus highest, the hand being permitted to hang freely down the perpendicular end of the plane. The tendons of the extensor muscles are thus brought into a position which enables them to assist in keeping the reduced fragments of the bone in proper relation. Where the deformity requires it, the displaced lower fragment is to be pressed into its position by the thumb of the operator, after sufficient extension has been made, and when the hand is bent on the forearm. The patient is to be kept in bed, but the hand is not confined, the seat of fracture being covered only by an evaporating lotion. Out of the thirty-nine cases under the Professor's care at the Frederick's Hospital, he failed but in one in effecting a cure. He has found a similar plan of treatment equally successful in fractures of the radius higher up the arm.

Mr. Partridge presented a dissection of a fracture of the lower extremity of the radius, the fracture having passed obliquely through the lower end of the bone, cutting off the styloid process, and passing into the articulation. The man had been admitted an out-patient in King's College Hospital, with comminuted fracture, which was treated on the usual principles, but in a few days after the accident, he came into the hospital, abscesses having formed, and pieces of bone having come away, and he had ultimately been obliged to perform amputation of the arm. Mr. Partridge believed that the fracture was most frequently oblique, and considered it as one very difficult to treat satisfactorily.

Mr. Solly remarked, that the Society were under a great obligation to Dr. Hodgkin for having brought the results of Professor Fenger's experience before them. No fracture so frequently occurred, and none, perhaps, was so little understood. He mentioned the recent case of an experienced surgeon, who had been proceeded against by his patient for damages, in consequence of some deformity having followed the treatment of a fracture of this kind. This case had at the time excited no little interest. The treatment of this injury was attended with so much difficulty, that even with the greatest care, and in the most experienced hands, it often failed. In this country, attention had, but of comparatively late date, been directed to the peculiarities attending this fracture.

Mr. Busk had seen several cases of fracture of the lower extremity of the radius, close to the joint, and had lately tried a method somewhat resembling that of Professor Fenger. He also placed the arm in a state of complete pronation, elevated the hand, and depressed the elbow, but supporting the carpus, permitted only the fingers to hang down. The results arrived at by him, under this treatment, appeared satisfactory. The weight of the hand would, he considered, prove too fatiguing for the patient, if continued in the position used by Professor Fenger for any length of time, nor did he think it possible or necessary to keep the patient in bed so long. In his own cases the patient kept the arm in a sling and went about. He could not think that when the whole hand hung over the end of the splint, as recommended by Dr. Fenger, the stretched tendons would act as "a natural splint."

Mr. Arnott said, the nature of this accident was described thirty years ago, by Colles, of Dublin, whose description had been reproduced by Smith, of Dublin, in his recently published work.* Dr. Smith described the fracture from an examination of twenty specimens, and has given nine or ten illustrations of the appearances. He was fully aware of the difficulty attending the diagnosis and treatment of this, having himself suffered, many years since, from having had his arm broken not far above the articulation, and could bear witness to the pain and extremely disagreable sensations attending the application of Dupuytren's bandage. He was inclined to think favourably of Professor Fenger's method, by which the extension was produced by the weight of the hand acting through the medium of the capsular ligament, and was glad that Dr. Hodgkin had made it known to them.

Dr. Hodgkin disclaimed any other merit than that of having received the paper from Mr. Norton Shaw, the translator. Mr. Shaw had studied many years in the north of Europe, and being present, would perhaps favour them with his views on this subject.

Mr. Shaw was aware that this fracture had been termed in Dublin, Colles' fracture, having, many years ago, been described by that distinguished surgeon; but as it seemed that Mr. Colles had not enjoyed an opportunity of performing any post-mortem examinations of this fracture, he believed nothing new concerning its pathology had been made public by that gentleman. Petit, Dessault, Sir Astley Cooper, and others, had likewise treated it in their works; but until the year 1834, its pathology had remained comparatively unknown. In that year, Gogrand, Malgaigne, and Dupuytren, about the same time, made known the results of their experience, and called the attention of surgeons more especially to the pathology of this fracture. The frequency of its occurrence, and the difficulty attending the diagnosis, had been admitted. When existing in a slight degree, it was liable to be mistaken for a distortion or dislocation of the wrist, and when in a greater degree, for a luxation of the same. In the London Hospital, from which alone he had been able to procure statistical data for any lengthened period, the fractures of the radius, ulna, and of both bones together, were reckoned as fractures of the forearm, without distinguishing them from each other. Knowing, however, how very much the number of fractures of the radius predominated over those of the ulna, or of both bones together, the frequency of this fracture might be easily conceived. In 1842, there were treated at the London Hospital 840 fractures, of which 153 were of the forearm. In 1843, there were 899 fractures, and 156 of the forearm. In 1845, 952 fractures, 200 of which were of the forearm; and in 1846, there were 954 fractures, with 176 of the forearm. In the five months, from May to October, 1846, at the King's College Hospital, there were treated eighty-four fractures, fifteen of which were of the forearm, twelve of radius, and three of ulna. Acknowledging, then, the frequency of this fracture, and the repeated failures attending its treatment, (Velpeau cures but thirty out of fifty,) thus causing a partial, if not total, loss of the use of the hand and fingers to a great number of our fellow-beings, it will be readily conceded that any rational plan, by which a more favourable result may be attained, is worthy the notice of the profession. Mr. Shaw hoped, therefore, that the method adopted by Professor Fenger, by which such pleasing results had been obtained, and of which a modification had already been successfully tried by Mr. Busk, Mr. Hamilton, and others, would meet a kind reception and fair trial among English surgeons. As it had been remarked by Mr. Busk, that it would be no easy thing to keep patients so long in bed with this fracture, Mr. Shaw thought that a splint, in which the arm could be supported, permitting the hand, at the same time, to hang freely down, or rather, to be fastened down, might be used, and the patient could, under certain restrictions, be allowed greater liberty. To the other objection, that the patient would not be able to sustain the weight of the hand so long a time hanging down, as would be necessary for the consolidation of the fracture, he remarked that this position seemed to him the most natural—at any rate, less constrained than in starch bandages, Dupuytren's splints, &c.; and that the patients, in the numerous trials made by Professor Fenger, had not experienced more difficulty than might be reasonably expected under such circumstances.

* A Treatise on Fractures and Dislocation in the Vicinity of Joints. Dublin, 1847.

## THE LONDON HOSPITAL MEDICAL SOCIETY.

March 12, 1847.—Mr. Daldy in the Chair.

Mr. Tomkins read a case of

### POISONING WITH NITRIC ACID, WITH RECOVERY.

On Tuesday, August 11th, 1846, at about one in the morning, I was called up to see a prostitute, twenty-six years of age, who, as I was informed, had attempted self-destruction, by swallowing half an ounce of aquafortis. Three quarters of an hour had elapsed before medical assistance could be obtained, and when I arrived, I found that the druggist at whose shop the poison had been obtained, and who had called me up, had been endeavouring to administer calcined magnesia, suspended in water. She appeared in a state of helpless intoxication, and was vomiting a quantity of dark fluid, resembling porter in colour, and mixed with viscid mucus. Face somewhat congested; lips bluish and swollen, with a yellow stain, and two or three small blisters in the middle of the under one; these being the only external signs of any corrosive liquid having been swallowed. Pulse scarcely perceptible, and very rapid; extremities cold; pupils contracted,

and feebly affected by the light. I endeavoured to pour the magnesia and water down her throat, but soon found it impossible, on account of—first, the strong spasmodic closure of the jaws, which only intermitted during the act of vomiting, this being immediately succeeded by violent grinding of the teeth, and then, immovable closure of the jaws; secondly, when an opportunity offered itself of putting some fluid into the mouth, the attempt to swallow directly excited vomiting, and this increased greatly, so that, at length, the further administration of anything became impracticable. She was then put to bed, and bottles of hot water applied to her feet, and I sat down to watch for the first sign of reaction. She lay for several hours, in a state of profound insensibility, interrupted only at intervals of four or five minutes, by violent retching, but she made no effort to raise or move herself. At length, her pulse became stronger, and the surface of her body warmer, and she raised her hands to her throat, and gave other signs of returning consciousness. Pressure on the throat gave her great uneasiness, and immediately excited vomiting, while much firmer pressure on the epigastric region only excited slight expression of pain. Ordered twelve leeches to the throat, and eighteen to the epigastrium.—Noon: The leech-bites have bled very freely, especially those over the throat; is now sensible, though incapable of speaking even in a whisper; breathes naturally; the retching continues as frequently as at first, and is provoked, on attempting to swallow her saliva; this she is unable to accomplish; and her face and attitude are expressive of excruciating agony; neither bladder nor bowels have acted; very little tenderness in epigastric region; but the slightest pressure on the throat gives great pain, and excites attempts to vomit. Ordered twenty leeches to the throat, and five minims of dilute hydrocyanic acid, in two drachms of syrup, every four hours; barley water or linseed tea, cold, in case of her being able to swallow. —Ten P.M.: Tenderness of throat diminished, and retching less frequent, but still incapable of swallowing; feels faintish; castor oil and oxymel enema administered; this caused a copious fæculent evacuation, and a small quantity of urine was passed at the same time.

12th.—Has passed a restless night, in much pain, and seems much exhausted; has with great effort swallowed a teaspoonful of cold water; can answer briefly in a whisper, when spoken to; tenderness and pain without considerably diminished, but slight pressure excites retching; pulse 110, and weak; blistered her on each side of the larynx, with acetum cantharides. Repeat enema.—Eight P.M.: Feels better, but very restless, and cannot sleep; pain and tenderness, and disposition to vomit, have much subsided; effort to swallow exceedingly painful, but has taken a little barley water and milk. To have fifteen minims of laudanum, in half an ounce of water, at bed-time, and to use a gargle, consisting of an ounce of honey of borax, and five ounces of water.

13th.—Has slept comfortably at intervals, and feels better in every respect. The false membrane in the mouth is beginning to come off in shreds of considerable size, one of them being moulded into the shape of part of the fauces, pharynx, and upper part of the œsophagus; feels extremely weak; tenderness and pain in throat diminishing. Ordered, beef-tea, with arrow-root, barley-water, and milk, of which she now drinks frequently; repeat blisters, lower down on each side, to throat; repeat enema.

From this time, she continued improving and gained strength rapidly. In a week, she could enjoy a mutton chop, and taste her food; bowels kept regularly evacuated by means of enemata, and a light tonic administered. At the end of the fortnight she was removed to a penitentiary, where she remained only a fortnight. I have seen her recently, and she looks well, and has gained health.

Mr. Tomkins considered that very little acid (which was of the strength of that ordinarily employed) had reached the stomach, and that that was so diluted by the gin and beer which the patient had taken as not to cause any distinct inflammatory affection of the organ.

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Mr. Barrett read a case of

MALIGNANT STRICTURE OF THE ŒSOPHAGUS, WITH ATROPHY OF THE RECURRENT LARYNGEAL NERVE, GIVING RISE TO ALMOST ENTIRE SUPPRESSION OF THE VOICE.

D. B——, aged forty-one, a bricklayer, has been accustomed for the last few years to live somewhat intemperately. States, that within the last two years he has lost flesh considerably. This he attributes to the constant difficulty he has found in swallowing. His voice, also, has recently become altered in tone to a deep, gruff base.

The first severe symptoms he experienced (about nine months back) were those of the food seeming to rest at a point opposite the upper border of the sternum, requiring a draught of fluid to force the mass downwards: this was frequently succeeded by regurgitation, with violent retching and coughing. Upon applying to a surgeon in the neighbourhood for assistance, his throat was examined with a probang; and leeches and blisters having been applied for a short time without much relief, he was referred to the hospital, into which he was admitted Jan. 13th, under the care of Mr. Andrews. He never remembers having had any uneasiness in his throat previous to the present symptoms, or to have swallowed scalding liquids, or anything which would have induced an inflammatory attack.

Jan. 17th.—Four days after his admission into the hospital, Mr. Adams, at the request of Mr. Andrews, cautiously passed a small-sized probang; slight resistance appeared to be offered about the situation of the lower constrictor of the pharynx. After passing this, the instrument was again obstructed in its progress some inches lower down the tube; with slight pressure, this also was overcome, and the probang appeared to pass into the stomach. This operation, however, occasioned considerable pain, which continued for some hours, and was referred to the cardiac end and upper border of the stomach. No further application of the probang was directed, and the patient was put upon middle diet, with strong broth. At this stage of the disorder, and for some weeks subsequently, he could swallow solid food, cut up finely, with greater ease than liquids. Upon a careful stethoscopic examination of the thoracic organs, no abnormal condition could be detected, nor was any enlargement, hardness, or tenderness upon manipulation, observable in the neck or cervical glands; the stomach also appeared free from any induration at either orifice.

But slight variation occurred in the symptoms during the succeeding months. The probang was but rarely had recourse to, and it was always observable that greater difficulty was experienced in passing it after each successive application.

Feb. 7th.—His general health appears good; and were it not for the gradually increasing difficulty of deglutition, he would be able, he thinks, to pursue his accustomed engagements. His diet is altered to milk, with light pudding, which he is compelled to eat very gradually by small spoonfuls at a time. More solid food will not now pass the lower stricture. His voice is reduced to a loud whisper.

14th.—During the last week, his constitution seems to sympathize with the disease. Much pain is complained of over the stomach, with general disturbance of the functions. The face, nose, and lips, have assumed a bluish hue; his breath is offensive, and he is unable to pass food of any kind into the stomach. After having passed a teaspoonful of fluid, it appears to remain in the œsophagus a few seconds, and is then violently rejected by coughing. Three days were passed with little if any food being taken. Under these circumstances, the stomach-pump was resorted to, and the smallest being passed down to the stricture, (through which it could not pass,) the pump was attached, and in this manner he was fed three times daily with milk and beef-tea, containing finely grated bread. Notwithstanding the nourishment he took, and his apparently increasing appetite, it was too evident that his health was rapidly giving way. His breath became horribly offensive; mucus collecting in his throat gave him uneasiness; but neither purulent matter nor blood was observable in his sputa.

22nd.—Complains of being ill all over; cannot rise from his bed, as usual; pulse is accelerated, 118; skin hot and dry; cough excessively troublesome, keeping him awake all night; his mouth is parched, obliging him constantly to moisten it with acid drinks, or by sucking wet lint. More resistance than usual is formed upon passing the upper stricture; but yet no pain is occasioned. The lower passage, however, is more contracted, rendering it extremely difficult to pass a small quantity of his accustomed diet; and this can only be done between intervals of coughing.

23rd.—No food has been passed to-day; he looks anxious and emaciated; lips anæmic; the colour of his nose is dark and livid; the thick mucus gurgles in his throat, appearing to impede the respiration, and at times almost threatening suffocation; pulse 136, wiry, and small; tongue slightly furred and dry; breath offensive; mouth parched; skin of lips cracked, dry, and swollen; loud bronchial râle obscuring every other sound in the chest. About four o'clock this afternoon, whilst talking to some friends who were standing by, he was seized with a fit of coughing, ejected a quantity of dark, fœtid matter from the mouth, fell back, and died.

*Post-mortem examination, twenty-two hours after death.*—

Body considerably emaciated.—Brain: A small quantity of firm lymph effused between the layers of arachnoid, but not adherent to either; more fluid than usual in the subarachnoid spaces and lateral ventricles. In every other respect the brain appeared healthy.—Cavity of thorax: The lungs rose up on removing the sternum; no adhesions. The whole contents were removed for a more minute examination.—Cavity of abdomen: Nothing abnormal was observed in the contents of this cavity. Stomach perfectly healthy; the liver also; no enlargement in the mesenteric glands. The œsophagus and neighbouring parts presented the following appearance:—Upon the anterior surface of trachea, extending downwards from the thyroid gland on to the pericardium, was a dense layer of soft, imperfectly developed fatty tissue. Upon removing this, the lower part of thyroid gland was condensed, by means of a much condensed mass, (of what appeared to be the original tissue,) to a number of indurated rounded bodies, somewhat resembling enlarged glands, slightly varying in size, and extending backwards rather more to the left side than the right, involving the carotid vessels, and partly separating the œsophagus from the trachea. Upon a section being made of one of these indurated bodies, a white, cream-like substance exuded from the dense fibrous structure of which it seems composed; but the structure itself did not present that gritty character upon cutting it which is usually met with in scirrhus. The interior of some parts of the bodies was softened; others contained cavities, partly filled with a fœtid, unhealthy-looking matter. Between the œsophagus and trachea, immediately behind, and a little below the thyroid cartilage, was a large abscess, or cyst, filled with matter somewhat similar to the preceding, and containing several detached rings of the trachea, in a state of partial absorption. This abscess was found to communicate, (as is seen in the preparation on the table,) on one side, by an oblong opening in the œsophagus, about the lower border of the inferior constriction, and on the anterior surface with the trachea, the rings of which had given way, their place being supplied by a thickened continuation of the fibrous membrane; through this membrane the opening had taken place. A little below this opening in the œsophagus was the commencement of a stricture, scarcely large enough to admit a small goose-quill, and surrounded by a condensed state of the submucous cellular tissue; its situation corresponded with the bifurcation of the trachea. The carotid vessels appeared to be implicated in the diseased mass, but the walls had been strengthened by a considerable thickening of the surrounding tissues. Their internal coats presented a highly vascular appearance, and small spots of lymph were visible, as well as upon the inner coat of the tuberal jugular vein. The left subclavian and vena innominata were evidently compressed by the gradually extending mass. Whether the orifice of the thoracic duct was closed, I am unable to state, as the heart was divided in the removal at the post-mortem; but from the immediate contiguity of the disease to this duct, I could hardly imagine it could escape some morbid influence. Upon tracing upwards the recurrent laryngeal nerve on the left side, it was found to terminate upon the internal surface of the lower part of the larger cyst, in a rounded nodule, the continuance of which had evidently been destroyed by the progressive absorption. I am indebted to Dr. Davies for the microscopical investigation of the diseased structure, which was found to consist of cancerous deposit.

I have been induced to bring this case before the Society, not so much in consequence of the peculiar interest it possesses, or under the idea that it contains many new circumstances corroborative of ascertained facts, neither from any novelty or success in the treatment, or even relief of any of the symptoms, but simply because it appears to present the following questions for consideration—viz.,

Whether, in a case of stricture of the œsophagus, in which the presence of malignant disease was doubtful, it were better merely to direct our attention to the relief of general constitutional symptoms as much as possible, leaving the stricture untouched; or, on the other hand, as in the case of stricture elsewhere, to attempt a radical cure by means of probangs or bougies, armed or otherwise, combating any inflammatory symptoms which might arise in the usual manner.

The cases recorded by Sir Everard Home give ample evidence of the success of the latter treatment. I am aware that one objection to this mode would be the danger of passing out of the œsophagus into the other important strictures, as is the case in one of the preparations before you, in which the probang was passed through the œsophagus into the anterior mediastinum: this, however, must certainly have been the result of considerable force, as the parts in the vicinity of the stricture appear excessively thickened, as they invariably are, thus serving to prevent the occurrence of such mischief.

In the case of the man now before you, his appearance when he first entered the hospital was certainly indicative of malignant disease, neither had he any symptoms at the seat of the disease, showing that so destructive a process was going on. From the suspicious and dangerous character of the disease generally, Mr. Andrews, I believe, was led to adopt the more passive treatment: the result of a post mortem has proved the advantage of such a course. But, on the other hand, had the case been one of stricture from thickening of the sub-mucous cellular tissue only, as might probably have been the condition of this stricture in the first instance, before the malignant disease was induced by the constant and unchecked irritation, then I cannot help thinking that the mechanical treatment, if carefully applied, would have brought the case to a more successful termination.

The gradual loss of voice must no doubt be attributable to the total destruction of the recurrent laryngeal nerve, the gradual diminution of the circumference of the trachea by the increasing pressure of the abscess materially tending to lessen the volume of sound; the attempt to speak towards the close of the man's life being accompanied by considerable exertion, and requiring frequent respiratory efforts.

## Foreign Department.

### Foreign Periodicals.—French.

*Tincture of Iodine as a Collyrium in Hypopion.*

In *L'Union Médicale* of April 6th, M. Rivaud-Laudran, of Lyons, recommends the use of the tincture of iodine as a collyrium to bring about absorption in cases of hypopion. He narrates two cases in which he employed it successfully. One, a lady, aged 61, had violent inflammation of the internal tunics, with ulceration of the cornea, at its lower part, and a considerable effusion of pus into the anterior chamber, accompanied with violent pains in the eye and head. The disease had lasted, when it came under the writer's observation, nearly a month and a half, and mild antiphlogistic measures had been used, but without amelioration.

M. Laudran immediately submitted the patient to active antiphlogistic treatment, bleeding from the arm, leeches to the mastoid process, active purging, and low diet, with an ointment to the eyelids containing belladonna. By these means the internal inflammation was soon got under; the pain ceased, the redness of the sclerotica vanished; the hypopion only showed no signs of decrease, and the iritis, dependent on it, remained stationary. The ulcer on the cornea slowly but sensibly improved. He then thought to try iodine in a collyrium, knowing it was not productive of inflammation, from previous experience, and ordered four or five drops of a collyrium made of fifteen drops of tincture of iodine to six drachms of distilled water, to be dropped into the eye three times a day. After this treatment had been pursued for four days, the hypopion, which had at the outset occupied a large portion of the anterior chamber, became reduced in size to a pin's head; nearly three-fourths of it being absorbed. Cicatrization of the ulcer of the cornea went on rapidly. At the end of seven days absorption was complete. A white speck occupied the site of the ulcer of the cornea, the iris was rather irregular, and the sight was impaired.

The other case was that of a gentleman, aged 71, of sanguine temperament, who had suffered from inflammation of the right eye for a month. Similar symptoms were present as in the former case: the vessels of the conjunctiva and sclerotica were congested: there was keratitis, and ulceration of the lower part of the cornea, with iritis, hypopion, and violent headach coming on in paroxysms several times during the day. Antiphlogistic treatment was adopted, and overcame the inflammatory symptoms in six days; but the hypopion was unrelieved. Recourse was had to the iodine collyrium, as above, which brought about complete absorption in eight days.

*Remarks.*—It seems impossible to doubt the good effects of the iodine in the preceding cases; no sign of the removal of the hypopion being noticed till its employment. The remedy was employed only against the purulent effusion, not against its cause—the active inflammation, which was previously combated by antiphlogistic means. Indeed, M. Laudran does not consider iodine to be antiphlogistic, but only as a medicine which favours absorption, by exciting the absorbents to functional activity. He would not insist on the two cases given,

as sufficient to demonstrate the real value of iodine in like circumstances, but only wishes to call the attention of the profession to the subject, that further trials may be made.

*Quinine in Coffee.*

A Parisian medical student, M. DES VEUVES, has been recommending the administration of quinine in an infusion of coffee, as the best means of concealing its bitterness, and as not impairing its medicinal powers. There is a warm discussion as to whether this is a discovery. It appears, however, not to be new, but that the young man has the honour of having directed the attention of the medical faculty in Paris to this useful mode of giving quinine, which had been almost entirely overlooked. It is worthy of trial in this country.

Baron DUBOIS, in the following paragraph, makes us further acquainted with his opinion respecting the employment of ether in parturition. It occurs at the conclusion of his paper read before the Academy of Medicine, and which, with the general results at which he arrived, was communicated to THE LANCET by the Baron himself. He says—"One word more: M. Velpeau has expressed a hope that ether might be usefully employed in cases of tetanic contractions of the uterus; but this hope vanishes, since we find that agent has no kind of influence over the uterine contractions."

## ACADEMY OF SCIENCES.

*Researches on the Phenomena of Induced Muscular Contraction; and on the relation between the direction of the Electric Current and the Electro-Physiological Phenomena it produces.* By M. A. MATTEUCCI.

These researches may be considered to form a continuation of those which are published in the *Philosophical Transactions*. They have been directed towards a consideration, first, of the phenomena of induced contraction; secondly, of the relation between the direction of the electrical current and the electro-physiological phenomena that it excites.

"I have ascertained beyond doubt, that induced muscular contraction is a phenomenon which, of all the parts belonging to the living organism, belongs to muscle only in a state of contraction. I have equally proved the impossibility of explaining this phenomenon by any action whatever of an electrical current passing through the muscular mass during contraction. No increase is noticed in the muscular current during the contraction of the muscle.

It is after having proved that there may be electrical discharges from a jar so feeble as not to be indicated by any instrument, except by the frog, that I have supposed that induced contraction may be due to a discharge of this description. If so, indeed, it is not by the aid of a galvanometer that it would be perceived. My doubts have been more confirmed, since I have found that very feeble electrical discharges, in traversing muscular tissue, were capable of exciting contraction in the galvanoscopic frog, which touched the surface of the muscle traversed by its nerve only. I have likewise proved, that the isolating and conducting layers interposed between the nerves of the galvanoscopic frog and the surface of the contracted muscle, gave rise to effects, from which we could not discover any difference between the action from the discharge of the jar and the muscular contraction excited by the irritation of the nerve. These phenomena have remained constant when a discharge was passed from a jar, as small as possible, across muscular masses which had lost the power of contracting.

If we now reflect on the analogies that my researches on the torpedo have proved to exist between the laws which preside over muscular contraction, and over the discharge of electrical fishes, we are brought to admit the explanation, that induced contraction is caused by an electrical discharge which occurs during muscular contraction. It is just to mention, that the origin of this idea is due to M. Becquerel. These analogies between contraction and the electrical discharge of fishes are of the highest importance, because they derive their source from the structure of organs, and from the physical and physiological laws of the two phenomena.

The second series of my researches is on the relation between the direction of the electrical current and the electro-physiological phenomena that it excites. Here we have a fact clearly established—a *direct* current destroys the excitability of a nerve; an *inverse* current increases it.

Further: the passage of an inverse current leaves the nerve in such a state, that very strong and permanent contractions are evinced when the current has ceased. I will narrate one experiment which is always attended with success

A frog, prepared in the usual manner, is plunged with its two feet into two glasses; when the current is passed, it is necessarily direct for one of the nerves, inverse for the other. After the circle has been completed for twenty-five or thirty minutes, cut that nerve through which the inverse current has passed at the point where it enters the thigh; you will then have a violent contraction in this limb, which will soon cease, but none in the other.

If, instead of proceeding as above, the nerve is cut at the point whence it springs from the spinal cord, so that a certain length of it remains attached to the thigh, you will then have a violent contraction in this limb, and one which will be followed by others in succession; and the limb will remain quivering for ten or fifteen seconds, sometimes for two minutes, or even more.

To bring about an immediate cessation of this state there are but two ways—either to renew the passage of the inverse current, or to completely destroy the nerve. I have described, in my memoir, some long and minute investigations on these phenomena, which will certainly conduct, some day, to the discovery of the intimate connexion which exists between the electrical current and the nervous fluid.

I cannot suffer the present opportunity to pass without saying a word on a passage in a recent important communication to the Academy from M. Liebig. This chemist having discovered, as did Berzelius, a free acid in the muscles, which is separated from an alkaline fluid (of the blood and of the lymph) only by very delicate membranes, thinks to explain thereby the origin of the muscular current. I may be allowed to observe, that the muscular current, whose direction is constant from the interior to the surface of the muscle, whose intensity and duration vary in a constant manner in mammalia, in birds, in reptiles, &c., which is destroyed by sulphuretted hydrogen, by default of respiration, will not admit of an explanation so vague and without foundation.

I would here make known some hypothetical ideas which result from the electro-physiological phenomena collectively, on the nature of the nervous force, and on its relation with electricity. I shall give this hypothesis in as few words as possible, and in the form of propositions.

1. The nervous fluid is produced by the chemical actions taking place in nutrition.

2. This fluid, developed principally in the muscles, is there diffused, and, endowed with a repulsive force between its parts, like the electrical fluid, and maintains the elements of muscular fibre in a state of repulsion analogous to that presented by electrified bodies.

3. When the nervous fluid ceases to be free in the muscle, the elements of muscular fibre are drawn together, as is seen to happen in the rigidity after death.

4. This nervous fluid constantly enters the nerves, and passes thence to the brain, assuming in its course a new condition, which is no longer that of a free fluid; it is in this way that it passes from muscles to nerves. According to the quantity of this fluid which ceases to be free in muscles, the contraction is more or less strong.

5. This state is that of the nervous current, or a kind of discharge which passes from the extremities of the nerves to the brain, and returns in the contrary direction by the act of volition.

6. When this discharge takes place, the muscular contraction ought also to follow, the fluid ceasing to be free in the muscles.

7. This discharge of nervous fluid, acting as in electrical fishes, explains induced contraction; in both cases, and by the same disposition of the parts, the nervous current produces a kind of electrical polarization of the elements, whether they be muscular, or belong to an electrical apparatus; the difference of effects will be owing to a different number of elements, or to a difference in their dimensions, &c.

8. The electrical current prevents the nervous discharge, if it be directed in the opposite direction, as in the case of the direct current; the nervous fluid being unable to enter into and collect itself in the nerve, the latter loses its excitability. The contrary takes place with the *inverse* current, which passes in the same direction as the nervous discharge; from this the nervous fluid accumulates in the nerve, and its excitability is augmented."

M. Matteucci hopes, although the preceding are but hypotheses, and open to numerous objections, yet that they will excite investigation, and thereby lead to new discoveries.

The hypothesis of a nervous fluid was long ago started, but its direction, as supposed by M. Matteucci, is just the reverse of that generally advocated. The nervous fluid he makes to exist and to be generated in the muscles, and thence to pass

along the nerves, as along so many tubes, or rather conducting wires, (seeing that he compares the fluid to the electrical,) to the brain. To cause this nervous fluid to discharge itself in the direction of the muscles requires an act of volition. Most physiologists, on the other hand, have looked upon the nervous centres as the originators of any nervous force or fluid, from which they have supposed it to proceed to the muscles under the direction of the will.

Electro-physiological researches are but in their infancy, and it will be for future generations to discover some primary force, the common parent of all those forces now called polar, which can only indirectly be made sensible to us, and to connect them together according to the extent of their analogies.

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*Generalization of the Phenomenon of the Division of the Vitellus in the entire Animal Series. Séance of 5th April.*

M. Coste has communicated to the Academy some observations he has made, which go to show that the division (segmentation) of the vitellus is not peculiar to any one class, but a common occurrence in the whole of the vertebrata. "It is generally believed, that among birds, scaly reptiles, and cartilaginous fishes, the organization of the blastoderm does not take place in the same manner as among other animals—viz., by means of the division of the vitellus; and, according to this, the animal series has been divided into two categories, one distinguished by the manifestation of this phenomenon, the other by its absence. The experiments of M. Coste prove that such a difference does not exist, but that Nature proceeds in a manner identical in all cases. He has observed among birds, scaly reptiles, and cartilaginous fishes, during the passage of the ovum through the oviduct, the division of the vitellus to go on as in other cases. The only difference to be noticed is, that among the animals just spoken of, the phenomenon, instead of proceeding throughout the vitellus, occurs exclusively in that particular part of it known as the cicatricula."

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*Ophthalmia leading to the production of False Membranes.*

The *Annales d'Oculistiques* contain a communication from M. Bouisson of a case of super-acute ophthalmia, attended by the formation of false membranes on the surface of the conjunctiva. Jacques L——, aged forty-six, entered the hospital with confirmed inflammation of the conjunctiva of the eye and eyelids, on the 28th of November. The eyeball was itself the seat of sharp and deep-seated pain, and the cellular tissue of the orbit partook in the inflammatory action, and from its congestion caused a prominence of the eye. The eyelids were red and swollen, especially the upper, against which the eye pressed. The margins of the eyelids were everted and stretched transversely, compressing between them the thickened, prominent, injected conjunctiva in a state of chemosis. A very copious muco-purulent secretion was discharged; the turgidity of the conjunctiva was so great, that the cornea could not be discerned through it. An acute pain, of a pulsating character, existed in the entire orbital region, and was accompanied with general headach and fever, a full and strong pulse, and a want of sleep which has attended the disease from its onset.

From the history, no account could be gained as to the previous existence of syphilis, and there was at the time no gonorrhœa. The man was of a good constitution. The eyes had not been exposed to the contact of any virulent matters which might kindle inflammation; but the patient had been prone to attacks of ophthalmia, which were generally seated in the left eye—the one now affected. Three months previously the patient had been treated in the hospital for an attack of some severity. His employ in the service of the Custom-house often exposed him to the moist air on the sea coast of a night, and to such an exposure he traces the origin of the present disease.

From the moment of his admission the disease increased in severity; the pain in the orbit was so great as to make the man cry out.

On the 29th of November, a copious bleeding was practised, and twenty leeches were applied to the temple; frictions with mercurial ointment containing belladonna, were used around the eye, and a collyrium of poppyheads. The inflammation still continued its course.

On the 30th, twenty leeches were again applied to the left side of the neck, and the patient took pills of calomel and opium. The tumefaction of the conjunctiva being very great, a portion was excised, and this was attended with an abundant sanguinolent discharge; after this, the muco-purulent discharge was somewhat less, but a grey film began to be apparent on the conjunctiva, between the eyelids.

On the 31st, the false membrane was more distinct. The eyelids were put very much on the stretch, and as it were bound down. Lest the ocular phymosis should cause sloughing of the portion of conjunctiva protruding between the eyelids, an incision was made outwards from the external angle, to loosen them. This operation afforded relief. The medicines were continued. The next day (morning) the interpalpebral false membrane had increased in volume; as it exerted pressure it was removed: its dimensions appeared much greater after extraction than before, and it presented the appearance of a false membrane infiltrated with pus; the conjunctiva beneath it was red, very vascular, and sensitive. Continuation of the same remedies, with a blister to the arm.

On the next morning, (December 3rd,) a new portion of false membrane had formed, of a grey colour, in front of the conjunctiva. The next day this was removed in the same manner as that preceding it. It had the appearance of solidified fibrine, with pus infiltrated between its meshes on its posterior surface. When placed in water, it assumed the rough, shred-like appearance of other pseudo-membranes. Its removal caused no pain, but left on the conjunctiva some streaks of blood, which probably were derived from the tearing of the vessels newly organized in the false membrane.

On December 4th, the symptoms were abated, but a thinner membrane again formed on the conjunctiva. The surface of the arm to which the blister had been applied was highly inflamed, and was covered over by very thick plastic formations, such as are sometimes met with on blistered surfaces in croup. The calomel and opium pills were persevered with; and foot-bath, acidulated with hydrochloric acid, ordered.

On the 5th, the right eye, until the present time sound, appeared red and inflamed; the Meibomian follicles secreted a large quantity of matter, which accumulated on the free border of the eyelids, towards the inner angle: the patient said the symptoms were the same as those which ushered in the previous attack in the left eye. To prevent the progress of the ophthalmia, a collyrium of nitrate of silver was prescribed for the right eye, the medicines before in use continued, and another blister applied to the arm.

On the 7th, the condition of the eye was ameliorated, and the inflammation subdued. The pain and swelling in the left eye were also diminished. The false membrane last formed was extracted; its external surface was dry, the deep one infiltrated with pus; beneath it, the cornea was ulcerated and partially destroyed; the iris protruded through an opening in it, and more deeply a whitish body was noticed, which, without doubt, was a fragment of the crystalline lens. The general symptoms were improved, but salivation had supervened; consequently, the calomel and opium were omitted. In the course of the following days the improvement of the condition of the right eye proceeded; the conjunctiva of the left was still inflamed, and secreted the muco-purulent matter as at the outset, but no false membrane had reappeared.

For fifteen days the discharge went on from the left eye, which ultimately shrunk into a small mass, concealed in the orbital cavity.

The patient was several times seen at various periods after his leaving the hospital. The conjunctiva which had produced the false membranes was completely dry, and had undergone such a transformation as to take on the characters of skin, being covered over by a scaly layer, made up of portions comparable to small epidermic scales.

M. Bouisson remarks, that the foregoing case resembles croup, so far as the exudation of plastic lymph, and its cohesion into a membraneous form, is concerned. There indeed seems to be a closer pathological resemblance, inasmuch as the inflammation in the above case differed in some respects, as in the slightness of its cause, its recurrence, from an ordinary simple ophthalmia, just as croup differs from simple inflammation of the trachea and larynx, and is deemed specific. Both in croup and in the severe form of ophthalmia, above instanced, the constitution seems to play an important part; the inflammation assumes that severe form which leads to the pouring out of lymph, even from mucous membranes; it is very apt to recur even from slight causes. In the preceding case detailed, during the course of treatment, the right eye, hitherto in a healthy state, assumed the symptoms which marked the onset of the severe inflammation in the left, and we may suppose would have gone on to the same extent had not the treatment cut them short. A peculiar condition of the constitution seemed further indicated by the exudation of plastic lymph in abundance, on the surfaces which were blistered.

# THE LANCET.

LONDON, SATURDAY, MAY 8, 1847.


SINCE the article which follows this notice was written, some circumstances have been disclosed which demand the earnest and immediate attention of thousands of the suffering Medical Practitioners of this country. From representations which have been made to the SECRETARY of STATE for the Home Department, it would appear that the exclusive Medical Corporations of London intend to offer *a violent opposition to the enactment of the* MEDICAL BILL now before Parliament. *Of course*, the SOCIETY OF APOTHECARIES, at Blackfriars, have joined in this opposition; and the COUNCIL of the NATIONAL INSTITUTE—betraying all the principles which many of its members formerly professed, and the principles upon which it was founded—have followed the example which has been set by the Society at Blackfriars. These double-faced proceedings naturally emanate from such Janus-like associations. The COUNCIL of the COLLEGE of SURGEONS, always delighted at seeing the geese, who have been ensnared into that Institution, plucked and tormented by the infamous quacks who in every place infest society, have also addressed the SECRETARY of STATE against the Bill, and have solicited the Right Honourable Gentleman to hear the nature of their opposition from a Deputation.

The interviews between Sir GEORGE GREY and the Deputations from the hostile bodies are to take place at the Home Office this day, (Saturday, May 8th;) and, disdaining all secrecy, and the exercise of improper private influence,—spurning and scorning private misrepresentations, and the motives which it is just possible might arise from feelings of self-interest, the Right Honourable Gentleman has publicly invited the Author of the Bill to attend at the Home Office, to be present at the interviews, and hear the objections which can be offered against the measure. That invitation has been accepted. Consequently, the attempt to defeat the measure by secret and private misrepresentation, instead of meeting the question, fairly, in the House of Commons, has been thoroughly defeated by the open, bold, honourable, and straightforward conduct of Sir GEORGE GREY.

The example thus set before the profession by such a high authority, cannot be without its effect upon the thousands of medical practitioners of this country. They ought at once to rise as one man, and appeal to the Legislature for protection against their persecutors who wield the government of the Medical Corporations, and also against the quacks.

It will be seen, by a brief report in another part of our Journal, that a MEDICAL REGISTRATION COMMITTEE, consisting of some of the most respectable medical practitioners of the metropolis, has recently been held. Similar committees should be formed in every county and borough of the kingdom. Public meetings should be held, and petitions should be sent to Parliament, not only from bodies of practitioners, but from individuals. It has now become a life-and-death struggle for the profession. If a REGISTRATION BILL cannot be passed, nothing can be accomplished for the profession by Parliament. And why? Because there are to be found amongst us treason, corruption, and duplicity—not, happily, in the body of the profession, but amongst those governing authorities, legal and usurping, which seek to degrade and destroy, rather than to protect, the very interests which they are bound in honour to defend.

If the Bill should be referred to a SELECT COMMITTEE OF THE HOUSE OF COMMONS, the objectors will have an opportunity of giving evidence as witnesses. The statements of some of them, we suspect, will be both edifying and amusing. It will not be sufficient merely to assert an opinion that is hostile to the principles and details of the Bill; but the facts will be demanded on which the objections are founded. The profession ought to know that Parliament is heartily tired of the subject of medical legislation; that the greatest difficulty exists in finding any number of members who are willing to take an active part in that question; and that, when solicited, nearly all reply, "What can "be done in the House of Commons, when you can-"not agree in favour of any measure amongst yourselves?" Such a reply is disheartening; but still, considering how vastly important is our cause to the interests of humanity and science, to the welfare of the public, and to the protection of the profession, every medical practitioner who estimates as he ought the position he holds in the ranks of society, and the part he should bear in the endeavour to improve the character and respectability of the profession, and to put down quacks and quackery, ought to exert himself at this juncture, as though success were to be achieved solely by the aid of his own individual exertions. If this view of the question be entertained by the many thousand practitioners of this country, we could have no apprehensions as to the issue of the contest in which we are engaged. If the London Registration Committee should resolve on holding a public meeting in the metropolis, we trust that it will be attended by thousands of practitioners. The voice of the profession ought to be heard, and must be heard, on the subject.

Just before going to press we have seen the advertisement of the Council of the National Institute. It is needless to observe that it is a tissue of misrepresentation and falsehood. We invite every member of the profession, after reading it, to examine the provisions of the Bill. Before this conflict has terminated, we are happy to be able to predict, with tolerable certainty, that the mask will be torn from the countenances of some men, at least, who, being full of pretension of upholding the best interests of the profession, have been guilty of basely betraying it. If there be a public meeting, will the Council of the Institute dare to face their professional brethren on such an occasion? All the *members* of the Institute who have written to us on the subject are firmly and decidedly in favour of the Bill.

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THE Medical Registration and Medical Law Amendment Bill is now fairly before Parliament and the profession. Every man will read the Bill with a somewhat different view from his neighbour, and interpret its meaning according to the mode in which he himself is likely to be affected by its provisions. Motives and intentions will, we have no doubt, be assigned by some with truth and candour, and by some from very different motives, which have never entered the mind of the framer of this measure. It will therefore not be without its use if we endeavour to set forth our opinions of its true intent and meaning, preparatory to our detail of the proceedings which it will be necessary for the medical body to adopt,

if they sincerely desire that this Bill shall become part and parcel of the law of the land.

The simple and honest intention of the Bill, then, is to draw a line of circumvallation around all regularly educated and qualified men—a line over which no unqualified person should dare to pass without incurring pains and penalties. Everything else has been held subsidiary and insignificant when compared with this great object; and if other points are touched upon, or provided for at all, it has merely been from a single desire to remove or anticipate objections to a naked system of medical registration.

In the first place, it was considered as imperatively necessary to throw all qualified men into one list or register for each division of the United Kingdom. This is effectually done by the ninth, tenth, eleventh, and thirty-first clauses of the Bill. But this has been done without any desire to level the profession, and deprive those who possess educational dignities of their due. That it was the fair and necessary plan to present the profession as one body, will, we think, be conceded by those who examine the subject calmly and dispassionately, not looking to individual benefits, but to the good of the whole faculty of medicine. It may be, and we know will be, said—How so? Where is the fairness or justice of placing the presidents of the College of Physicians and the College of Surgeons in the same registry, on the same footing, and as members of the same profession, with the last made licentiate of the Apothecaries' Society, or the youngest M.R.C.S. We fear this line of argument is but individual selfishness, or pride, or weakness, warring against the general good. Either a man is a member of the profession, or he is not; and if the former, whatever his rank or degree, there must be some common ground upon which he stands, and upon which the highest dignitaries of the profession, if there are such, must also have their foundation. Such a foundation—such a common ground—we conceive a system of registration to be. It must fairly be granted that the junior licentiate of the Apothecaries' Society is a medical man; it may be said of the president of the College of Physicians that he, too, is a medical man—a "medical practitioner;" and this is the common title which belongs to both. But this in no degree places them in all particulars upon the same level; it will cause no one among the public or the profession to mistake the specific title of the one for that of the other. It is only a sign of just so much concession from the highest to the lowest as is necessary to separate the profession from the public, and without which concession the profession must remain, as heretofore, undefined, admitting any knave or upstart dishonestly to assume, not only its membership, but its highest titles—that of surgeon or physician; and this without education, and without a qualification of any kind. This concession between differently educated members of the profession would be no more than what obtains in the law and the church. The barrister whose first powder has not yet been shaken from his wig is as much a member of the legal profession as the Lord Chancellor; and the humblest parish curate is as much a clergyman of the church as the Archbishop of Canterbury. But this is no cause of levelling; no destruction of honours and distinctions; such a thing is, indeed, never dreamt of, except in our own unhappy, and we are fain to say, illiberal profession. Of all the professions, it is only in medicine that real equality is a bugaboo. We repeat, then, a general registry is fair and necessary. To those who still object to an amalgamation of the profession into one body, as a first principle, we would say—What else would you do? or what propose? Would you have physicians, surgeons, and apothecaries, registered in classes according to their titles? Let us see how the matter would stand. Graduates of the Universities of Oxford, Cambridge, Dublin, and London, and Fellows of the College of Physicians, would be placed cheek by jowl with men from St. Andrew's, and Aberdeen, and Glasgow, bearing much the same titles and designations. We do not say this in derogation of these latter schools of learning, but simply as a fair illustration of the position assumed. This was, indeed, what the College of Physicians proposed in their last year's Memorial. They proposed to admit all British graduates into the College, and the College lists; only, in place of paying a registration fee, they were to pay a fee for the College licence. Now we maintain that this stooping of the Fellows of the College to the young M.D.s of the easy universities is quite as great a condescension as it would be to appear in the same registry as that containing the general practitioner, the surgeon, the apothecary, or the surgeon-apothecary. Indeed, it is more; for as the same titles of M.D., or Doctor, or Member, or Fellow, of a College, would be given to all, St. Andrew's might well be confounded with Cambridge and Oxford, whereas, in a general list, Blackfriars could never be mistaken for Pall Mall, nor Edinburgh for Aberdeen. If divisions and castes are to be maintained, the only equitable mode of proceeding would be, to place the members of each university, college, corporation, or licensing body, and the different classes and castes of each, separately, and then there would be such confusion and variety, that the different merits and qualifications would never be understood, and something like a separate legislation would be required for each of the recognised bodies in the kingdom. There are, and ever will be, we emphatically maintain, almost insuperable objections in the way of any registration, unless so much of concession as goes to the formation of a general list or register be made by the whole body in the first instance. To say that formal classes must be preserved in a system of registration, is equivalent to saying, that no registration whatever shall exist; for angels, much less men, could hardly settle the order and precedence of the various bodies and titles, licences and degrees, that would come up to the surface at the bidding of a class registry.

And, we would ask, for whom is a class registry demanded? For the public, or for the profession? If for the public, we refer to the proposed "medical registration certificate," which would set forth the exact diploma or licence of its possessor; and we further refer to the plan attached to the Bill, containing "the names of registered medical practitioners arranged alphabetically," in which the "qualifications, and their dates," are minutely set forth; so that there could be no pretence, no scope or opportunity, for false boasting and assumption. To say that class lists are required for the profession is still more absurd. The instincts of the profession are too keen for any of its members to seem, under such a system of registration, other or better than they really are. In the certificates granted, and in the alphabetical register, the distinctive titles are set forth, and their legitimate class distinctions are preserved in the manner least liable to objection; the apothecary is but an apothecary, the man in practice before 1815 is simply

set down as such, while the Fellow of the College of Physicians, and the Doctor of the English, Irish, and Scotch Universities, is duly set forth as such. But in the framing of the Act, some generic term was imperatively required, and the term fixed on is "medical practitioner." All the levelling of the Bill consists in this, that the legitimate qualifications of the highest and lowest of those qualified at all, are set forth individually. If such an Act were passed, it would soon be seen that the different colleges and corporate bodies would bestir themselves to keep men in their outward professional doings to their proper designations, and the Bill itself gives them power over disorderly members—a power of discipline, the want of which has been often lamented, but never hitherto possessed. This discipline, which, properly exercised, would be fraught with the greatest advantages, is ensured by Clause 16, relating to the "expulsion of registered practitioners for disgraceful conduct," and in Clause 30, which provides for the erasure of "the names of criminal practitioners."

The machinery for carrying the Bill into operation is provided for in the first eight clauses. It is as simple as the subject would admit of, and while the expenses of registration properly falls upon the profession, they are, however, so insignificant as not to be burdensome to any individual.

Clause 9 provides for the right of a registered practitioner to practise in any part of the United Kingdom, according to the division in which he has taken out his certificate. This concession will probably be opposed by some interested parties, but most unjustly. It is nothing new to say, that there are in England, and in Ireland and Scotland, a great number of able and well educated professional men, who, according to the present state of the law, are as much engaged in illegal practices as though they had received no medical education at all. But though they may be called illegal, there is no adequate power in existence to compel them to become legal practitioners under the old laws, and experience abundantly shows that they will not become so. Why, then, should these men be subject to the annoyance, and, legally speaking, the crime, of still continuing subject to the brand of illegality? The moral fault, if such it be, is not more in them than in the old or partial laws, fitted and intended for bygone ages, but which are given up to obsoletism by all decent men in the present day, even by those whose legal duty it is to carry them out. Even the College of Physicians, in its Memorial, wished to fold under its wings all British graduates, desiring to give them all legal rights as physicians; and the National Association, and its relic the National Institute, invited *all* educated men in general practice to enlist under their banner, whether they came from England, Scotland, or Ireland, from Hall, College, or University; promising them all equal rights and equal privileges in the New College for which they were to contend. The principle, then, of exclusiveness, of restricting a man to practise an art and science like medicine, of universal application, within so many miles of the place of his education or licence, must be considered as utterly untenable, as given up by those to whom it would most naturally cling.

The apprenticeship system is proposed to be annulled in Clause 13. It is not necessary, on this occasion, to enter into the abuses of the old apprenticeship system—abuses which far outweighed any good to be derived from the old relation between apprentice and master.

The Clauses 14, 15, and 20, provide for the punishment of unregistered persons unlawfully engaged in practice. Every endeavour has been made to render the remedy easy of application, and the punishment prompt and effectual. All the present restrictions have been found wanting when their application to the restraint of illegal practice has been made or attempted. If in the medical profession there were no other feature than this, it ought to be sufficient to stop any impediment, from qualified men, to the registration of all classes of the profession in one general list. They cannot prevent, under present circumstances, the most notorious villain from calling himself publicly Dr., or M.D., or Surgeon. Respectable streets in London, the daily advertisements of the newspapers, shoals of works issuing from the press, exhibit wretches, who, in another age, would have been footpads or burglars, assuming the highest professional titles unmolested. Is not this a disgrace to the profession? Does not this bring greater discredit on the M.D. or the F.R.C.S. who may be inclined to preserve his caste, than any contact by simple registry with honest members of this or that hall or college? This alone ought to be sufficient to drive all the fair and honourable members of the profession, whatever the source of their qualification, to combine for an equitable system of registration. Registration is, in truth, but another word for severance from quackery and criminal practice.

Clauses 23 and 24 offer an attempt at providing for uniformity of education, the want of which seemed the most valid argument against a general registration of the profession. Under these clauses the colleges of higher rank would be able to force the licensing boards of easy virtue to bring up the education and requirements of their candidates to the proper point; or, in default of this, to deprive them of their power of licensing or of granting degrees altogether. The higher bodies, and the men possessing higher qualifications, therefore, need have no fear of being overrun by men and institutions of inferior weight or acquirements.

Such is a fair interpretation of the whole measure—one fraught, as we believe, with good to the profession, appealing not to the selfishness of any parties, but honestly directed to the good of the whole faculty. Whatever is done must be done quickly; there is time enough to work in the present Session, but no time to waste; and we warn the profession, that unless such a measure pass, quackery and unqualified practice will become more rampant and astounding than they have ever yet been. Every defeat in any attempt at medical legislation is in effect a triumph of the quack and the impostor over the honest professional man.

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We beg to repeat most earnestly to all members of the profession who are favourable to the Registration Bill, our advice respecting the necessity of immediately petitioning Parliament in behalf of the measure. A good beginning was made at the Freemasons' Tavern on Monday night, and the example should be followed in every town of the kingdom. The colleges and corporations which are favourable should petition; so should the different societies and associations; the medical communities in cities and towns; and single individuals should omit no opportunity of sending petitions for presentation to the Members for the places in which they reside. What is wanted is, *an immense number of petitions* as well as a vast number of petitioners. In this way the success

of the measure would be promoted. Medical men owe it to themselves and to their profession to be up and doing. Those who oppose the Bill—the quacks, on the one hand, and the rigid exclusives, on the other—will be active enough, and to those who are for it, the present is no time for supineness. Let the voice of the profession be heard; if against the Bill, let the measure fall to the ground, but if in its favour, let them bid it good speed, and success is certain.

## AN ANALYSIS

*Of the leading provisions of the Bill now before the House of Commons, for the* Registration of Qualified Medical Practitioners, *and for amending the law relating to the practice of Medicine in Great Britain and Ireland.*

### The Preamble

refers to the complicated and contradictory nature of the laws relating to the practice of medicine, as they now exist, and declares that the public possess no certain means of distinguishing between legally qualified medical practitioners and the pretenders to a knowledge of medicine, and concludes by stating that it is desirable that the names, qualifications, and places of residence, of legally qualified practitioners of medicine, should be duly registered by competent authority.

### Clause 1

requires that the Secretary of State shall, within one month after the passing of the Act, nominate and appoint three persons, being qualified to be registered under the Act, to be the medical registrars for England, Ireland, and Scotland; and it declares, that such Secretary of State shall also appoint such clerks and officers as he may consider to be necessary for assisting the registrars in carrying the Act into execution, and that all the persons so appointed shall be subject to *removal* by the Secretary of State.

### Clause 2

enacts, that all monies received by the registrars for carrying the Act into execution, shall be paid by them into the Bank of England, in the name of the Medical Registration Fund of Great Britain and Ireland.

### Clause 3

enacts that the registrars, within thirty days after their appointment, and from time to time afterwards, shall register, without fee, the names and places of residence, and a description of the qualification or qualifications, with the date or dates thereof, of all persons who were qualified to practise medicine before the passing of the Act, and shall hold a medical degree, diploma, or licence, or who were actually practising as apothecaries in England or Wales, prior to the first day of August, 1815, and also every surgeon and assistant-surgeon of the army and navy, and the Hon. East India Company, who obtained their qualifications, and held their offices, before the passing of the Act.

### Clause 4

provides for the registration of persons, on the payment by them of two pounds each, who obtain their qualifications *after* the passing of the Act.

### Clause 5

requires that the registrars shall issue certificates according to the form in the schedule, such certificates to be issued by them only for those parts of the kingdom in which they are appointed to act.

### Clause 6

provides that a payment of five shillings shall be made for each certificate, which certificate is to remain in force from the day of the date thereof until the 31st day of December of the ensuing year.

### Clause 7

requires the registrars to keep a record of every such certificate, and that in the month of January of every year, they shall cause to be printed a register of the names and places of residence (arranged alphabetically) of all persons to whom they have issued such certificates, making three distinct registers, one to be entitled "The Medical Register for England," another, "The Medical Register for Ireland," and one, "The Medical Register for Scotland." The registrars are to cause such registers to be sold at a charge not exceeding one shilling for each copy.

### Clause 8

enacts that a person, whose name has been accidentally omitted from the register then current, or who shall prove to the satisfaction of the registrar, that he intends commencing practice, or changing his place of residence, may obtain a certificate to continue in force until the 31st day of December then next ensuing, on the payment of twenty shillings.

### Clause 9

provides for the repeal of all restrictions on the practice of medicine and surgery which are now in force in any Act or Charter, and that no restrictions shall henceforth have the force of law other than are to be found in this Act.

### Clause 10

provides that every person who is registered, and who possesses certificates such as have been described, shall be entitled to practise medicine in that part of the kingdom for which his certificate has been issued.

### Clause 11

provides that all registered practitioners possessing certificates in force shall be entitled to recover at law, with the full costs of suit, reasonable charges for medical and surgical advice, visits, attendance, and medicines.

### Clause 12

provides that after the passing of the Act no person shall recover at law such charges as are specified in the preceding clause, unless he shall prove that he is in possession of a certificate then in force, or that he was legally practising in the character in which he claims the charge, at the time when the debt was incurred.

### Clause 13

repeals clause 194, section 15, of the 55th George III., which enacts that no person shall be admitted to an examination for a certificate to practise as an apothecary, unless he has served an apprenticeship of five years to an apothecary.

### Clause 14

empowers a magistrate to fine any person, on conviction before him, in a sum not exceeding five pounds, nor less than forty shillings, who shall act or practise as a physician, surgeon, or apothecary, without having been duly registered, and not possessing a certificate according to the provisions of the Act.

### Clause 15

provides that any person holding a medical or surgical office, for which he is not qualified under this Act, shall be subject to a penalty of ten pounds every time that he shall act or practise in such office.

### Clause 16

enacts, that if five registered practitioners shall complain to the Council of any College, that a person who has obtained his diploma or licence from such College has conducted himself in any manner which is calculated to bring scandal or odium on the profession, the Council of such College shall be empowered to cite the accused person before them; and on being satisfied of the truth of the charge, they are authorized

to erase his name from the rolls of the College; whereupon the Council are required to transmit to the registrar of that part of the kingdom in which the College is situated, the name of the offending party; and the registrar is then to expunge the name from the register, and not to reintroduce it, unless the Council shall have reintroduced it into the rolls of the College.

CLAUSE 17

provides that no person not possessing a certificate in force, according to the provisions of the Act, shall be capable of holding any medical or surgical appointment, and that he shall not be deemed capable of granting any medical or surgical certificate, or of giving any medical or surgical evidence in any court of law or equity in the kingdom.

CLAUSE 18

enacts that the registrars shall be deemed to be guilty of a misdemeanor, if they shall wilfully falsify any matters relating to any register or certificate made or granted under this Act.

CLAUSE 19

provides that persons who shall attempt to procure certificates by false representations, shall be liable to be imprisoned and put to hard labour for a period not exceeding six months.

CLAUSE 20

enacts that unregistered persons wilfully and falsely declaring that they are registered under the Act, or that they are recognised by law as physicians, surgeons, or apothecaries, shall, on being convicted of the fact before a magistrate, be subject to a penalty not exceeding ten pounds, nor less than forty shillings, for every offence.

CLAUSE 21

provides for the imprisonment of persons who do not pay the fines which are imposed.

CLAUSE 22

enacts that sums recovered as penalties for offences committed against the Act, shall be paid to the account of the Medical Registration Fund of Great Britain and Ireland.

CLAUSE 23

provides that the several colleges and examining bodies shall from time to time submit to the Secretary of State their schemes of education to be pursued by candidates for diplomas and licences; and also a statement of the amount of the fees which they propose to demand. Such schemes are not to have the force of law until they have received the sanction of the Queen in council, the object of the clause being, to establish uniformity of education, uniformity of qualification, and uniformity of fees.

CLAUSE 24

enacts that the Secretary of State may require "returns" to be made by the various Universities and Colleges respecting examinations for degrees, diplomas, and licences; it also empowers him to depute a registered practitioner to be present at such examinations, and if he finds that the schemes sanctioned by her Majesty in Council have been violated, that he shall be empowered to direct the registrars to refuse to register upon the testimonials of the University or College in default.

CLAUSE 25

provides that the examiners of candidates for degrees, diplomas, and licences, be empowered by the Secretary of State to attend, with the candidates, in hospitals and other public institutions, with a view to ascertain the practical knowledge possessed by such candidates.

CLAUSE 26

provides that students in medicine who have been already engaged for two years in attending lectures or hospital practice shall not be affected by this Act in passing their examinations.

CLAUSE 27

provides that the Act shall in no manner affect Dentists and Cuppers who were in business previously to March 1st, 1847.

CLAUSE 28

provides that nothing contained in this Act shall in any way prejudice or affect the trade or business of a Chemist and Druggist in the buying, preparing, compounding, dispensing, and vending of drugs, medicines, and medicinable compounds. This is strictly identical with the 28th clause of the Apothecaries' Act.

CLAUSE 29

exempts every person who is registered, and possesses a certificate in force, from serving on juries and at inquests, and from serving corporate, parochial, or county offices, or in the militia.

CLAUSE 30

enacts that the registrars shall erase from the register the name of any practitioner who shall be convicted of felony or of any offence inferring infamy, or who shall have been proved to have procured a certificate by any false pretence, or who has knowingly given a false statement, evidence, or certificate, and he shall forfeit all the privileges of a registered medical practitioner.

CLAUSE 31

enacts that the words "medical" and "medicine," as employed in the Bill, also mean and include the words "physic," "surgery," and "surgical."

CLAUSE 32

provides for the amendment or repeal of the Act during the present session of Parliament.

THE SCHEDULES

were printed at length in the last LANCET, and scarcely admit of an analysis.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

### MEETING OF MEDICAL PRACTITIONERS.

A WELL attended meeting of medical practitioners of the metropolis took place on Monday evening, at the Freemasons' Tavern, for the purpose of taking steps to ensure the success of this measure in Parliament. Dr. Lankester, F.R.S., being called to preside, proceeded to say that he had merely attended with the view of giving his support to any motion for securing the passing of the Medical Registration Bill, and did not expect to be in the chair. All present appeared to have met with that object in view, and it was therefore desirable to proceed at once to business.

Two gentlemen, Mr. James Rhodes and Mr. W. M. Powell, having volunteered their services as secretaries, the following resolutions were proposed and unanimously carried:—

Proposed by Dr. Powell; seconded by J. D. Jones, Esq.:—

"That this Meeting, being of opinion that the Bill now before the House of Commons for the Registration of Qualified Medical Practitioners, and for amending the Laws relating to the Practice of Medicine in Great Britain and Ireland, is calculated to be of the greatest advantage to the public and the medical profession, pledges itself to further its progress through the Houses of Parliament by every effort in its power, and hereby calls upon the medical profession throughout the United Kingdom to petition in its favour."

Proposed by A. H. Hassall, Esq.; seconded by G. Henderson, Esq., and resolved:—

"That the following gentlemen do form a committee, with power to add to their number, for the purpose of effectually carrying out the objects of the foregoing resolution:—

"Edwin Lankester, M.D.; James Rhodes, Esq.; Henry Powell, Esq.; J. F. Clarke, Esq.; J. D. Jones, Esq.; W. B. Maxwell, Esq.; W. M. Powell, Esq.; J. E. Smyth, Esq.; G. Henderson, Esq., M.D.; W. Simpson, Esq.; Michael K. O'Shea, Esq.; J. Hunter, Esq.; A. B. Burney, Esq.; A. H. Hassall, Esq., and T. H. Cooper, Esq.—Edwin Lankester,

M.D., Chairman.—James Rhodes, W. M. Powell, Honorary Secretaries."

Some reference having been made by one of the speakers to the opposition of the Council of the National Institute to this Bill, Mr. John Dalston Jones, of Dalston, said that he was a member of that Institute, and was in *favour* of the Bill. Indeed, he could state with certainty, that all the members of that body with whom he was acquainted were of the same opinion as himself with regard to this important and valuable measure. The expression of this fact called forth loud cheers from the gentlemen present.

A liberal subscription was afterwards entered into, to defray the expenses of advertisements &c., and the meeting adjourned.

## ARMY MEDICAL OFFICERS AND THEIR RETIRING PENSIONS.

(*From Hansard's Parliamentary Debates of April 12th.*)

Sir H. Douglas.—In October, 1840, a warrant was issued, granting full-pay retirement to a limited number of officers of infantry and cavalry, to include twenty lieutenant-colonels, twenty majors, and 115 captains, of whom forty-five might be brevet-majors. This boon was soon after extended, by warrant, to a limited number of officers of artillery, engineers, and marines, and Navy. This full-pay retirement, however, having been granted to officers of cavalry, infantry, artillery, engineers, and marines, was not extended to medical officers, nor to the officers of the regimental staff—namely, surgeons, paymasters, quartermasters, and veterinary surgeons. Deeming this an unjust distinction, he, (Sir H. Douglas,) in the year 1845, in Committee on the Army Estimates, brought the subject under the consideration of the House, when his views appeared to meet with unanimous approbation, at least, no objection was urged against them. In May, 1846, a warrant was issued, granting an increased retirement to quartermasters and veterinary surgeons, to the extent of about five-sixths of their pay, but neither paymasters nor surgeons were included. The improved retirement granted to veterinary surgeons and quartermasters was eight shillings to ten shillings a day, respectively, after thirty years' service. His object was, to urge the just claims of paymasters, regimental surgeons, and medical officers, to participate in like proportion in those advantages. The principle of this arrangement was not confined to the two classes of officers to which he referred, but was established by Act of Parliament, to regulate the amount of retired allowance to all public functionaries in certain proportions to their full pay, or salaries, at the time of retirement; increasing, by twelfths, for every five years' service, commencing after having served ten. The effect of applying this would be, to increase the retiring pay of these two classes, from fifteen shillings to eighteen shillings and a fraction. The measure, as he had stated, would, to a certain extent, be self-sustaining; for the pay of a regimental surgeon who had served thirty years being £1 2*s.* a day, and that of a paymaster, £1 2*s.* 6*d.*, and the former being succeeded by a surgeon commencing on thirteen shillings a day, and the paymaster by one on twelve shillings and sixpence a day, there would obviously be a commensurate saving. But what paymaster or surgeon would give up twenty-two shillings a day in addition to the advantages which he derived from barrack accommodation, lights, fuel, a soldier servant, and the advantages of a mess, which might be taken altogether as equal to ten shillings more, to retire on fifteen shillings a day? What was the consequence? That these officers were obliged to cling to the active service long after their physical powers were too much impaired to discharge efficiently their laborious duties, and much longer, consequently, than was consistent with the good of the service or their own comfort.

With respect to medical officers and surgeons of regiments, whatever argument could be urged on behalf of paymasters might be applied with greater force to the case of that learned, most important, and, as he thought, rather neglected class, entitled on every account to the first consideration and distinction. The army surgeon, it is true, does not purchase his commission; but the expense necessarily invested on his education must not be forgotten; and he, like the paymaster, cannot realize this by sale, for the benefit of his family. No one who knows anything of the severe and painful duties which a medical officer has to discharge, and the services in which he must be engaged, in the presence of disease of every kind, facing death in every shape, can doubt of the hardships which officers of that class must have undergone during a service of thirty years. The surgeon, too, let it be remembered, must be in full possession of all his energies, keep himself well up to the mark in every improvement in practical surgery and medical science. Paymasters and quartermasters may, with rather diminished powers, cling to the service, without any great detriment to it, or inconvenience to themselves, after these had somewhat faded; but there was a period of life beyond which the medical officer, however perfect his intellect, could not discharge effectually the duties on the field, of surgeon to the regiment—a period, beyond which vision becomes imperfect, the nerve unbraced, the hand unsteady, in the difficult and delicate operations which a surgeon was called upon to perform. No man of the age of sixty or sixty-two could be expected to possess his powers unimpaired; and as the great bulk of medical officers enter the service at the age of twenty-four, thirty-two years' service would bring them near to that stage in human existence, beyond which it would be vain and unreasonable to expect that a medical officer of thirty or thirty-five years' service in all climates should retain his efficiency. Officers so circumstanced are aware of this, but continue to serve, knowing that the half-pay to which they are at present entitled is insufficient for their wants; that from bodily infirmities and deficiency of mental energy they cannot add to their income by private practice, and are unequal to compete successfully with younger and more recently educated practitioners, and therefore cling to the service. It is for the interests of the service, then, that men so circumstanced should cede their avocations to younger individuals; but this they can only be induced to do, or justified in doing, by our increasing their rates of retirement. The medical officer, while on full-pay, has no cause for complaint; this is sufficient to bind him too long to the service, and will continue to do so till the rates of retirement are increased. The honourable and gallant member then cited, from official returns, the cases of many deputy inspectors-general of hospitals, and surgeons, who had been from thirty-six to forty-three years in the service.

| Names. | Services. | Total. |
|---|---|---|
| Mahony | Peninsula | 39 |
| Franklin | Peninsula | 39 |
| Halket | Walcheren, Canada | 36 |
| Short | Peninsula | 42 |
| Staff Surgeon, 1st Class: | | |
| Stewart | Peninsula | 39 |
| Monroe | | 39 |
| Grant | Peninsula | 43 |
| Pickering | | 37 |
| Roe | Peninsula | 38 |
| White | | 41 |
| M'Lean | Peninsula | 38 |
| Melvin | | 37 |

| Names. | Regiments. | Entered Asst. Surgeon. | Surgeon. | Services. | Total. |
|---|---|---|---|---|---|
| Lewis | 1 Dragn. Gds. | 1111 | 1830 | Peninsula, from 1811 to end | 36 |
| Stephenson | 3 Dragn. Gds. | 1807 | 1813 | Peninsula, 1809 to end | 39 |
| Flanagan | 4 Dragn. Gds. | 1806 | 1813 | Canada, Peninsula | 40 |
| Barlow | 5 Dragn. Gds. | 1803 | 1813 | Copenhagen, Martinique, Low Coun. | 43 |
| Heriot | 6 Dragn. Gds. | 1804 | 1812 | Peninsula, 1809 to end. | 42 |
| Bartley | 1st Dragoons | 1810 | 1826 | Peninsula | 36 |
| Winterscale | 2nd Dragoons | 1809 | 1828 | Walcheren, Peninsula, Waterloo | 36 |
| Graham | 4th Lt. Drags. | 1809 | 1825 | Peninsula, from Jan. 1816, to end. Was on board the Kent when burnt | 36 |
| Mouat | 15 Lt. Drags. | 1812 | 1827 | Burmese | 34 |
| Henderson | 5th Fusileers | 1811 | 1826 | Peninsula | 35 |
| Leonard | 11th Regt. | 1811 | 1833 | Peninsula | 35 |
| Mostyn | 27th Regt. | 1810 | 1825 | Peninsula, Waterloo | 36 |
| Richardson | 2nd West Ind. | 1805 | 1826 | CapeGoodHope, M. Video, Peninsula. | 42 |
| Piper | Prov. Bat Chatham | 1806 | 1823 | East Indies, China, Pindarree War | 41 |

Thus he had shown, that whilst medical officers had no means of realizing, by sale of their commission, the expense of their education, and did not enjoy the advantages of an improved retirement as granted to veterinary surgeons and quarter-masters, he had now, alas! to show, that the widows of medical officers were not so well provided for, by pension, as the widows of officers of relative rank. The surgeon of a regiment ranks with captain; a staff-surgeon of the first class with major; the deputy-inspector with lieutenant-colonel; the inspector-general of hospitals with a general officer. But the widow of an inspector-general killed in action only gets £80 a year, whilst the widow of a general officer of the lowest rank —viz., brigadier-general—gets £90. The deputy-inspector's widow gets only £60, but the widow of a lieutenant-colonel £80. The staff-surgeon's widow gets £20 less than the widow of a major; and there is a difference of £5 to the disfavour of the surgeon's relict compared with the widow of a captain. The House will be sensible, that though these differences be of small amount, they are of vast importance to widows and orphans left to such slender provision. The hon. and gallant member read a letter from the widow of an officer who had served throughout the Peninsular war, and had afterwards died at Jamaica, in which she stated that she had only £45 per annum pension; but she complained, most, that she did not receive the pension to which she was entitled, as her husband had held the relative rank of major:—

"My late husband, staff-surgeon Burmester, served for twenty-four years, on constant active service, the whole of the Peninsular campaign, the battle of Waterloo, and was with the Army of Occupation in France. He was then sent to Jamaica, where, in discharge of his duty, I had the misfortune to lose him, and I was left with three little children.

"Hitherto, I have received the small pension of £45 per annum; and what I complain of as a sad grievance is, that I do not receive the pension I am entitled to, as my husband held the relative rank of a major."

Having explained the ordinary duties of medical officers, he would now beg to say a few words which he hoped would take these officers, as a class, out of the category of civil functionaries and non-combatants. The medical officer cannot be considered a non-combatant in the sense of personal risk, nor in many cases, as he could tell, of personal military gallantry. The medical officer is suddenly called upon to discharge duties which require the vigour and powers of endurance of less advanced age—to partake of the fatigue and privations, the diseases incidental to actual service—to brave every climate, to witness death in every form, and to suffer it himself, in the field, when administering to those whose lives he is endeavouring to preserve. Two surgeons of her Majesty's regiments were killed on the field of battle in the operations of the Sutlej; three at Cabul. How many of the company's service fell, he knew not. He requested the House to let him endeavour to depict the duties of medical officers on the field of battle. The action is about to commence. The medical officers attached to the troops take post in the immediate rear of their respective corps, and there prepare the implements of their mournful and painful calling. The battle begins; the active combatants, unmindful and regardless of danger, buoyed above the terror of death or of wounds by ardour and excitement which few can imagine, heed not the casualties that happen around them. Not so the medical officer. The fallen that are not beyond the reach of his skill become the subjects of his immediate care. The fiercer the fight, the more numerous these sad consignments. There, on the naked field, exposed to personal risk, and within reach of the bullets, which may have previously ploughed the ranks of the columns, or lines in their front, the medical officers, with unflinching eye, steady hand, and well-braced nerves, discharge their melancholy duties, and frequently lose their lives in endeavouring to preserve that of others. Is the battle won? The troops move forward with exultation to reap the fruits of their victory. The medical officers remain on the blood-stained field, amidst the havoc of war, to collect the mutilated victims, and administer to the sacrifices that victory exacts. Is the battle lost, or is the field, though won, abandoned, as ofttimes happens? The medical officers perform their still more painful duties on the forsaken field, and become themselves captives, in common with those who, by their aid, may survive. Then there was the assault of the fortress—the storming of the breach—which medical officers invariably attend. And this is the class—such the persons—from whom you withhold advantages enjoyed by the practitioners of a less exalted surgery. The horse is a noble animal—the veterinary science, an important and useful profession; but man is a nobler animal still—and a soldier, apart from other considerations of humanity, a more important and valuable agent. He appealed, then, in the strongest terms, to the feelings and generosity of her Majesty's government, to the House, and to the country, against the exclusion of the class of officers whose case he had taken up, from advantages which are extended to others—from a boon which all public servants, civil and military, now enjoy.

## PETITIONS IN FAVOUR OF REGISTRATION BILL.

May 3rd.—Mr. M. K. O'Shea, Mount-street, Lambeth; John Lilley, and Frederick John Lilley, High-street, Wisbech; Nathaniel Jarvis Highmore, Bradford, Wilts; Richard Savage Penkivil, Sampford Peverel, Tiverton.

May 4th.—Richard Rowland Allen and William Smith, Belper, Derbyshire; William Gibbs, Heckington, Lincolnsh. John Sykes, Sheffield; Dr. J. Machin, 29, Wicker-street, Sheffield. Practitioners of Hackney, five signatures; practitioners of St. Andrew's, Holborn, sixteen signatures; practitioners of Shoreditch, nine signatures; practitioners of Bethnal Green, nine signatures.

May 5th.—John Kerrison Preston, Esq., 31, Edward-street, Hampstead-road; Frederick Smith Garlick, 5, Cheapside, Halifax; William John Preston, Esq., 28, Upper Berkley-street, Marylebone; Medical Practitioners of Birmingham, thirteen signatures; Ralph Finch Irving, Esq., Keswick, Cumberland; Thomas Harrison Yeoman, M.D., 41, Wharton-street, Lloyd-square, London.

May 6th.—F. A. B. Bonney, Esq., 3, Trevor-terrace, Knightsbridge; David Corbet, Esq., and R. B. Jordison, Esq., Orsett, Essex; James Williams, Esq., Leintwardine, near Ludlow; Medical Practitioners of Bury, Lancashire, three signatures; Medical Practitioners of Bewdley, Worcestershire, three signatures.

## Operations Without Pain.

### ST. GEORGE'S HOSPITAL.

Since the former report, the following operations have been performed at this hospital, whilst the patients were insensible from ether:—

On April 1st, Mr. Cæsar Hawkins removed a fatty tumour from the right shoulder of a woman, aged forty-eight. She inhaled for seven minutes, and then the operation was commenced, and was performed without any sign of sensation being exhibited by the patient. She breathed a more diluted vapour for three minutes, whilst the operation was going on, when the process was altogether discontinued, and in two minutes more, the dressings were applied, and consciousness was returning. The pulse was 120 soon after the inhalation began; in a little time it was 100; then 80; and 72 just before the operation was commenced. During the operation, it was 78; and just after it, 65; and half an hour afterwards, 60.

On the same day, Mr. Cutler amputated the leg of a man, aged twenty-three, for scrofulous disease of the ankle-joint. In five minutes after he began to inhale, the operation was commenced, without causing him to flinch or cry out; he breathed a more diluted vapour during the operation, with now and then a few inspirations of air by the nostrils. Towards the end of the operation, he began to talk, and tried to move about, but did not seem in pain. When it was concluded, he said he was very drunk, but had felt nothing of the operation. This patient had symptoms of consolidation of the summit of the left lung. His cough was relieved for two days after the operation, and afterwards it was as before.

On April 8th, Mr. Cæsar Hawkins amputated the thigh of a young man, aged eighteen, for disease of the knee-joint. The inhaler was placed in water at 71°, and the operation was commenced two minutes and a half after the tap was fully turned, and two minutes and three quarters from the commencement of the inhaling. It was completed in seven minutes and a half, without causing the least symptom of pain, and the patient quickly recovered his consciousness. Ten and a half fluid drachms of ether were inhaled in this case.

On the same day, Mr. Hawkins also amputated the forearm of a man, aged forty-eight, for severe and long-standing disease of the bones of the wrist. In a minute and three-quarters after he began the process of inhaling, the operation was commenced, without the least evidence of pain; the strength of the vapour, which had been mixed with not quite its own volume of air, was now reduced, and he was allowed,

besides, to breathe occasionally by the nostrils, and soon began to show some signs of returning sensibility, by moaning a little; but the quantity of the vapour being increased a little, he was soon perfectly quiet, and remained so to the end of the operation. He inhaled for twelve minutes altogether, and used fourteen fluid drachms of ether. He quickly recovered his consciousness, and said he had not felt the operation.

On the same day, Mr. H. P. Johnson operated for hare-lip on a little girl. She became sufficiently insensible in three or four minutes, the eyes being turned up, and the muscles quite relaxed. She sat perfectly passive during the operation—the inhalation, of course, having been discontinued; and she recovered her faculties two or three minutes after it was concluded.

On April 17th, Mr. Cæsar Hawkins performed an operation for a vascular tumour of the lower lip in a woman, aged fifty-seven. Her breathing was slow and gentle, and it was seven minutes before she was considered sufficiently insensible. The inhaling was then discontinued, and the operation by needles and ligatures was performed. For two minutes the patient was passive and silent; but on the tightening of some of the ligatures afterwards, she cried out. She did not recover her consciousness till removed to bed, and has no recollection of the operation.

On the same day, Mr. Cæsar Hawkins also performed an operation for the removal of diseased bone from the metatarsus, in a little girl, aged eleven. The operation was commenced in three minutes and a half after the inhaling began, and was performed without causing any pain. The child recovered her consciousness in a minute or two, and had been dreaming about her amusements.

Dr. Snow administered the ether in these cases, and the temperature of the water in which the instrument was placed was about 67° in the cases in which it is not mentioned; and, consequently, the proportions of vapour and of air were about equal up to the time the operations commenced. When the ether was continued during the operation, a more dilute vapour, usually about twenty per cent. to eighty of air, was given, and the patient was also allowed to take a few inspirations of air by the nostrils now and then.

## WESTMINSTER HOSPITAL.

On Saturday, the 24th, two operations were performed by Mr. Hale Thomson whilst the patients were under the influence of ether. The first case was one of sinus, extending for several inches under the integuments of the chest, and forming, with a branch running off from its upper third, a figure resembling the letter Y.

The patient, a woman about twenty-five years of age, inhaled the ether very readily, and in three minutes was quite insensible. After the operation she was about five minutes before she regained consciousness; and on being told that the proceeding was over, expressed much surprise and gratitude.

The second case was one of encysted tumour, situated on the lower part of the back of a woman about thirty. The first attempt at inhalation was attended with some slight coughing and spasm, and it was thought desirable to withdraw the instrument for a few seconds; the effects on its reapplication were very rapid, scarcely a minute and a half elapsing before she was quite insensible. The tumour was removed quickly, and without the expression of any pain; indeed, the patient, on regaining consciousness, was quite ignorant of having undergone any operation whatever. The ether, in these two cases, was administered by Dr. Snow, by his inhaler.

Mr. Phillips afterwards operated on a woman with ununited fracture of the left humerus. The case had been one of long standing, and the arm was perfectly useless. The operator had stated to his patient the chances which were offered her by the proceeding, which at least was doubtful, as to success. She consented on these terms. Having been placed in a sitting posture on the end of the table, the operator made an incision of about four inches in length along the outer side of the arm. A vessel having been ligatured, the ends of the fractured bone were turned outwards to a small extent, and removed, by means of the cutting-pliers, with considerable ease. The patient had been placed under the influence of ether by means of an instrument used occasionally in the hospital. The operation was necessarily tedious, and the inhalation was continued for some time, the woman being in a state of insensibility. The patient was removed from the theatre before she had regained consciousness. We may mention here, that the area of the operating theatre contained upwards of twenty persons, who surrounded the operator so closely that it was quite impossible for any one besides themselves to see anything which took place. This justly gave rise to much discontent among the pupils, who remarked, that operations were rare enough in the hospital, but rare as they were, they never got a sight of the proceedings. Mr. Phillips animadverted upon the unjust system of crowding the area, and trusted that means would be taken to prevent its recurrence.

# Correspondence.

## MEDICAL FEES AT LIFE INSURANCE COMPANIES.

*To the Editor of* The Lancet.

Sir,—I forward you the enclosed correspondence with one of the life insurance companies, which I beg you to publish in an early number of The Lancet, if you think it will have any influence on the question of the payment of fees to medical men for their reports to these companies. It is quite time that some definitive arrangement should be come to on this question, as it is now a source of great annoyance to persons who wish to insure their lives, to medical men, and to the assurance companies themselves. To show the progress the subject has made by the perseverance of the medical profession to obtain their due, I may mention that an assurance company, (the Legal and Commercial,) the direction of which consists principally of lawyers, among whom are several Queen's Counsel, have recently come to the determination of remunerating the medical men from whom they require reports. If the profession generally will be firm in their determination to refuse opinions to the assurance companies without a fee from them, and take the trouble to explain the matter thoroughly to their patients, I believe they will not be much longer deprived of their just rights, and perhaps, in many instances, be relieved from a troublesome and awkward position. There is not so much difference in the advantages to be derived from insuring in any particular office as to induce a very decided preference; I would therefore advise medical men to recommend their patients to insure in those offices which act justly towards them.—I am, Sir, your obedient servant,

Torrington-square, March, 1847. Henry Smith.

March 5th, 1847.

Sir,—I beg to inform you, that it is contrary to the practice of this and of the old established offices generally, to give fees to the medical referees of parties assuring. As you act for your patients in all such cases, it is Mr. ———'s duty to pay for answering a reference made by him to you, the same as if he had required your medical aid in any other way.—Your obedient servant,

To Henry Smith, Esq. ———, Secretary.

March 6th, 1847.

Sir,—In reply to your letter of yesterday's date, I beg to say that I am quite aware that the old insurance companies have not the liberality to remunerate medical men for their reports as to the safety of insuring the lives proposed to them, by which reports the insurance companies have largely thriven. As I consider, in common with the medical profession generally, that our reports and opinions are entirely for the advantage and protection of the insurance companies, and that they can be the only parties benefited by them, I have steadily refused to answer their applications till I receive the fee. The proposer merely gives permission to his medical attendant to furnish the company, at their request, and for their protection, with such information as he may have become professionally acquainted with, and to state his opinion to the company as to the risk they run in insuring his life. The proposer has nothing to do with the statement made by the medical man, which is confidential to the company. Your last question is, if I "have any doubt whether he be a safe life;" and you state that the answers are held as strictly confidential, and must be sent "directly" through the post-office. I therefore think, if the company require my opinion, they are in duty bound to pay me for it; and I have only to repeat, that till I receive the fee, I must decline giving an opinion.—I am, Sir, your obedient servant,

To ———, Esq., Secretary, &c. Henry Smith.

March 6th, 1847.

Sir,—Mr. Smith, your medical referee, has refused to answer our letter without a fee; and as it is contrary to the

practice of this and of all the old established offices to pay such fees, I beg to inform you, if you wish your proposal to be proceeded with, you must satisfy Mr. Smith, and get him to send in his report.—I am, Sir, your obedient servant,

To ——, Esq. ——, Secretary.

Sir,—I have seen Mr. Smith, and I think, as his opinion is required entirely for the advantage and protection of the company, and made confidential to them, they are bound to pay the fee. I would willingly have submitted to the examination of your medical officers, and have given full sanction to my own medical adviser to give whatever opinion he might think proper regarding the state of my health, but decline paying the fee for it. I shall therefore apply to some other office, where the same difficulty will not arise.—I am, Sir, your very obedient servant,

To ——, Esq., Secretary, &c. ——.

## House of Commons,

WEDNESDAY, MAY 5TH.

(*From* THE TIMES *of Thursday, May 6th.*)

### THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

MR. WAKLEY, on rising to move the order of the day for the second reading of The Medical Registration and Medical Law Amendment Bill, presented upwards of twenty petitions from medical practitioners, apothecaries, physicians, and surgeons, in the metropolis and the provinces, and from various medical institutions, stating that they laboured under very severe grievances in consequence of the existing condition of the profession, and prayed that the Bill which had been now introduced might pass into a law in the present session of Parliament. The hon. gentleman then proceeded to inform the house that the right hon. the Secretary of State for the Home Department, who last session had promised to give his aid and assistance in passing a medical bill, had intimated, that afternoon, that deputations from some of the colleges had been appointed to wait on him (Sir G. Grey) for the purpose of laying before him the objections which they entertained to this Bill; and at the request of the right hon. gentleman he (Mr. Wakley) had consented to postpone the second reading to Monday next. He gave notice, at the same time, that it was his intention to move that, after the second reading, the Bill be referred to a select committee. Those who objected to the proposed alteration in the law would then have a full opportunity of stating their objections, and of having them refuted; and he trusted that when this necessary investigation was concluded, the house would consent to pass a measure which there could be no doubt would be beneficial to the profession and to the public. Seven medical bills had, time after time, been introduced. this was the seventh; and certainly, if this was to be successfully opposed, it was the last he would introduce. (Laughter.) The state of the medical law was at present most unsatisfactory, and he thought it was the duty of the legislature to take the subject as early as possible into consideration. Some of the various corporations, he understood, had come to the conclusion that their interests would be injuriously affected were such a measure as this to be adopted. That might or might not be the case; but, whether or not, the house was bound, in inquiring into the facts, to look to the general interest of the profession and not to the profit or loss of a few parties. (Hear, hear.) He would beg of the right hon. gentleman (Sir G. Grey) to remember that the objections about to be urged in private by the deputations he had mentioned, ought not to influence the opinion he would form on the course he should take; he ought to be guided solely by the facts, and the facts could only be brought to light before a committee of that house. Back-stairs influence had on too many occasions swayed the decisions of that house, and he was sure the right hon. gentleman was too high-minded and of too independent a judgment to give undue importance to the representations which might be made to him in private by interested and prejudiced parties. He now moved that the order of the day be read, that the second reading might be postponed to Monday next.

Sir. G. GREY had stated that morning, in answer to a question, and during the absence of the hon gentleman from the house, that he had received three deputations—one from the College of Physicians, one from the College of Surgeons, and one from the Council of General Practitioners, all pressing on him the great importance of appointing a day when they might wait on and lay before him the great objections they entertained, either to the principle of the Bill or to some of its details, previous to proceeding to the second reading. He had since received two other applications for deputations, (laughter,) one from the Society of Apothecaries, and one representing individual gentlemen; and the same representations had been made, and the same delay had been asked for. It was quite true, as the hon. gentleman had said, that objections urged in private ought not to influence the course which a member of that house should take in dealing with a measure of this nature; but as those parties were deeply concerned in the probable operation of the Bill, they had a perfect right to be heard, and it was for this reason he had requested the hon. gentleman to postpone moving the second reading until next week. The interviews would take place at the Home Office, on Saturday, and he should be very happy to see the hon. member on that occasion, (hear, hear.)

Mr. HUME apprehended that the right hon. gentleman would find it much more convenient to hear the parties to whom he alluded before a committee up stairs. All the difficulties experienced by the hon. gentleman, (Mr. Wakley,) in inducing the house to amend the medical law, had resulted from his Bill having been assailed privately: the facts of the case had always been carefully hid, and the appointment of a select committee was now the only way by which they could succeed in making the question understood and the truth known. He (Mr Hume) was afraid the right hon. gentleman would experience a great deal of trouble, and lose the whole of Saturday, in listening to these deputations; it would be much better to wait until they could be referred to a committee.

Sir J. GRAHAM thought that the appointment of a committee would very much depend on the answer which he hoped to receive from a question he would put to the hon. members for Finsbury and Montrose: would they undertake to employ their time—the first, by presiding over, and the other by attending, that committee—until all the complaints of all the deputations referred to had been exhausted? (Laughter.) If the hon. member for Finsbury would say that he would take the chair of the committee, and if the hon. member for Montrose would promise a daily attendance, he (Sir J. Graham) should be very much disposed to support the proposition. (Hear, hear.) Let them not, however, hear of loss of time. If those hon. gentlemen would not give up their time and attention to hearing the complaints which the Secretary of State professed himself ready to hear, it was not very unreasonable on the part of the house not to entertain with any great favour the proposition now made. (Hear, hear.)

Mr. HUME said this was the first time he had ever been asked to make such a promise. All he could say was, he would do his best. (Laughter.)

Mr. WAKLEY could make no such promise. (Laughter.) He firmly believed that if he did make it, and were to adhere to it, it would be at the sacrifice of his life. (Great laughter.) He feared that he should have to sit in the chair till one day after eternity. (Renewed laughter.) He agreed with the hon. member for Montrose, that the best prospect of obtaining a settlement of the disputed points would be by consenting to the appointment of a select committee. [Sir J. GRAHAM. —Over which you will not promise to preside.] He would at least promise to work in that committee to accomplish the end he had in view, and to serve the profession. (Hear, hear.) He did not, however, object to hear the deputations in private also, and he accepted the invitation of the right hon. gentleman, and would visit him at the Home Office on Saturday, for the purpose of hearing the objections of the deputations. (Hear, hear.)

The second reading of this Bill was ordered to be postponed to Monday next.

## Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted Members of this Institution on Friday, April 30th, 1847 — viz., Messrs. John Henry Walker, Dublin; Theodore Sheldon Tearne, Worcester; John William Williams, Southwell, Notts; William Hyde Cooke, Stockton, Worcestershire; William Johnson, Leeds; James Lardner Green, Holywell, Flintshire; Robert Stead Jones Stevens, Ely; Alfred Adney, Exeter; Michael M'Donnell, Randalstown, co. Antrim; and Henry John Barrett, Commercial-road.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination, and received certificates to practise, on Thursday, April 29th, 1847:—John Robert Humphreys, Shrewsbury; Richard Eliot West, Camelford, Cornwall; George Goforth Wyer, Swayfield, Lincoln; John Sebastian Helmcken; Richard Thomas Smith, London; Thomas Stillman, Steeple Ashton, Wilts; Henry Fisher, Devonshire.

THE COLLEGE LECTURES.—Professor Owen having finished his course of lectures on human and comparative anatomy, was succeeded by Professor Paget on Tuesday. This gentleman's lectures, on "Nutrition," are exceedingly well attended.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—The prizes were awarded at this school on May 3rd—Dr. Seymour in the chair.—*Anatomy:* Senior class.—Prize, Mr. T. G. Copestake; honorary certificate, Mr. R. Blagden. Junior class.—Prize, Mr. R. E. Rusher, Mr. G. King, equal; honorary certificate, Mr. T. H. Mayne.—*Chemistry:* prize, Mr. W. P. Roberts.—*Materia Medica:* prize, Mr. R. E. Rusher; additional prize, Mr. J. Parkes; honorary certificate, Mr. Woolstan Dixie.—*Medical Jurisprudence:* prize, Mr. T. G. Copestake; honorary certificates, Mr. W. Fuller, Mr. W. P. Roberts.—*Midwifery:* prize, Mr. W. Fuller, Mr. L. Parnell, equal.—*Medical Clinical Reports:* prize, Mr. H. B. Holl.—*Surgical Clinical Reports:* prize, Mr. W. Fuller; honorary certificate, Mr. John S. Gundry.—*Practice of Physic:* prize, Mr. Walter Thompson; honorary certificate, Mr. W. P. Roberts.—*Surgery:* prize, Mr. Walter Thompson; honorary certificate, Mr. W. Fuller.—*Scholarship:* Mr. G. King.

ST. GEORGE'S SCHOOL OF MEDICINE.—A public distribution of prizes awarded to the students of the School of Medicine, adjoining St. George's Hospital, took place on Saturday, the 1st of May—Sir James Clark, Bart., F.R.S., in the chair. The prizes and honorary certificates were awarded as follow:—*Anatomy and Physiology:* Mr. T. Webb and Mr. A. Brown, equal; certificate, Mr. C. H. Payne.—*Junior Anatomy:* Mr. R. E. Price, Mr. Turner, Mr. Finnimore, and Mr. H. Brown.—*Clinical Medicine:* prize, Mr. J. S. Gundry.—*Clinical Surgery:* prize, Mr. Symes. These prizes are given by the lecturers of this school to all students entering to St. George's Hospital practice, irrespective of the school at which they may have studied.—*Medicine:* prize, Mr. R. E. Price.—*Surgery:* prizes, Mr. P. Allen and Mr. T. Webb, equal; certificate, Mr. R. E. Price.—*Chemistry:* prize, Mr. W. Bloxam.—*Materia Medica:* prize, Mr. W. Bloxam; certificates, Mr. G. Fast and Mr. R. E. Price.—*Midwifery:* first prize, Mr. G. Jago; second prize, Mr. C. H. Payne.—SUMMER SESSION.—*Medical Jurisprudence:* prize, Mr. Morley; certificate, Mr. Parnell.—*Botany:* prize, Mr. W. Bloxam.—*Practical Chemistry:* prize, Mr. F. Godrich.

THE LIBRARY OF THE LATE DR. WILLIAMS, of Bedford-place, was sold on the 23rd ult. There were 181 lots. Of these only about 50 lots comprised medical books. This nearly represents the proportion, but not quite, the books having been catalogued by tens, twenties, thirties, and forties. There were in all, about 2000 volumes, of which about 700, divided into the 50 lots, were medical. The collection abounded in French books, containing the works of nearly all the more popular writers on medicine of modern times, both general and special. This was obviously the main feature. There were not many English medical books; scarcely any Latin, and not one medical classic that I saw. Among the *octavos*, lot 35 deserves to be mentioned. Williams' "Elements of Medicine," 2 (vols.) 1836—1841, (containing numerous MS. corrections, evidently prepared for a new edition.) This was not interleaved, but the margins were much written on, and the text was interlined in some places. A splendid copy of "Harveii Opera," Lond. 1766, among the *quartos*, and "Morgagni on Diseases," by Alexander, 3 vols., London, 1769, adorned the library. The *folios* were few books. I observed "Stephani Medicæ Artis Principes," and that stately work, "Icones Anatomicarum," a L. M. Antonii, and Caldani, and Venet, 1802," in 9 vols. The library was rich in volumes of the Greek and Latin classics, and also in English standard works; but my business is with the medical portion only. The books were in fine condition. I forbear to give the prices; for no end could be answered by recounting what such higgledy-piggledy lumbering bundles fetched. This system of jumbling works—always adopted by the estate-and-landed-property gentlemen, who knock down their thousands of pounds' worth with a single blow of the auctioneer's mallet, may suit the round-robin folks, and save time to the seller, but the living medical public, or the deceased owner, or his heir, derives but little benefit from it. Doubtless, however, it is "very good for trade," and we must not grumble.

TESTIMONIAL TO MR. EDWIN CANTON.—The students of the Charing Cross Hospital have presented Mr. Canton, the demonstrator of anatomy at this school, with a superb silver ink-stand and pen, in testimony of their esteem and regard for him as a teacher.

SYDENHAM SOCIETY.—The Society held its fourth anniversary meeting at its room, 54, Frith-street, Soho, on Saturday evening, May 1; Dr. Latham in the chair. The Report was read by the Secretary, Dr. Risdon Bennet, and represented the Society as in a flourishing condition. Upwards of two thousand subscriptions for the current year had already been paid. The Report went on to state that many persons had refrained from joining the Society, for fear of having to receive odd volumes in the course of their subscription, the Committee had therefore determined, that as the only unfinished work now in hand was the works of Paulus Ægineta, any new member should, instead of the last volume of that work, have some volume complete in itself, or to be completed in the year for which he subscribed. The Council hoped for the future to be able to complete each year's books in the required time. The great expenses to which the Society had been put by the three last new works, Hewson, Dupuytren, and Harvey, had precluded them from being able to add a fourth volume to the third year's subscribers. A complete edition of Hippocrates was in progress, as also a work on medical physiology, and another on medical ethics. A work on ancient medical bibliography was also in progress. The Treasurer read his Report, from which it appeared that there was a balance in hand of £700.

## CORRESPONDENTS.

*Mr. J. A. Dorr.*—In the present crowded state of our columns, it is scarcely necessary to print Mr. Dorr's communication, which is chiefly a repetition of his statement published in THE LANCET for March 13th. The real question seems to be—Did Mr. Horace Wells perform any operation upon a patient under the influence of sulphuric ether prior to Dr. Morton? This has yet to be answered. That the entire subject of preventing pain in surgical operations had been occupying Mr. Horace Wells' mind, and that he had lectured publicly in Boston on the subject, is pretty well proved. That in the account of their proceedings Dr. Jackson and Mr. Morton should have made no mention of Mr. Wells is most extraordinary, and must tend to create a powerful prejudice against both the names of Jackson and Morton.

*Veritas.*—The announcement of the change of lectures, though in bad taste, can hardly be termed quackery. The other points are deserving of the most condign reprehension, and they shall have it.

*Scrutator's* proposal to test the good faith of the evidence given by Dr. Venables in the Cronin case shall be published next week.

*W. H. P.*—The college has the right to grant the M.D. Scotch M.D.'s cannot legally practise in England. We refer to the leading article in the present number on this point.

*Confidence in our opinion.*—There is not much probability of prosecution. Still, the matter is never certain, and cannot be until a Registration Bill has passed into law.

*Mr. Fras. Wardell.*—The information required is contained in the last Students' Number of THE LANCET.

*W. S.* (Buckingham) is thanked; he will see that we have availed ourselves of his favour.

*One of the Jury.*—We can see no reason for holding an inquest at all under such circumstances.

*Mr. Bromley.*—You are clearly entitled to the fees.

*Inquirer.*—We fear there is no such medical society in existence.

A correspondent states that a portrait of HOLLOWAY, the quack, stands No. 277 in the Exhibition of the Royal Academy of the present year; and that in the catalogue he is given the title of "PROFESSOR"! Have the Royal Academy a fellow feeling for quacks?

*Mr. Gray.*—We gave the fullest contradiction to the infamous calumny in the *Times* newspaper of Thursday, May 6th. Anything more false than that such instructions were given to counsel was never uttered. The atrocious lie carries with it its own contradiction. We have plenty of rods in pickle for all the libellers, and shall punish them at our leisure.

ERRATA.—In page 455, line 49, first col., *for* "pelvic oblique ovata," *read* "pelvis obliqué ovata;" page 456, line 8, first col., *for* "outlets," *read* "outlet."

A number of valuable communications are in type, but are obliged to stand over till our next. Among these are papers by Mr. Haynes, "On Hydrophobia," Mr. Hunt "On Ovarian Tumours," Spectator, &c.

Communications have been received from—Mr. Robins; W. S., (Buckingham;) Mr. Lithgow, (Weymouth;) Mr. Sharman, (Daventry;) Dr. Robert Dick; One of the Jury; Mr. Sheppard, (Stonehouse;) Veritas, (Bristol;) Spectator; Philanthropos; Mr. J. A. Dorr; Professor Simpson; Mr. I. B. Brown; Dr. F. Bird; Mr. Bishop; Dr. Henry Bennet; Dr. Ormerod; Dr. Watts, (Nottingham;) Scrutator; W. C. B., (Bedford Infirmary;) Mr. Wardell, (Winchester;) Mr. C. H. Bromley, (Stafford;) L. S. B.; Mr. Ford, (Islington;) Inquirer; Mr. Shephard; Mr. Evans, (Margate.)

## Deformities of the Chest and Spine.—

EDWIN EAGLAND'S New Invented INVISIBLE SPINE SUPPORTS are respectfully submitted to the Profession, in the confident assurance that they will be found well deserving their notice, their usefulness in assisting in the correction of LATERAL CURVATURE having acquired for them the patronage of the highest surgical authorities. As any attempt at a description must needs fall short of giving a correct idea of the plan itself, Mr. EAGLAND solicits an inspection. They are remarkably light, beautifully simple, and eminently successful; quite imperceptible, and conceal the deformity from the keenest observer.

21, Coventry-street, Haymarket, London. Hours, 12 till 6.

## Messrs. Lane & Rathbone, Medical

Agents, 13, John Street, Adelphi, are instructed to negotiate the TRANSFER of various Practices, both in Town and Country, the receipts from £200 to £1000 per annum, the particulars of which may be obtained on application, personal or by letter. Gentlemen in the country supplied with Assistants without charge.—Office hours from Twelve to Four.

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30, Bucklersbury, Cheapside, in offering his services to the members of the Medical Profession, has the satisfaction of being permitted to give reference to gentlemen of the highest respectability, between whom he has been engaged in matters of Transfer and Partnership.

Mr. Orridge takes leave to point out that his Agency offers particular advantages to those ABOUT TO RELINQUISH PRACTICE, EITHER WHOLLY OR IN PART, by placing them in direct communication with applicants for purchase of suitable professional standing and pecuniary resources, an INDISCRIMINATE publicity being carefully avoided.

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## Private Lunatic Asylum.—To be disposed,

of in the most eligible part of St. John's Wood, a newly built VILLA, containing 18 large and lofty rooms, fitted with every convenience, and spacious Garden attached. The depth is 330 feet, the frontage 80 feet. The rent on lease will be £140 per annum, or the freehold may be purchased. Land tax redeemed.—For particulars apply to Mr. Orridge, 30, Bucklersbury, Cheapside.

## An M.R.C.S. of England, who has

some lectures to attend, wishes for a situation as VISITING and DISPENSING ASSISTANT in London. Salary not an object. Address A. B., LANCET Office, 423, Strand.

TO MEDICAL STUDENTS AND PRACTITIONERS.

## A Small Collection of Select Medical

Books FOR SALE by a Gentleman in town leaving the profession. To be disposed of on the most liberal terms.—Apply by letter, addressed S. S. S., Mr. Bulgin, 221, Regent-street.

TO THE MEDICAL PROFESSION.

## To be Disposed of, a snug Business,

doing £400 per annum, as a chemist's and druggist's, but which in the hands of a medical practitioner might be increased considerably. Premium for lease, fixtures, and fittings, £600.—For cards of address, apply at Mr. Price's offices, 48, Chancery-lane.

## Partnership.—Wanted, a Married Gen-

tleman, of the medical profession, as PARTNER in a Hydropathic Establishment. A premium required.—Apply to Messrs. Nicholls and Doyle, Solicitors, 48, Bedford-row, London.

## Wanted immediately, by a General

Practitioner, a qualified VISITING and DISPENSING ASSISTANT. References will be required, and preference given to a person of active habits, and accustomed to Union and Country Practice.—Apply to C. M., Messrs. Garnet and Milner, Druggists, Paternoster-row, London.

## Wanted, an Assistant to a Surgeon in

a Mining District. He will be required to Dispense and attend Midwifery, &c.—Apply to Mr. J. Hartill, Surgeon, Willenhald, Staffordshire.

## A Gentleman possessing the double

qualification of M.R.C.S.L. and L.A.C., wishes for a RE-ENGAGEMENT, chiefly as a VISITING ASSISTANT.—Address, post-paid, A. B. C., Post-office, Banbury.

## Mr. E. E. Barron, F.R.C.S., Demon-

strator of Anatomy, continues to give COURSES of MEDICAL and SURGICAL TUITION, adapted to Gentlemen preparing for EXAMINATION at the College of Surgeons, Apothecaries' Hall, College of Physicians, Army, Navy, and India Boards, and Universities of London, and of Scotland, at his Class-room, 16, St. Thomas's-street East, Borough.

Mr. Barron receives two or three Gentlemen as House-Pupils. Residence, 15, St. Thomas's-street, Borough.

## Wanted by a Surgeon in the Country,

a qualified ASSISTANT. A comfortable home and gentlemanly treatment are offered him.—Letters to A. B., Post-office, Bromyard, Herefordshire, stating age, qualification, and references, will be attended to.

## Number One, Saint Paul's Churchyard.

—The best COFFEE, whether choice old mountain Mocha or Jamaica, 2s. per pound; coffee mellow in ripeness and richness of flavour, 1s. 6d. and 1s. 8d.; good strong, full-flavoured coffee, 1s. 2d. and 1s. 4d.; inferior kinds, from 9d. upwards. These are the prices of some of our coffees, but as much is being daily said and written on the price and quality of coffees, we will endeavour to show the present market value of a few of the principal sorts:—

| | Price per cwt. for raw coffee. | British duty & add 5 per cent. | Selling prices at "Number One" for Roasted Coffee. | |
|---|---|---|---|---|
| | | | Per Cwt. | Per Pound. |
| | s. s. | d. | s. d. s. d. | s. d. s. d. |
| Jamaica | 28 to 70 | 4 | 84 0 to 144 8 | 0 9 .. 1 3½ |
| Good to finest | 75 .. 130 | 4 | 149 0 .. 224 0 | 1 4 .. 2 0 |
| Ceylon | 40 .. 38 | 4 | 107 4 .. 130 8 | 0 11½ .. 1 2 |
| Good to finest | 60 .. 96 | 4 | 133 0 .. 177 4 | 1 2½ .. 1 7 |
| Berbice and Demerara | 30 .. 80 | 4 | 83 8 .. 156 4 | 0 9½ .. 1 4½ |
| Dominica and St. Lucia | 30 .. 75 | 4 | 133 0 .. 151 8 | 0 9½ .. 1 4½ |
| Mocha | 50 .. 100 | 6 | 144 8 .. 224 0 | 1 3½ .. 2 0 |
| Costa Rica | 33 .. 60 | 6 | 121 4 .. 156 4 | 1 1 .. 1 4 |
| Java | 36 .. 54 | 6 | 128 4 .. 140 4 | 1 1½ .. 1 4 |
| Cuba | 37 .. 80 | 6 | 128 4 .. 182 0 | 1 1½ .. 1 7½ |

By the above list it will be noticed that we supply the public retail, not only at wholesale prices, but we may say at merchants' prices, which, being ourselves merchants, we are enabled to do, and give them every advantage. —DAKIN and Compy., tea-merchants, Number One, St. Paul's-churchyard.

## Dec. Aloes Comp. P. L. — R. and Z.

FINCHAM beg respectfully to call the attention of the Profession to their IMPROVED Preparation of the COMPOUND DECOCTION OF ALOES. The ingredients and proportions are the same as in the London Pharmacopœia—the advantage possessed by this Preparation being in the method of preparing it. In this Decoction the fine genuine Soccotrine Aloes and picked Gum Myrrh are invariably used; these, with the proper quantum of Saffron and Liquorice, are held in *perfect solution*, which always retains its bright colour, and is free from any deposit (always to be found in that prepared in the common way.) The improved and careful method of preparing this article renders it far more grateful to the palate, and agreeable to the stomach, and a Preparation that may always be relied on. Prepared only by R. and Z. Fincham, Chemists, &c., and sold by them in quantities, from one pint upwards, at 57, Baker-street, Portman-square, adjoining the Royal Bazaar.

ROYAL GERMAN SPA, QUEEN'S PARK, BRIGHTON.

UNDER HER MAJESTY'S ESPECIAL PATRONAGE.

## Struve's Pump-room and Promenade,

offering every facility for taking a course of Mineral Waters in precisely the same perfection and with the same benefit, as at the natural Springs, ARE NOW OPEN for the TWENTY-SECOND SEASON, and will close in November.

Struve's Waters are also sold in bottles; and orders are executed throughout the year by Struve and Co., Brighton; and by their Agents, George Waugh and Co., Chemists to the Queen, 177, Regent Street, London; and numerous other respectable houses in London and other towns, where a succinct account of the waters, and of their application, including the highest medical testimony, may be obtained gratis.

To the waters of Vichy, Salzbrunnen, Saratoga, Homburg, Kreuznach, Kissingen, Marienbad, Eger, Spa, Pyrmont, Pullna, Seltzer, Fachingen, &c., sold in glass bottles, are now added, in stone bottles, those of Carlsbad and Ems, with directions respecting their temperature.

STRUVE and Co. feel it necessary to caution the public against spurious articles.

## Elastic Surgical Stockings, and Knee-

caps, of a NEW FABRIC, for varicose veins, weakness, &c., are introduced by POPE and PLANTE, 4, Waterloo-place, Pall-mall. They afford the requisite compression and support, with sufficient elasticity to draw on, WITHOUT THE TROUBLE OF LACING. The very great convenience of this ingenious application, and the efficiency of its uniform pressure, are attested by the particular approval of the most eminent practitioners. Instructions for measures to be had on application, and the articles sent by post.

# Medical Registration Bill.—At a Meeting

of qualified Medical Practitioners, held at the Freemasons' Tavern, on Monday evening, May 3rd,

Dr. LANKESTER, F.R.S., in the Chair,

The following Resolutions were unanimously adopted:—

Proposed by Dr. POWELL, and seconded by J. D. JONES, Esq.:

That this meeting being of opinion that the Bill now before the House of Commons for the Registration of qualified Medical Practitioners, and for amending the Laws relating to the Practice of Medicine in Great Britain and Ireland, is calculated to be of the greatest advantage to the public and the medical profession, pledges itself to further its progress through the Houses of Parliament by every effort in its power, and hereby calls upon the medical profession throughout the United Kingdom to petition in its favour.

Proposed by A. H. HASSALL, Esq.; seconded by G. HENDERSON, Esq., and resolved:

That the following gentlemen do form a Committee, with power to add to their number, for the purpose of effectually carrying out the objects of the foregoing resolution:—

| | |
|---|---|
| Edwin Lankester, M.D. | James Rhodes, Esq. |
| Henry Powell, Esq. | J. F. Clarke, Esq. |
| J. D. Jones, Esq. | W. B. Maxwell, Esq. |
| W. M. Powell, Esq. | J. E. Smyth, Esq. |
| G. Henderson, Esq., M.D. | W. Simpson, Esq. |
| Michael K. O'Shea, Esq. | J. Hunter, Esq. |
| A. B. Bursey, Esq. | A. H. Hassall, Esq. |
| T. H. Cooper, Esq. | |

EDWIN LANKESTER, M.D., Chairman.
JAMES RHODES, } Hon. Secs.
W. M. POWELL, }

The Committee met again on Thursday evening. All communications are requested to be addressed to the Honorary Secretaries, at the Freemasons' Tavern.

# The National Institute of Medicine,

Surgery, and Midwifery.

At a SPECIAL MEETING of the Council of the National Institute of Medicine, Surgery, and Midwifery, held at the Hanover Square Rooms, on Friday, the 30th of April, it was unanimously resolved,—

That a Bill, now before the House of Commons, generally known as a Medical Registration Bill, having been brought under the consideration of the Council of the National Institute, specially convened to consider its provisions, the Council are unanimously of opinion, that the said Bill, in most of its enactments, is highly objectionable, and would be prejudicial to the public interests and injurious to the Medical Profession if it should become the Law of the Land.

That whilst professing to establish a correct registry of Qualified Medical Practitioners, it aims at the subversion of the only protection which the Public and the Profession possess in the Act of 1815, by which the education and attainments of the general practitioners have been raised to their present standard.

That it would permit persons possessing a single qualification as a physician or as a surgeon, or as an apothecary only, to practise the three branches of the profession,—who, according to the present laws, are unqualified so to do,—thereby, necessarily encouraging an inferior curriculum of Medical Education.

That without providing an efficient Medical Board to share the responsibility, it would give the Secretary of State the most arbitrary power over the Profession; that it would confer an equally arbitrary power on the Councils of the several Colleges, which might be exercised to the total ruin of individuals or classes, without the offences being clearly defined or any constitutional appeal provided.

That the mere Certificate of the Registrar would constitute the only legal title to practise—thereby destroying the privileges of the Colleges of Physicians and Surgeons, and also of the Apothecaries' Society.

That it would give increased facilities for practising Medicine to the Chemists and Druggists which the interests of the public require should be suppressed or controlled.

That, thus, although usually regarded as a mere "Registration Bill," if enacted into a law it would subvert all the existing relations of the Profession without settling any of the more important points of the long agitated question of Medical Reform;—on the contrary, it would leave the question of Medical Education in the same unsatisfactory state as previous to the passing of the Act of 1815. For these reasons the Council consider that the Bill ought to be most strenuously opposed.

By order of the Council,
GEORGE ROSS, Secretary.

4, Hanover-square, May 3, 1847.


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"Believe me, yours faithfully,

"JOHN RYAN, M.D., M.R.C.S.,
Professor of Chemistry to
the Royal Naval College, Portsmouth, &c.

"To Wm. Maugham, Esq."

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# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

It has appeared better to collect, in the form of a general summary, such remarks as did not immediately arise from the cases of fever detailed in the few preceding papers, rather than to overload each case with observations which might have but a remote connexion with it. But although the following observations claim to be fair inferences from the cases which have been treated in the hospital during the last year, they must be considered rather as relating to fever in general than to be the exact account of that particular epidemic to which limits of time have been thus arbitrarily prescribed. For by the nature of the author's office, an unduly large proportion of fatal cases fall under his notice. To admit any case into a general analysis which has not actually been watched, merely on the strength of its being entered on the hospital books as fever, would admit a source of fallacy to an extent which only those who have examined each case could be aware of. It seems absolutely necessary that the elements of an analysis of cases of such a disease as fever, whose essence, indeed, consists, in many cases, of our inability to find out any local cause for the constitutional symptoms, should be examined by the same person. And in the impossibility of examining the whole number, though greater accuracy might have been perhaps obtained by exactly recording the whole experience of one physician only, circumstances rendered it more convenient to present them as they were collected at random from the practice of the physicians, always the cases of greatest severity, or the most instructive in points of treatment, subject to fallacies from such causes, and with all the imperfections of the author's diagnosis.

But it must not be supposed that causes which render a description inapplicable to its particular subject give it therefore the value of a general observation—a statement proved false by the only test of its accuracy to be therefore assumed as universally true: the general application of these inferences rests on higher authority. A most striking analogy exists, as has been kindly pointed out to the author of these remarks, between the cases observed last year and those on which Andral's observations in his first volume are founded—a resemblance in the symptoms, in the nature and situation of the organic changes when existing, and in their occasional absence. It were much to be wished that the same talent and earnest desire after truth which characterize those observations could extend this similarity beyond the subject itself into the mode of investigation.

The history of each particular symptom may be found in the works of Andral, Louis, or Chomel, worked out with more exactness, and at greater length, than the object of the present communication would allow of, or give any interest to. The following remarks apply almost exclusively to various points of treatment or diagnosis which excited interest in particular cases, the further details of which were not of sufficient interest to be presented here, or the point itself was not of a nature to be elucidated by a single observation. Such remarks, of whatever nature, whether relating to the treatment or to the morbid anatomy of the disease, have been classed together, according to the part of the body to which they refer. To enlarge the numbers for analysis on particular points, cases have been occasionally introduced which are not dwelt upon elsewhere. Any fallacy has always been avoided by the use of a new number on such occasions, and the present notice is to assure the reader that this occasional change of number does not arise from inadvertency.

*Skin.*—The eruption on the skin in fever has always attracted much attention, and deservedly; for although of little moment in itself, yet a character so striking, and so easily detected, is useful in connecting the epidemic of one period with those of others, which have now become matters of history. With regard to its diagnostic value, nothing further need be said than that until the same eruption, trivial as it is in many cases, amounting only to a few papules or spots, can be shown to occur under the same circumstances in any other class of cases of acute disease, the belief of the specific connexion of these spots with continued fever must be maintained.

Yet it must not be supposed that fever cannot exist without this eruption; for in thirty-five only of fifty-two cases in which the eruption was looked for was it clearly distinguished, and in these it exhibited characters so different as only to be included under a very wide definition, rather than adopt which it seems advisable to speak of them as so many forms of rash, taking their name from their most prominent features. In seven cases, accordingly, the rash was composed of distinct red spots, scarcely, if at all, elevated, and fading on pressure. Of these three died. The eruption appeared about the fifth day; but the observations on this point are much limited by the rash not having attracted the patient's attention, in several cases, until it was pointed out to him on admission. All such cases are necessarily excluded from the determination of the above question.

In eleven the rash was papular—that is to say, made up of raised red spots, fading on pressure, fewer in number than the spots composing the spotted rash, appearing about the seventh day, or sometimes not till the third week, and numbering only two fatal cases.

But in thirteen cases the rash had no such definite form, but existed as a general mottling of the skin of the chest and abdomen, commencing about the eighth day, three of these cases having terminated fatally. In four there was a generally diffused, dusky redness. There are no facts to tell with accuracy at what time it commenced; but it was only seen in very severe cases, three of them having been fatal.

*Petechiæ*, as already noticed, occurred in only three cases; and if we exclude one case, where, probably, they were nothing more than a fresh crop of purpura spots, they seem to have appeared exactly at the end of the second week in the other two cases, one who recovered having been previously marked by spotted rash, and the other, who died, by diffused, dusky redness.

*Desquamation.*—Keeping out of consideration those cases in which it merely resulted from the drying up of miliary vesicles, though neither was miliary eruption always followed by desquamation, we find noticed as having occurred in four cases. In two of these it appeared on the tenth and thirteenth days, following a papular and mottled form of eruption respectively. In the two others it followed, on the thirteenth and nineteenth days respectively, the appearance of a diffused rash, which in the first there was great reason to consider as the rash of scarlatina, the desquamation in this case preceding the appearance of the ordinary mottled rash of continued fever by two days. (Case 55.)

There is much room, on a question like this, for difference of opinion. It is believed that the desquamation observed in cases of fever is no more than the separation of the cuticle, which is to be seen after confinement to bed from any cause; and the four cases just alluded to are the only ones which presented this separation to such a degree as to merit any higher term than a scurfy state of the skin—desquamation. But this derives its sole interest from its relation to another question—namely, whether the rash is an integral part of the fever to the same degree as is the rash of scarlatina or measles. This question has, by the analysis of the present cases, been apparently answered in the negative.

Another affection of the skin which has claims to notice rather on account of its prognostic than its diagnostic value, occurring, as it generally does, at a period when all doubt as to the nature of the disease has long since been removed, is the miliary eruption, which has been noticed in twelve cases, appearing generally on the nineteenth day; five times as the only eruption, twice where the papular had previously existed, four times with the mottled, once with the diffused form, and once with petechiæ. Three of these cases terminated fatally, but in only one of them can this rash be said to have marked the period of death, for in the other two it was coincident with the slight improvement in the symptoms which preceded dissolution by five days and nearly two months respectively.

In the nine remaining cases this eruption certainly marked the period about which they were getting better, but not so clearly as in any single case, except perhaps Case 52, to be considered critical. Against this we must set two cases, (Cases 54,) where, though the patients ultimately got well, yet the appearance of the rash was by no means a sign that they were out of danger. In four cases its appearance was accompanied by profuse perspiration, in the others the skin was warm and moist, but no remarkable perspirations coincided with the eruption.

The real value of a sign of which we do not understand the meaning, for neither did this eruption accompany exclusively

any particular form of complication, can only be expressed by numbers, small as those may be; it betokened an improvement as 11:1; it promised a favourable issue to the case as 3:1.

But numbers give a very inadequate representation of the acts of a case where words cannot exactly convey the idea. A tabular analysis would show that the skin had been warm and moist throughout the whole course of the disease in the majority of the cases; but how different is the meaning conveyed by these words at the beginning of the disease from what it is at the termination; at one time a symptom of exhaustion, at another, of returning health. Dryness and moisture are terms which can easily be understood, but a far more important peculiarity of the skin must be actually observed before it can be fully appreciated—namely, the softness so characteristic of returning health in fever. But it would be ill wasting time on an analysis of mere symptoms, which have in themselves no influence on the life or death of the patient, but must be practically known to be made available for good. We proceed to investigate the symptoms referrible to particular organs; and first, those of the nervous system.

*Nervous System.*—The earliest symptom of all in fever—namely, the rigor, total prostration of strength, and vomiting, by which the disease is so often ushered in, probably belong to the nervous system; but having on a previous occasion alluded to the general meaning of the initiatory symptoms, the only point remaining here for consideration is the occurrence of rigors during the course of the disease. These have been observed four times in the present series of cases, their indications generally being the same as under ordinary circumstances. Thus, twice they have appeared referrible to the supervention of fresh disease, and twice to collapse, from which last condition, however, one of the patients was recovered by the timely exhibition of stimulants.

An analysis of the cases under consideration shows that they all presented some symptoms referrible to the nervous system; the fact could hardly be otherwise; indeed, the same might be remarked of a set of cases of any disease of equal average severity with those which have been here described. But if the more severe cerebral symptoms be separated from the slighter affections, such as headach, it will appear, that in very few instances was the stress of the disease, as indicated by these so-called cerebral symptoms, on the nervous system.

Of fifty-two cases in which this particular class of symptoms was looked for, all had headach, commencing, in thirty of them, on the first day of the attack of fever. A symptom so generally manifested, and the assurance of its existence depending so entirely on the confused sensations and recollections of patients, cannot lead to any satisfactory inferences as to its meaning. In the case (39) where the cerebral disturbance was most marked it appears to have been absent.

Out of the same number thirty-nine were delirious, of whom fifteen died. In some of the fatal cases, the delirium only came on just before death, as it might do in any disease, and subtracting these, the remainder, judging merely from the later date of commencement of delirium in them than in the successful cases, would lead to infer that early delirium is not a very unfavourable prognostic. But the mention of delirium in an analytical table, where too, unfortunately, the distinction between delirium as occurring by day or night has not been throughout observed with the care which its practical importance demands, is a very different thing from the analysis of each case by the bed-side, and the author would not, on the strength of the above facts, at all hesitate to hold the generally-received opinion, that early, wild delirium by day, especially with a propensity to suicide, is one of the most unfavourable signs in fever.

Deafness is a symptom which causes considerable difficulty in the investigation of a case of fever; itself of rather a favourable import than otherwise, when occurring in a case already otherwise distinguished as a severe one. Of fourteen patients thus affected, four died.

Subsultus tendinum is generally one of the most discouraging symptoms; there is more cause for satisfaction in saving a patient after this condition has fully manifested itself than after any other occurrence, except coma, in fever. Yet it is not a symptom immediately preceding death, four or five days occasionally intervening before that event; an anxious period, during which, whatever may have brought the patient to that condition, a sound constitution and careful nursing are generally the only grounds of hope. Of eleven cases where this symptom was noticed, seven died; but in one of these, it must be observed, this dangerous period was safely got over, and the patient died more than two months after, from peritonitis, resulting from ulceration of the bowels. (Case 46.)

In all the cases but two, in which the body was examined after death, the brain was found healthy. In these two it is said to have been congested. But it is probable that this condition of the brain had nothing to do with the cerebral symptoms, which, indeed, were rather those of exhaustion in the two cases, for one of the patients (41) died suddenly from hæmorrhage into the bronchi; and the other (55) bore marks of great pulmonary obstruction during the latter days of her life.

Morbid anatomy would tell us, then, that there was not much cause for apprehension in any of the cerebral symptoms; but even were this inference not vitiated by the well-known fact, that death may result from causes acting on or through the brain, without leaving any traces of disease, as in case 39; the relief of pain, especially when that pain interferes with the functions of the body, is too important an indication to be overlooked. In the cases marked as having generally presented severe cerebral symptoms, the treatment was for the most part stimulant, as if those symptoms had arisen from exhaustion. But taking the cases the other way, inquiring into the results of the treatment directed to subdue such symptoms as they casually arose, though they might not constitute the chief characteristic of the fever throughout, we find these means to have been attended with very satisfactory results.

In severe cases leeches were applied to the head, or blood was taken from the temples by cupping, three times with marked good effect, for the relief of headach, other general antiphlogistic treatment being employed at the same time; in two of these cases the application was repeated; in another case of headach, the use of these means was attended with no good result. Again, to calm noisy delirium, and to quiet uneasy feelings, combined with the use of general stimulants, local depletion was found of much good in two cases; in another case, under the same circumstances, depletion was employed, where drowsiness seemed to be passing into coma, without any particular effect.

Of five cases in which the effects of blisters to the head were noticed, it does not appear that positive good resulted in more than one case. The explanation lies partly in the fact, that blisters to the head are occasionally used during the latter stages of fever on the general indication of rousing the patient from almost hopeless coma; thus enlarging the number of cases where blisters have failed to fulfil the indication on which they were used by applying them to cases beyond their reach. In the one case the headach, vomiting, and delirium, all ceased on the application of a blister to the scalp.

The mode of its application, wherein its great utility consists, excludes from consideration here the use of cold lotion to the head, a remedy, from the employment of which a greater amount of comfort has been derived than from any other single means, and for whose use no analysis could furnish a safer guide than that which is habitually employed, the feelings of the patient from hour to hour.

There is nothing in the particular treatment of the other symptoms, manifested through the nervous system, which calls for consideration in this place, apart from the treatment of fever as a whole.

*Lungs.*—The symptoms referrible to the lungs have been set down generally under the heads of cough, pains in the chest, bronchitis, and pneumonia. It is rarely, however, that the two first mentioned become of sufficient importance to require special treatment without their being reduced by auscultation under one of the two last more definite names.

Bronchitis was met with most frequently in the months of April and September, occurring commonly in the course of the second week or earlier. Pneumonia was observed mostly in some cases of extreme severity which were under treatment in October, this complication occurring generally after the third week.

On the whole, the pulmonary complications were not frequent, nor did they appear to be very important. There were about ten cases of bronchitis, and the same number of pneumonia; two of the first and three of the latter died. But it cannot be said that the two first died of the bronchitis; and this symptom never appeared to demand any special local treatment. Death, however, seemed in great measure referrible to the occurrence of pneumonia in two of the last three cases.

In three cases of bronchitis, it was thought necessary to employ local treatment: in one of these, slight local depletion relieved the cough; in the two others, blisters relieved the

cough and pain in the chest, and, combined with general stimulants, exercised a very favourable influence on the symptoms generally. In seven cases of pneumonia local treatment was employed. From six of these blood was taken away by cupping or by leeches—in four of them with most marked relief to the cough, dyspnœa, and pain in the chest; while one derived great relief from a somewhat complicated prescription, of which leeches to the chest formed a part. In the other case (33) apparently no benefit was derived from their use, as employed at too late a period.

In one patient, acute laryngitis, requiring tracheotomy, occurred during convalescence; but the connexion is not clear enough to justify its being placed among the pulmonary complications of fever. The case, however, possesses sufficient interest to induce us to insert in this place some account of its most prominent symptoms.

FEVER, WITH DELIRIUM; SUBSEQUENT LARYNGITIS, REQUIRING LARYNGOTOMY; RECOVERY.

Case 56.—Guiseppe S——, aged forty-two; admitted Nov. 10th, 1846; John back ward. An Italian, of slight make, and thin; face dusky and anxious; tongue dryish, tremulous, with a thick brown fur on the dorsum; pulse 104, small, and soft; respirations 32; bowels regular; abdomen full, tolerant. He has shivering, giddiness, and headach, of about three weeks' duration, coming on gradually. Ordered, fifteen minims of compound spirits of sulphate of ether every six hours, and half an ounce of castor oil to-morrow morning; four ounces of wine daily, and broth diet.

Twenty-second day.—Noisy and violent at night; now sensible, and complaining of headach and vertigo; pulse 110, small, and weak; bowels once freely open; tongue dry and trembling, with a thick brown fur. Ordered, half a drachm of compound spirits of sulphuric ether, out of camphor mixture, every four hours; to continue the wine.

Twenty-third day.—Little sleep; muttering delirium; face flushed, tongue a little moist; pulse 110, soft; bowels not open; abdomen tense. Ordered to continue the draught, with five minims of tincture of opium; to take five grains of compound mercury-and-chalk pill thrice a day, and eight ounces of wine daily.

Twenty-fourth day.—Good sleep; pulse 126, fuller, soft. Continue.

Twenty-fifth day.—Sleeps well; tongue moister; pulse 126, soft, as before; bowels not open; abdomen full and soft.

Nov. 21st.—The notes have generally the import of health slowly returning from the condition above mentioned, till the thirty-second day, when he complained of pain in the region of the larynx; his respiration was loud, and auscultation discovered some large crepitation in both lungs behind, the general symptoms remaining much the same. Ordered to omit the wine; to take a pound of beef for tea instead, and a saline draught, with half a drachm of oxymel of squills, and half a drachm of spirits of nitric ether, every six hours; and to have a blister plaster applied to the throat.

23rd.—The blister has risen well; pulse 118, small, and soft. He sleeps pretty well, but his breathing is very loud and shrill. He has some difficulty in swallowing, and complains much of pressure on the larynx. He has a frequent, croupy cough. Ordered, to continue the draught; to take two grains of chloride of mercury, and half a grain of opium, every six hours; and to apply eight leeches to the throat.

24th.—The larynx is less tender; skin warm and dry; pulse 112, soft, small; bowels freely open. He had tolerable sleep, but suffers much from cough, which is croupy and accompanied with a feeling of choking; the difficulty of swallowing continues. Ordered to continue; to have a blister plaster applied to the top of the sternum.

25th.—The blister has risen well; he bears pressure on the larynx better, and appears altogether easier. Ordered to continue.

Towards evening the dyspnœa became urgent, the breathing very loud and shrill. These symptoms increasing, so as to threaten suffocation, an emetic was given, which acted immediately, with great but not permanent relief, for at ten P.M. he was again fighting for breath, with cold extremities, and an anxious, livid face. When Dr. Burrows saw him, a little later, he was sitting up in bed, with loud, croupy breathing heard all over the ward; his extremities were still cool, but his face had lost its lividity. He was very anxious and frightened, and afraid to try to sleep. Pulse 120, and small. It was determined to open his trachea, not altogether on account of the urgency of the present symptoms, which had in some degree relaxed, from whatever cause, but as the only means of ensuring safety through the night. The hæmorrhage was so great from the subcutaneous vessels near the top of the sternum where the blister plaster had been applied, that it was thought best to make the opening between the thyroid and cricoid cartilages. Immediate relief followed the operation, and he slept quietly for many hours.

26th.—Troublesome cough, with free expectoration through both the tube and the larynx; pulse 126, weak; tongue moist, with a white fur on the dorsum; face clear. Ordered, one-sixth of a grain of acetate of morphia, and half a drachm of oxymel, at once, and to be repeated occasionally should his cough be troublesome.

The notes taken from day to day represent him with a pulse gradually falling in frequency; tongue moist, with thin fur. All the bodily functions performed regularly, the only suffering being from the rapid clogging of the canula by the bronchial secretion, which was abundant and very adhesive. He slept well, and swallowed easily. The treatment was confined to some slight opiate and expectorant mixtures from time to time, the chief care being to keep the canula free, and to preserve him from the cold. He can hardly be said to have been in danger at any time after Nov. 26th, but it required careful daily examination to be assured of his safety.

The tube was removed Dec. 7th, and on Dec. 13th the wound was entirely closed by firm, healthy granulations.

He remained in the hospital till the beginning of January, liable to a croupy cough after any slight exposure to cold, but no symptom requiring any particular notice having presented itself; and when he came again to show himself, after the interval of a fortnight, he reported himself as having continued quite well.

## Original Papers.

OBSERVATIONS ON

# DISLOCATIONS OF THE ASTRAGALUS;

AND AN ACCOUNT OF THE DISSECTION OF AN UNUSUAL FORM OF DISPLACEMENT OF THIS BONE.

By EDWIN CANTON, F.R.C.S.E.,

DEMONSTRATOR OF ANATOMY AT THE CHARING-CROSS HOSPITAL MEDICAL SCHOOL.

When we consider the firm manner in which the astragalus is confined to its place between the tibia and fibula, and look to the great strength of the interosseous ligament and the arrangement of the fibres which secure and support the position of its head, we should expect a dislocation of this bone would very rarely happen; but on reference to surgical works, it will be found that not a few cases of this accident are there recorded.

It is gratifying, however, to find that the resources of Art in the alleviation of the mischief are great, and that where these fail, the efforts of Nature are capable of affording much relief. It is admitted on all hands, that the reduction of a dislocated astragalus is a matter, generally, of considerable, and in some cases, of insurmountable difficulty; a glance at its anatomical relations explains the cause; but much will necessarily depend upon the amount of displacement which has occurred, the extent of its detachment from the four bones with which it articulates, and the particular direction in which the luxation happens.

Compound dislocations of the part may sometimes be reduced where simple ones are irremediable; for in the former, textures are torn through, which in the latter case remaining intact afford insuperable resistance; and continued observation has confirmed the force of the following remarks by Dupuytren on this head:—"In some cases the reduction is accomplished with comparative facility, which I am disposed to attribute to the amount of injury sustained by the connecting ligaments. When the ligaments are not actually ruptured, but merely stretched and distended, they retain the bones in the new situations they have assumed, and even more firmly so than in their normal position; hence the complete immobility of the dislocated astragalus in some instances. But when, on the contrary, there is much laceration of the ligaments, the bones are readily moved on each other, and the reduction is proportionately easy."

Some stress, I am disposed to think, should be laid upon the action of certain muscles, as the two tibial, when the head of the astragalus leaves its recipient cavity and rides over or lies to the inner side of the navicular bone. I believe their contraction in such an accident tends to draw the scaphoid nearer to the os calcis; and this would appear feasible when we consider that they act first upon the astragalo-scaphoid articulation, that the tibialis posticus is attached to the three cuneiform bones, in addition to its insertion into the navicular, and that their action is to draw the foot inwards, by operating on

the anterior range of tarsal bones, so that they would oppose reduction by fixing the upper edge of the scaphoid firmly beneath and against the head or neck of the astragalus, in the same manner as the supra-spinatus draws upon the humerus, when its head is thrown beneath the lower margin of the glenoid cavity of the scapula. If this view of the matter were found to be correct, and other common resources failed to procure adjustment, the simple operation of tentotomy might, I believe with very great advantage, be resorted to. On referring to Sir A. Cooper's work on Dislocations, I find, in a case of Mr. Green's, that "the head of the astragalus, which was torn from the articulatory surface of the os naviculare, protruded through the divided integuments; the *tendons* of the tibialis anticus and of the flexor muscles were *tightly stretched*." The difficulty in reduction "seemed to arise from the small size of the wound in the capsule of the joint, and in consequence of the bone being *tightly held by the tendons*." After unavailing efforts at replacement, the astragalus was, by dividing the ligaments which connect it to the bones of the leg and tarsus, removed.

From the description given of this accident, I should be inclined to think that division of the tendons of the two tibial muscles, and a slight enlargement of the opening into the capsule, might have saved the necessity for a severe operation, but as the procedure had the sanction of Sir A. Cooper, and was undertaken by Mr. Green, the above suggestion might appear misplaced; still I would urge, that had the plan mentioned been employed, very little additional mischief would be inflicted, even if practised unsuccessfully, and might perchance, on the other hand, have saved further trouble in the reduction of a part which required such division of ligaments to detach it, and bordered by the posterior tibial artery torn through, with the accompanying nerve lacerated.

When, in addition to the accident above mentioned, the astragalus leaves the mortise formed by the leg bones, "one reason," says Mr. Dodd,* for the difficulty the surgeon experiences in replacing the luxated astragalus, may, we imagine, be found in this, that the bone, once expelled by violence, the muscles attached to the tendo-Achillis, and indeed also those before and behind, act so on the foot as to have a powerful and effective influence in effacing the inter-space between the os calcis and articulating surfaces of the tibia and fibula, so that there is now no room for its return."

In a discussion at the Medico-Chirurgical Society, reported in THE LANCET, (March, 1844,) upon this subject, I find Mr. Erichsen adverted to the great difficulty in effecting the reduction in some cases of dislocation of the astragalus, which he attributed partly to the tonic spasm of the strong muscles of the calf of the leg, and thought that division of the tendo-Achillis, as practised by Gerdy, Velpeau, and other French surgeons, might be useful when the ordinary means failed.

On reviewing the relations of the astragalus, we should, I think, from the direction of its long axis, inclining downwards, forwards, and inwards; from the rounded form of its head, and larger size of that part compared with the glenoid cavity of the scaphoid, implying an arrangement for much and varied movement; from the astragalo-scaphoid articulation being only strengthened by one proper ligament situated on the dorsal aspect of that joint; and from the play and inclination given to the part when the weight of the body presses on the foot, (for it is to the inside that this weight is transmitted chiefly;) be induced to imagine that the anterior extremity of this bone would be more favourably circumstanced for dislocation than the body, which is dovetailed with the tibio-fibular socket, whose lateral osseous and ligamentous stays are so unyielding, is so strongly connected to the calcaneum, is protected before and behind by firmly-bound tendons, and is capable of motions which, comparatively, are of a more limited character than those of the head of this bone. Much, however, will of course depend upon the amount of injury parts in the vicinity have sustained, the direction in which the force is applied, and the position of the leg and foot when the luxation happens; for we may even read of cases where the astragalus "has revolved on its long axis in such a way that it shall be placed, as it were, on its side, so that the pulley-shaped surface looked outwards, and the peronæal articular surface looked downwards towards the os calcis, and the facet for articulation with the tibial malleolus was placed upwards in contact with that part of the tibia which was naturally shaped for articulation with the upper part of the trochlea of the astragalus: when the astralagus is thus rotated on its longitudinal axis, a broader part of the bone is wedged in between the tibia and os calcis than the vertical height of the astragalus would measure, and hence there is difficulty in restoring it or removing it." This twisting of the bone on its axis has been known to occur to a still greater extent, and complete rotation has placed its under surface in apposition with the articular portion of the tibia.

Two remarkable examples have been published by Mr. B. Phillips,* of a very rare form of dislocation of the astragalus—viz., where it had passed backwards from the tibia and fibula. "There was elongation of the heel, a projection of the tendo-Achillis, a shortening of the anterior part of the foot, and an anterior projection upon the dorsum formed by the inferior extremity of the tibia; there was also immobility of the joint."

I have stated that the accident most likely to occur to the astragalus is a dislocation of its head upwards or inwards; it may also be thrown outwards, so as to be placed in relation with the external malleolus. The position of the foot would be different in the two cases, being directed outwards in the former and inwards in the latter. The difficulty in effecting reduction, too, will depend upon the one or other species of luxation being greater in the latter than in the former instance.

In compound dislocations, a practice is not unfrequently called for which has often been executed with great success, and a limb preserved which would formerly have been, from the moment of the injury, a doomed one—viz., the extraction of the astragalus. It is equally true, however, that this operation has been occasionally performed when (judging from the same amount of injury having been inflicted in other cases, and the bone left unreduced, recovery succeeded) no absolute necessity required its removal.

Hence it becomes a serious matter for reflection, how far, in certain cases, we are justified in interfering; and we should bear in mind, that the resources of Nature in this accident, are often adequate to the restoration of great and useful motion of the part, in the absence of the operation, which, nevertheless, may be followed by equally successful efforts, but always entails additional lameness, by shortening the limb.

I have, in the above sketch, passed in review the various kinds of dislocation to which the astragalus is liable; and on turning to the numerous histories of cases given in surgical works, it will be found that, in the majority of them, the bone has left its connexions with the tibia and fibula, and the usually concomitant fracture of the latter bone will explain how such displacement is favoured: we find also in these records, that the head of the astragalus is generally luxated; for, as Chelius remarks, "most probably, this part is always primarily dislocated forwards from the navicular bone, and driven, according to the direction of the operating force, inwards or outwards:" and Dupuytren says that this accident almost invariably accompanies fracture of the lower end of the fibula. Instances of a displacement of the astragalus from the navicular bone and os calcis, whilst the ankle-joint maintains its integrity, are rare; for Mr. Hancock† states that, after great pains, he has only been able to collect the accounts of three cases of this peculiar accident, and mentions the particulars of a fourth, which occurred in his own practice. A more unusual luxation, I suspect, is that of the body partially inwards with the tibia, the astragalo-scaphoid articulation remaining perfect.

I have lately had the opportunity of dissecting such an example, where the displacement had remained unadjusted. The subject of the injury was a middle-aged man, and was brought, for anatomical purposes, to the Medical School of the Charing-cross Hospital. No history of the case could be obtained, and I shall therefore at once proceed with an account of the dissection.

*Bones.*—By admeasurement of the sound foot, it was seen that the distance between the lowest point of the internal malleolus and the inner tubercle of the calcaneum was three inches, whereas on the affected side the interval was increased to four inches. The fibula had been fractured two inches and a half above the malleolus; union had taken place; and from that point to the ankle-joint the bone was completely anchylosed to the tibia. The distance between the malleoli on the sound side was two inches and three quarters, but on the opposite, it was three inches and five-eighths. The astragalus was dislocated inwards with the tibia, so that the outer edge of its posterior surface was now in a line with the upper and inner margin of the posterior aspect of the os calcis, and that portion of the convex articular surface of the latter bone now unoccupied by astragalus was so fashioned as to afford accommodation for the play of the inner side of the fibular malleolus. On examining the under surface of the tibia, its external half is seen to be deeply hollowed out, to receive the corresponding portion of the trochlea of the astragalus, to-

* Cyclopædia of Anatomy and Physiology.

* Medical Gazette, vol. xiv. † THE LANCET, October, 1844.

gether with the outer fibular surface of this bone—the margin which naturally separates these two aspects was rounded off, so that a kind of ball-and-socket joint had been established, and the fibula being thus excluded from articulation with the astragalus, was, as I before mentioned, found applied to the calcaneum. The encrusting cartilage of tibia and astragalus, in these situations, was almost entirely wanting, but remained perfect in the rest of their extent.

There was a peculiarity connected with the calcaneo-cuboid articulation, which may be deemed worthy of mention, as illustrative of the effect produced by the now unusual bearing of the weight of the body upon the foot. In this joint, we should call to mind that the opposed surfaces are so arranged, that the curves they present are conversely adapted to one another, and this mutual overlapping is destined to allow of the descent of the cuboid on the os calcis, but to oppose its movement outward or upward. In the foot before me, the centre of the articular surface for the cuboid presents a retreating angle, into which a corresponding projection of the latter bone is received, and it would appear that the pressure continually made towards the inner side of the calcaneum had forced the inner half of its anterior articular surface in between the navicular and cuboid bones, so as nearly to touch the external cuneiform. This view is additionally strengthened by finding that the os calcis is united by soft anchylosis, for nearly the extent of half an inch, to that facet on the outer side of the scaphoid, which, when present, is opposed to the cuboid.

The metatarso-phalangeal articulation of the great toe was obliterated by bony anchylosis, which had incorporated the two sesamoid bones found in this situation, the whole being fortified by dense and irregularly arranged ligamentous bands, constituting a solid mass about the size of a large chesnut. A reference to the normal peculiarities of this joint, the part it plays in the formation of an arch, and the support it affords to the inner side of the foot in standing, would lead us to expect, I think, that in this peculiar unreduced dislocation its consolidation would become a most efficient accessory means for ensuring support and stability.

I should have mentioned, that from the twisting the astragalus had undergone, so as to have thrown its fibular surface in relation with the tibial trochlea, and the inclination inwards given to the tibia, the internal half of the convex articulating surface of the os calcis was prolonged with a considerable slope downwards, backwards, and inwards, and the facet on the lesser process was depressed below its ordinary level.

*Ligaments.*—1st. *Perfect.* The three divisions of the external lateral; the superior and inferior calcaneo-scaphoid; the superior astragalo-scaphoid.—2. *Strengthened.* The inferior calcaneo-scaphoid ligament, at its outer part, was of more than cartilaginous hardness, and of thrice its natural thickness; the anterior peroneo-tibial; anterior and posterior tibio-tarsal.—3. *Ruptured.* The interosseous and deltoid, most probably; but this point could not be well made out, on account of the surrounding condensation. "The process of restoration depending upon a thickening of parts around the torn ligaments, with effusion and infiltration of lymph, resembling the provisional callus in the reunion of simple fractures."*—4. *Obliterated.* The inferior portion of the interosseous membrane consequent upon the anchylosis of tibia and fibula.—5. *Abnormal.* A dense ligament was found stretching from the lower portion of the anterior annular ligament, over the upper part of the astragalo-scaphoid articulation, to be implanted into the two internal cuneiform bones, by which means the tendency of the head of the astragalus to start from its socket was kept in check.

*Tendons.*—Those of the anterior part of the leg were displaced somewhat outwards, but a ridge of bone, springing from the anterior and lower part of the fibula, formed a stay to, support, and pulley-surface for, the tibialis anticus; the inner tendon of the extensor brevis was curved; the peronæal tendons were placed further forwards than natural; the posterior tibial tendon had become very dense in structure; its breadth was much increased; it was firmly united to the trochlea of the inner malleolus, and twisted on its way to the os naviculare; its turns, however, were secured in position by osseous embankments, arising from the margins of the canal in which it ran, and it deeply grooved the inner side of the astragalus. The flexor communis was similarly circumstanced, but had been separated from the former muscle to the distance of a quarter of an inch. Its course was maintained, however, as it passed around the astragalus, at the inner edge of its posterior surface, mainly by thick, osseous offsets from this bone. The flexor pollicis ran in its proper grooves, and was in like manner secured there. The internal annular ligament was much thickened, and as it passed over the tendons, was firmly adherent by its under surface to the bony projections spoken of.

*Vessels.*—The posterior tibial artery, its venæ comites, and accompanying nerve, so overlaid the flexor pollicis as to entirely conceal it from view at the inner ankle. The anterior tibial artery presented a wavy course from the lower portion of the tibia to the toes.

*Nerves.*—The posterior tibial nerve, as it turned round the astragalus, was somewhat spread out.

*Bursæ.*—A large bursa, with tough fibrous shreds in its walls, and crossing its cavity, had been generated beneath the bony mass forming the "ball of the great toe." With respect to the presence of these sacs, it is well known that continued pressure or friction will bring about their formation in the areolar tissue, in a situation where no such structure had previously existed; and their origin, I presume, is the same as that of bursæ generally, which, as Mr. Wharton Jones states in his physiological lectures, "are regarded as enlarged interstices of the cellular tissue;" and I may add, that Sir B. Brodie, in his work on the joints, mentions "that they may be resolved by maceration into cellular texture."

*Unreduced dislocations in general.*—It is always instructive to learn the state of parts in the vicinity of an unreduced dislocation, more especially so when the dissection is made within the limits of a time, beyond which the attempt at reduction is set down as imprudent. The bold efforts of modern practitioners have, in many instances, overcome long-standing luxations, which, in former days, would have been regarded as incurable; but at the same time it must be borne in mind, that success is not invariable—nay, that much additional injury has been inflicted; and the records of surgery are not unsullied with accounts of the severe laceration of soft parts, the rupture of nerves and arteries, and even of the death of the sufferer from unwarrantably prolonged trials to reduce old dislocations. It therefore becomes important that we should be acquainted, as far as possible, not only with the structural changes, and the relatively altered position of adjacent parts, which take place in these cases, but be furnished with the different periods of time within which such changes occur; so that a correct judgment may, from a gradually increased number of facts, be formed as to the advisability of attempting reduction, after a certain lapse of time, in each particular dislocation.

It is also highly interesting to witness the efforts made by Nature to remedy a defect,—to restore those very movements required of a joint from its position in the body, by a series of contrivances simple, beautiful, and effective, and, at the same time, to mutually accommodate and harmonize the actions of displaced structures in their new localities. Nor is this all: a near articulation may be brought, as a compensation, into greater play, or its anchylosis secured where increased stability is needed; new materials are laid down, and original ones fortified, as means of strength and security, or to restrain the actions of certain parts whose motions now necessitate control, that their capability for support may be the better ensured: bursæ are generated where friction or pressure require them, and additional offices are assigned to textures whose previous functions were of a limited character. These attempts at repair are often crowned by the most successful results, and we not unfrequently see, that though great deformity remains, its original amount has been lessened, and that though a displacement is complete, a new and an adequate socket has been constructed, with much mobility and power retained. The now unused joint-surface, in accordance with a prevailing law, is obliterated or turned to account by its more convenient adaptation to the position and necessities of neighbouring structures.

St. Martin's-lane, May, 1847.

* Mayo's Pathology.

## RESULTS OF FIFTY-NINE CASES OF PLACENTAL PRESENTATION.

By ROBERT LEE, M.D., F.R.S.

The following table exhibits the results of all the cases of placental presentation I have seen in practice during the last nineteen years. The diminished mortality during the last ten years has partly arisen from the absence, in any great degree of epidemic puerperal disease in London; but it has perhaps been owing, in some measure, to the promptitude of active interference in accomplishing delivery, and to the precaution of turning without passing the whole hand into the uterus where there has been great rigidity, with only partial dilatation of the os uteri;—

*Table showing the Treatment and Results of Fifty-nine Cases of Placental Presentation.*

| No | Complete or Partial. | Treatment. | Result. |
|---|---|---|---|
| 1 | Complete.. | Turning by the late Mr. Baker; phlebitis eighteen days after. | Died. |
| 2 | Complete.. | Seen by no practitioner before death. | Died. |
| 3 | Partial ... | Placenta and child expelled ..... | Recovered. |
| 4 | Uncertain. | Placenta and child expelled; flooding continued after. | Recovered. |
| 5 | Complete.. | Turning by Dr. Lee..... | Recovered. |
| 6 | Partial ... | Turning by Dr. Lee ..... | Recovered. |
| 7 | Complete.. | Dying before turning by Dr. Lee ... | Died. |
| 8 | Complete.. | Turning with two fingers by Dr. Lee. | Recovered. |
| 9 | Partial ... | Distortion of pelvis; craniotomy by Dr. Lee. | Recovered. |
| 10 | Partial ... | Placenta and fœtus expelled ..... | Recovered. |
| 11 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 12 | Complete.. | Turning by Dr. Lee..... | Died. |
| 13 | Partial ... | Turning not performed ..... | Died. |
| 14 | Partial ... | Turning not performed. Up to this time an epidemic prevailed. | Died. |
| 15 | Partial ... | Ergot freely given before turning by Dr. Lee. | Died. |
| 16 | Partial ... | Turning by Mr. Gaskell..... | Died. |
| 17 | Partial ... | Turning by Dr. Lee..... | Recovered. |
| 18 | Partial ... | Turning by Dr. Lee ..... | Recovered. |
| 19 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 20 | Partial ... | Membranes ruptured by Dr. Lee; turning not performed. | Recovered. |
| 21 | Complete.. | Turning by Dr. Lee..... | Recovered. |
| 22 | Complete.. | Turning by Dr. Boyd; phlebitis ... | Died. |
| 23 | Complete.. | Craniotomy by Dr. Lee; turning not performed. | Died. |
| 24 | Complete.. | Turning by Dr. Lee; great rigidity. | Died. |
| 25 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 26 | Complete.. | Great distortion; turning by Dr. H. Davis. | Died. |
| 27 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 28 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 29 | Complete.. | Turning by Mr. Girdwood ..... | Died. |
| 30 | Complete.. | Turning by Mr. Jonson ..... | Recovered. |
| 31 | Partial ... | Membranes ruptured spontaneously. | Recovered. |
| 32 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 33 | Complete.. | Turning by Dr. Lee..... | Recovered. |
| 34 | Partial ... | Membranes ruptured by Dr. Lee ... | Recovered. |
| 35 | Complete.. | Turning by Mr. Harvey ..... | Died. |
| 36 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 37 | Complete.. | Turning by Dr. Lee ..... | Recovered. |
| 38 | Partial ... | Membranes ruptured artificially by Dr. Lee. | Recovered. |
| 39 | Partial ... | Craniotomy by Dr. Lee ..... | Recovered. |
| 40 | Partial ... | Craniotomy by Dr. Lee ..... | Recovered. |
| 41 | Partial ... | Craniotomy by Dr. Lee ..... | Recovered. |
| 42 | Complete.. | Turning by Dr. Lee..... | Recovered. |
| 43 | Uncertain. | Perforation of placenta ..... | Recovered. |
| 44 | Partial ... | Turning by Dr. Lee ..... | Recovered. |
| 45 | Complete.. | Turning by Mr. Byam; flooding continued. | Recovered. |
| 46 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 47 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 48 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 49 | Complete.. | Turning by Mr. Gaskell..... | Recovered. |
| 50 | Complete.. | Turning by Mr. Dalton ..... | Recovered. |
| 51 | Complete.. | Turning with two fingers by Dr. Lee. | Recovered. |
| 52 | Complete.. | Turning with two fingers by Mr. Davidson. | Recovered. |
| 53 | Complete.. | Dying when first seen; turning by Dr. Lee. | Died. |
| 54 | Complete.. | Turning with two fingers by Dr. Lee. | Recovered. |
| 55 | Complete.. | Placenta and fœtus expelled spontaneously. | Recovered. |
| 56 | Complete.. | Turning promptly performed by Mr. Balderson. | Recovered. |
| 57 | Complete.. | Turning with two fingers by Dr. Lee. | Recovered. |
| 58 | Partial ... | Membranes ruptured; turning not performed. | Recovered. |
| 59 | Complete.. | Placenta and child expelled; turning not performed. | Recovered. |

OBSERVATIONS ON A CASE

SUPPOSED TO PROVE THAT

# SECONDARY SYMPTOMS ARE CONTAGIOUS AND CAPABLE OF TRANSMISSION.

By WILLIAM ACTON, Esq.

SURGEON TO THE ISLINGTON DISPENSARY, AND FORMERLY EXTERNE TO THE VENEREAL HOSPITALS OF PARIS.

The subject of the correspondence included in this article has of late occupied much of public attention in the medical periodicals. To judge by the cases advanced, great uncertainty seems to exist on the contagion of secondary symptoms; and in spite of experiments which have been brought forward, proving the impossibility of inoculating with the secretion of secondary symptoms, it has been said that we cannot imitate Nature—that although our experiments do not succeed, it by no means follows that Nature cannot do what our lancets fail of effecting; and to this purpose cases are cited which are supposed to prove the position that secondary symptoms are transmissible. One gentleman with whom I have been in correspondence on this subject, states, that the evidence I have advanced in my work on venereal diseases, in the various articles in the periodicals, is wholly of a negative character; whereas, my opponents adduce positive evidence; and he will at any time rather believe the latter than the former. It is in vain for me to remind him that his countryman, Dr. Gregory, stated it as his opinion that "a hundred so-called medical facts were as many medical lies," and that a French author has desired us "peser et non compte les faits."

Certain it is, as I shall subsequently take occasion to show, much difference of opinion occurs on what is and what is not syphilis; and I am almost disposed to think that he would write the best treatise on syphilis who should occupy himself by showing the little value to be placed on colour alone as a diagnostic mark of syphilis.

I am daily seeing instances which induce me to believe that the pseudo-syphilis, or syphiloid diseases of authors of the last century, are similar to the cases which are now giving rise to the present difference of opinion, and that they are not syphilitic at all in many instances, and in others only allied to that disease by colour, or by the same treatment curing the one and the other complaint.

The error of the day appears to me to consist in thinking an eruption syphilitic provided it presents a copper-colour tint, notwithstanding the absence of all corroborative evidence. Hunter did not think that this symptom was alone necessary to characterize syphilis; then why should we, particularly when authors of repute have shown that the copper colour is common to many diseases?

We are only just emerging from the error of the last century, which consisted in calling that disease syphilis which yielded to mercury, and denying its existence when the complaint yielded to simple treatment. It took many years to overturn this dogma; it will probably require as long to eradicate the received idea, that a copper colour is diagnostic of syphilis, notwithstanding all other opposing circumstances.

In spite of all opposition to my views, I must still believe that the copper hue is only of importance when supported by corroborative history. Sore throat of a peculiar kind, condylomata, psoriasis palmaris, &c.; when one or all of these are present, we may safely say that the case is one of syphilis, but without one or more of these symptoms, the diagnosis is at best but doubtful.

With these preliminary observations, I submit the following correspondence to the notice of the profession, believing the case under discussion to be one of those anomalous ones, many of which may be found described in the works of Hunter and Abernethy:—

Dear Sir,—Knowing, from your studies whilst in Paris, and your recent publications, that you are much interested in the history and nature of syphilitic diseases, I send you the following case, which, to my mind, goes far to prove the contagiousness of secondary symptoms, a fact which I believe to be questioned both by yourself and M. Ricord. I shall state the case briefly, and leave it for you to decide how far it bears upon this important point:—

A—— B—— contracted syphilis in May, 1845, and was under treatment for a superficial chancre, situated at the base of the glans penis. According to his own account, he took five grains of blue pill four times a day, for a week, but his system was not affected by the mineral. After exposure to wet, and much fatigue, the gland of one of the groins became inflamed, which obliged him to lay up. By the use of proper remedies, the inflammation subsided, but he was not perfectly

well until the following October. During this time, he took no more mercury. He then considered himself cured, and from October to March, did not again expose himself to infection. During this interval, he was engaged to be married, and forgot his previous maladies. Early in the month of March, 1846, he was troubled with sore throat, and condylomata round the margin of the anus. There was no eruption about the skin. The medical man to whom he submitted his case, put him under the iodide of potassium, and he continued this treatment for six weeks, when he was perfectly recovered. The condylomata (one of which was in a state of ulceration, and very irritable, being close to the anus,) were touched with the nitrate of silver. The 15th of April was the last day in which he took any medicine, and he was married the second week in June. Nothing particular occurred until his wife miscarried in the September following, having gone with child about two months. On recovering from this, she complained of soreness in the scalp, where there were two or three nodes to be felt; one gave her particular uneasiness, being situated over the mastoid process of the right side. After this, she had sore throat, much irritation about the vagina, and an eruption over the trunk and lower extremities. This much frightened her husband, and he requested me to see her, at the same time intimating to me what his fears were. I then, for the first time, gathered from him and his former medical attendant, to whom he referred me, the details as above given. At first, I thought it was impossible there could be any grounds for his fears, as I was a faithful disciple of M. Ricord, having followed his practice at the Hôpital du Midi, in 1840, when in Paris. When, however, I saw the eruption, I began to be shaken in my opinion. It was exanthematous in its appearance, and resembled roseola or measles, the spots being crescenta and diffused, leaving interstices of healthy skin between them. The coppery hue was most marked, and I found that the eruption had been out for about a fortnight. There was nothing specific in the appearance of the throat. The tonsils were very much enlarged, and superficially ulcerated in parts. I examined the internal labia, and discovered much irritation, then produced by excoriations. I ordered small doses of iodide of mercury twice daily, an emollient gargle, and, for local application, recommended a solution of the diacetate of lead. This treatment was continued for about six weeks, and the eruption gradually disappeared, with the irritation about the vulva and vagina. The tonsils have not been reduced to their ordinary size, and I have latterly been giving small doses of iodide of potassium, in place of the iodide of mercury. The nodes have almost disappeared. I examined the state of the penis in the husband, to see whether there might be any induration remaining about the old cicatrix, but such was not the case. He appeared to be quite well. He has also been subjected to treatment since this event. The story, as above given, I can vouch for the truth of, and nothing has been concealed from me. As this is the first case which I have seen of the kind, I thought I would communicate it to you, as a matter of interest. Should you wish to hear any further details connected with it, I shall be happy to send them to you. You are at liberty to make what use you like of this case, for the furtherance of science, provided no names be mentioned, as it is in the strictest confidence that I have been consulted. If you have time to spare, I should like to hear your remarks on the contents of this notice; and in the meantime, allow me to remain, yours faithfully, ———.

Feb. 1847.

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Dear Sir,—I have read the letter you forwarded to me with much interest, and as it is of common occurrence for me to be applied to in similar cases, I shall be happy to send your communication to The Lancet, with my own remarks, provided you do not object to find your opinion (communicated to me with a scientific purpose) criticised in a manner that you are perhaps unprepared for. I have determined not to publish cases similar to yours without free permission to add my own comments, for, as you truly observe, these obscure cases are very important, and have occupied much attention both in Paris and London, and they at first sight invalidate some laws of syphilis which M. Ricord and myself may have ventured to lay down, and which we cannot give up without a struggle; although we would as readily admit the contagion of secondary symptoms as we now deny the fact of their being so, provided their occurrence could be proved.

I may, however, premise, that without seeing a patient, it is always difficult to find out any cause of error: cases are cited in books, and related in journals, which are so got up that they cannot be disputed, but yet no one believes them; yet had they been seen by a practical man, the cases would probably have worn a very different appearance; and as you ask me my candid opinion upon your communication, I shall not hesitate to give it. In the first place, I think your diagnosis *may* have been wrong; and in saying this, allow me to observe, that you may have fallen into the error (common to many who have seen much of disease, without attending specially to syphilis) of supposing a case to be syphilitic which was not really so; and in proof that this is often done, I must beg of you to wait a few weeks, when I propose to publish the details of a large number of cases which have fallen under my notice in private practice, and which have been condemned as syphilitic for similar reasons to those given in your letter; the particulars, however, would be too long for the present occasion, and will form, I think, a very interesting and practical paper.

Now, supposing the case you have detailed to have been a case of secondary symptoms in the wife, observe what you take for granted:—That a man who does not present, and has not presented, any trace of secondary symptoms for two months, can infect his wife. This, then, is not a case of simple contagion from the contact of skin suffering from secondary symptoms with a healthy skin, as some have asserted, but renders the subject still more complicated, and, I think, improbable. Had the husband suffered under secondary symptoms subsequent to his marriage, the idea that he had communicated the disease would have been more probable. If your case proves anything, it goes to decide that a man can infect his wife, although he himself presents no traces of secondary symptoms.

Another no less extraordinary circumstance occurs in this case: supposing the wife to have secondary symptoms, how did she contract them from her husband? They do not appear to have commenced at condylomata, which authors who support your opinions have generally believed to be the means of contagion; but I find in your communication, that three nodes made their appearance on the scalp. If, then, contagion can take place between a man (who presents no mark of secondary symptoms) and his wife, we must suppose that in future such contagion will be evinced by the occurrence of nodes on the head, and not, as is usual, simila similibus; in other words, that so-called secondary symptoms (which are not apparent in the husband) will give rise to what we call tertiary disease in the wife. These are truly extraordinary phenomena, and perhaps you yourself are unprepared for the consequences which we must deduce from them if we admit your facts.

I would point out another extraordinary circumstance unknown to persons who have had great experience in syphilitic disease; I allude to these said nodes. Your letter states that they occurred about three months after possible infection. This is likewise an almost unprecedented circumstance. You further state, that they were followed by an exanthematous eruption. Now generally, the course of nodes is this: secondary symptoms follow primary ones at intervals varying from six weeks to three months; and tertiary symptoms, or nodes, follow secondary symptoms at the end of many months, or even a year. Now, exactly an opposite course occurred in your recital. So wedded am I to my own opinions, founded on the observation of a vast number of cases, which I have now watched for many years, that I would disbelieve my own senses, and consider that I myself had observed these cases imperfectly, rather than believe one case ran counter to all recorded instances, or all syphilitic cases that I myself had witnessed.

Now, allow me to recal your attention to the reasons for considering the symptoms in the wife as those of syphilis—what are they? You admit, yourself, that the throat presented nothing specific—I should say as much of the exanthematous eruption. I have alluded elsewhere, both in my work on venereal diseases, and in the pages of The Lancet, to the little value of the coppery hue; and I find no traces of condylomata, or psoriasis palmaris, and other characteristic signs of syphilis mentioned as occurring in the case you cite. Now, had the husband never had syphilis, would you have condemned the wife? I think not; and as happens often in syphilis, the history of cases biasses the medical man. It is always to be regretted, when errors have been committed; and it is usually a thankless task to point them out, particularly when the case is not at hand to prove or disprove statements; but as you ask me to state my opinion, I give it you, the more readily, as I believe your case is far from uncommon, and its recital may clear up certain obscure points in diagnosis. If, therefore, you do not object to my views, or their publication, I will, on your sending back this letter, forward them to The Lancet, together with some additional cases bearing on

the question, which press of business prevents me giving at the present moment.—Pray excuse this hasty letter, and believe me to be, yours faithfully, W. Acton.

Queen Anne-street, Cavendish-square, Feb. 1847.

P.S.—You may probably ask me, what was the case, if not one of syphilis? I would not venture to give it a name; but should we call that syphilis which we are unable to class under any other disease? and yet I fear this has been often done.

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Dear Sir,—In reply to your comments on the communication which I sent you, I beg to offer the following remarks, and, by way of preface, allow me to say that most of your objections had suggested themselves to my mind ere I decided upon the conclusion to which I at length came. I was therefore prepared in your answer for one of two modes of your meeting the case, by your questioning either the accuracy of my diagnosis, or the truth of the story told by the party concerned. It is to the former of these points that you direct your observations, and I conclude that the latter is not doubted by you.

Now, your chief arguments are founded upon the supposition that the conclusions which you have come to relative to the nature of syphilis are decisive, and you invalidate the opinion which I had formed, by showing its nonconformity with certain laws which you take for granted as definitely fixed, but which my case (if it be such as I suppose it to be) proves not to be absolute in their application. You, in fact, draw your inferences from premises which you presuppose to be true, but which I am not so ready to grant now as I might have been twelve months ago. It is of course self-evident, that if the great rules by which you test the accuracy of my conclusion be so perfect as to admit of no exceptions, and so true as to constitute axioms, then the question between us is at once settled. It is, however, just this very point upon which a doubt exists in my mind, and therefore it was that I sent you the details of a case which apparently proved that the rules of syphilis, like most other rules, had their exception. If it be impossible that secondary syphilis can be communicated by contagion; if the like disease in one must produce the like in another, (an axiom that I have always questioned, believing that the character of syphilis is often dependent upon peculiarity of constitution;) if it be impossible to have periosteal pains and swellings after three months of supposed infection, or for an individual apparently cured of secondary symptoms, though perhaps not really so, to infect another; if by the laws of syphilis this be impossible, then the case before us is not syphilitic in its character.

Now in my communication to you, I gave a simple recital of the case as it presented itself to my observation; I took nothing for granted, but simply stated facts, and my conclusion from them, and I leave it for others to decide how far the history and the symptoms of the disease warranted the inference which I drew, and how far I should be justified in turning a deaf ear to my own convictions, because they invalidated a theory which I had hitherto judged to be right. If there be certain general rules whereby one is to be led in arriving at a correct diagnosis,—if there be certain symptoms which are characteristic of certain diseases,—if the history of a case is to be our guide, we are not to reject the conclusion to which they may lead us, because that conclusion may question the accuracy of certain theories. A female of good health and strong constitution marries. From no assignable cause she miscarries. Her miscarriage is followed by sore throat and a copper-coloured exanthematous eruption, (the latter so peculiar in its tint as to attract the notice of an ordinary observer,) which persists for nearly two months, and then disappears under the apparent influence of the iodide of mercury. Pain is complained of at night in the scalp, when there are to be felt two or three hard swellings; and the question asked is—what may this case be? Is it not one of secondary symptoms? I answer in the affirmative. But you deny the accuracy of my judgment, as the history of the case will not bear it out, and the laws of syphilis declare it to be impossible. You allow that it is difficult to know to what class of diseases it may belong; but you ask, must it therefore be syphilitic? I came to my conclusion through no such unsound premises; but in this case, as in every other of doubt, was guided by certain general features which developed themselves in the disorder, and gave it a peculiar character. So faithful a follower was I of M. Ricord and yourself, that I unhesitatingly replied, when the possibility of syphilis was first mentioned, that such could not, under the peculiar circumstances, be the case. It required, therefore, no little reasoning with myself to argue me out of my former belief, to which I gave the benefit of the doubt, till the character of external appearances no longer warranted it. If these were not such as indicated the nature of the disease, my studies at the Hôpital St. Louis, and the lessons I there learnt, have taught me nothing. If the copper colour of an eruption is not to be relied on as diagnostic of its peculiar nature, I know not what is; for whether it be a case of psoriasis, lichen, lepra, or roseola, what, I would ask, gives them their specific stamp, if this does not? Let the profession generally answer this question—Do we ever see copper-coloured eruptions, with sore throats, in patients whose history places them beyond the suspicion and the possibility of being tainted with the syphilitic virus? I think not; and it does appear to me, that if once we deny the specific character of the coppery hue, one great means of diagnosis is gone. You ask me—"Had the husband never had syphilis, would you have condemned the wife?" I answer, that tacitly I should, provided the husband was a person on whose word I could rely with confidence. But let me ask in return, whether, supposing such a case as this had presented itself to your notice in one of the lower orders of society, amongst whom virtue is not so highly valued as amongst the higher, would you have then been inclined to question the nature of the disease, though you might have questioned the accuracy of the story? How the secondary symptoms could be communicated in this or any other case, I do not pretend to determine; for theory upon theory might suggest itself, supposing the reality of the case and its circumstances be satisfactorily established. You are perfectly right in not yielding your point upon the mere hearsay of another; but still cases like the above, though perhaps very rare, may, in the course of time, present themselves to your notice, when you will be able to reason better upon them, and judge more dispassionately of their merits, than by reading the mere dry details on paper of what another has seen, all the while knowing how prone the mind of the inexperienced is to be deceived in points, the difficulties of which can alone be met, and satisfactorily answered, by him whose practice has made him perfect in unravelling them. The question is very important, and one well adapted for discussion. I have to thank you for your kind and prompt attention to it, and your opinion offered on it. Should anything be further developed in the course of time in connexion with this case, I shall again write you on the subject.—Believe me to remain, yours faithfully,

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## Reviews.

*Body and Soul; or, Life, Mind, and Matter.* By George Redford, M.R.C.S.E. London: Churchill. pp. 232.

The first eight words, so pregnant with meaning, forming the title of this book, convey a tolerable notion of the nature of its contents; and they will prepare the reader for the discussion of the numerous knotty points which occur in that domain of science, which borders upon metaphysics on the one hand, and physiology on the other. The vulgar, who know a little, and the severe rationalists, who know a great deal, have long held up the mysteries of life, as well as those which attend it in disease, as a sort of opprobrium to the science of medicine. They think that we ought to be able to explain, or at any rate, account for, everything which falls within the immense range of our mighty study, as is done in the exact sciences, but the best amongst us are mindful of the evil that has arisen from a desire, on the part of many physiologists, to explain away difficulties, and place physiology nearer the exact sciences, by reducing nature to the rule of favourite theories and fancied laws. We must always remember how very little in our science can be actually proved to be true. We are now only beginning to comprehend the physiology of life, and its great antagonist, disease; but, brilliant as the results of the last twenty years have been, we seem, as yet, only to have arrived at a position parallel to that which Newton so beautifully described, in reference to the inductive sciences in his hands; we have gathered a few pebbles from the shore of a boundless ocean which lies beyond.

In the work before us, the various theories concerning life and mind are pretty fully discussed, with an extensive appli

cation of numerous facts of physiology and disease, exhibiting a comprehensive knowledge of the subject; and what pleases us more, a great degree of that sort of philosophical caution, so necessary in dealing with such matters; there is, withal, a laudable determination to point out the truth, conveyed in language both lucid and correct.

After stating that the work is intended for the general as well as the medical reader, the writer proceeds to the subject in three parts—1. Life, in which a comparative view of animate and inanimate bodies is given, and the peculiar nature of the vital operations enforced; 2. Mind, in which the mental phenomena observable in men and brutes are pointed out, their nature discussed, the differences between the mind in men and brutes shown; and the connexion of mind with organized structure leads to the third part, in which we have the whole subject of the structure of the brain and nervous system, with various theories of mental action and sensation, winding up with some remarks on the connexion between life and mind—their origin and their cessation. This arrangement appears to us happy enough: the analogy between life and mind is very close, and their mutual dependence upon organism admits of a better and clearer mode of consideration of such abstruse matters than we remember to have seen elsewhere.

After treating of the vital phenomena, the author says, in reference to their laws—

"There are certain facts connected with the structural conditions necessary for the manifestation of vital phenomena that are highly interesting, for they exhibit the action of some kind of controlling power which never ceases, and which ever appears invariable in its progress. . . . Again, certain definite and peculiar forms are seen in animate objects, with regard to which both animals and plants may be respectively classified, and distinguished from minerals: thus we find the spheroidal in the lowest orders and in germs; the symmetrical arrangement of parts round an axis, as in the star-fish and flowers of plants; the spiral in many plants, as in the fir-cone, and even in the animal body, in the fibres of the heart and gullet, and the curious bony structure of the inner ear, called the cochlea, from its resemblance to the snail's shell; then comes, perhaps the most remarkable of all, the bilateral symmetry, where two similar halves are united at what is called the median plane, well exemplified in all the higher animals, and man especially: then the greater proportion are subject to an arrangement of parts, as head, trunk, and extremities: these extremities, again, are reducible to one type, as in that of shoulder, arm, forearm, and hand. In plants we see the distinction between the root, the stem, the leaves, and the flower, at the same time their general branching form is composed in a more or less symmetrical manner. . . . These phenomena are referrible, according to some, to two forces, *a. metabolic*, controlling the changes in the matter taken as food, and *b. plastic*, controlling the building up, by selection of particles proper to form the various structures of the body. Then there is the law which regulates forms, which may be called *formative*. . . . Lastly must be pointed out, the law which destines all living objects to proceed towards maturity, decay, death, and destruction, or dissolution of structure.

"Some writers have asserted that the animate world is governed by a law of transition; that all are proceeding from low to high, from the infusoria to man. This view is founded upon the completeness of the 'chain of nature,' from simple to the most complicated forms of existence, and upon the fact, that the transition states of higher animals in embryo correspond with the perfected forms of lower animals. . . . Wonderful and inexplicable as all these facts are, we doubt whether they are sufficient to support a theory of transition, because, in examining the earliest trace seen in the germinal disc of the egg, or human ovum, we first observe the rudimentary structure of the vertebral column and nervous system, parts not found in multitudes of lower animals. Again, if this view were correct, we should expect to find transition states in lower animals, in which the very earliest states of the impregnated ovum have been examined; but even in the ovum of the newt and frog, something like the future form of the creature is visible, and nothing like the animals below it in the scale; in Nature we never find that more is performed than is actually necessary, so that the simple tube-heart of the human embryo is adopted, as sufficient for the wants of that simple condition of the animal, the more complex forms being gradually taken on as the more perfected creature required them. Lastly, with regard to this theory, some observers affirm that they have seen the transformation of animalcules into plants; Bory de St. Vincent, and, lately, Kützing, assert this occurs in the Ulothrix zonata: this we leave for future investigation."—pp. 41—45.

The resemblance in form of some of the lowest vegetables and animals with one another and crystals is very ingeniously pointed out, and the author seems to think that these peculiar forms may yet be accounted for.

The following application of chemical facts to the subject of the different qualities possessed by organized structures strikes us as apt and original:—

"It is well known that form does not determine the mode of action or quality of bodies, for we may have what the chemists call isomorphous bodies, which have different properties, and we may have the same properties possessed by the same body in two different forms; thus we find that the arseniate of soda, a highly poisonous salt, possesses precisely the same form as the phosphate of soda, a comparatively harmless substance; the composition of the two being precisely analogous, as seen by their formulæ, (2 Na H As + 24H) and (2 Na H P + 24 H); there is another salt, containing fourteen atoms of water, which has a totally different form, but still the same in both compounds; all the alums, too, are isomorphous. There are examples also of a substance remaining the same, so far as we are able to detect its composition, but altered in its form and appearance—e. g., iodide of mercury, when first sublimed, is of a bright-yellow colour, but becomes a fine scarlet when cool; sulphate of manganese may be either in pink or white crystals; the diamond is precisely the same in composition as common charcoal, so the brilliant calc-spar is simply chalk. These facts are very curious, and lead us to think that some change has occurred which we cannot yet appreciate; some suppose that a change in the amount of specific or combined heat has been effected. Further, the germs of all animals are similar in form and structure, yet the difference in their properties is very great.

"It is said, 'that immediately after death, the elementary composition of organized bodies does not appear to be different from that of bodies still living;' therefore it is insisted that we must admit the existence and operation of a principle not recognisable by chemical analysis, whether it be 'as an imponderable matter or a force or energy.'

"But it may be questioned if our powers of chemical analysis are yet so far advanced as to detect minute differences in organic bodies; . . . . . and the remarkable difference in the constitution of some chemical substances, or, so to speak, in the arrangement of their elements, shows that subtile and inexplicable changes, relating to the properties and qualities of inorganic bodies, do occur, although their constituents and form remain the same; therefore we are not yet in a condition to deny the occurrence of change in the elemental arrangement of organized bodies at death, or change in their material properties."—pp. 58—60.

The whole subject of chemical action, in connexion with vitality, is very well given. The phenomena of endosmosis, catalysis, and caloric, are compared with vital phenomena. After admitting the difficulty for accounting for such things, we read at page 73—

"On the other hand, we have not been able to admit the existence and operation of some new imponderable and inappreciable principle, something superadded to matter, so constantly called 'the vital principle,' and to which every phenomenon of mystery in physiology has been by some ascribed.

"But in studying the vital phenomena we are inclined to think that too much attention has been paid to one set of phenomena, to the neglect of the whole group; we suggest that the combined or conjoined operation of the elements which constitute living organism is most important; that in this rests the secret of life; not in the nervous influence, the blood, the muscular tissue, or in the operation of an unknown 'vital principle.'"—pp. 73, 74.

The influence of heat in the animal economy is further alluded to in the Appendix; Mr. Redford attributes great importance to it.

"Latent heat, or that which forms a part of substances, influences both the form and qualities of those substances; the effect of latent or combined heat in the living body may be

very important, because we know that a certain amount of heat is indispensable both for setting up and continuing life, and that a constant supply of heat is produced by the various vital processes of the living system, the nerves especially, which we have seen are actuated upon some principle of conduction being necessary for this heat."—pp. 231, 232.

We pass over the Second Part of the work as not exactly suited to our pages, although it contains much that is interesting, and deserves a compliment for the exceedingly clear and simple way in which the mental phenomena are described, especially that of "consciousness." The classification of psychical phenomena is clever and original. Anything like arrangement is of service in the study of such abstruse questions as the differences between intellect, mind, and instinct.

We come now to the third division of the work, in which what the author calls the "combined phenomena of life and mind" are dealt with, and the subject of the structure and functions of the brain, in reference to the mind, is entered into very particularly. The arguments from comparative anatomy, that the brain is the organ of the mind, are wound up thus:—

"The differences between the brain of man and that of the lower animals are not found so much in those parts devoted to the bodily powers, as in those which are allowed to be the seat of the strictly intellectual powers of mind—viz. the hemispheres of the brain; in accordance with these facts, we all know that man is distinguishable from animals beneath him in the scale, more by his intellectual than his bodily powers; and it is clear, that if we find any part of the brain preponderating in so remarkable a manner as the hemispheres do, we should expect to find such a conformation connected with 'the peculiarities of man,' of which the possession of intellect is certainly the most remarkable: again, we may pursue a similar method of argument by observing the differences in the amount of brain in extreme cases amongst the human species: in comparing the brain of an idiot with that of Cuvier, differences are evident; the general proportion of brain is less in the idiot, and the deficiency is in the hemispheres; also in the cases of children born without any brain, in which none but the brute qualities are exhibited; so that development of the hemispheres is a grand feature in the physiology of the human brain, and to this we are to look as a source of the intellectual superiority of man."—pp. 130, 131.

Those remarkable cases of severe injury to the brain, without such fatal results as might at first sight be expected, are well shown:—

"Amongst the most remarkable of thirty cases are, that of a sword-point for fourteen years; the point of an arrow, nine years; the point of a sword, the whole life; two screws shot in, twenty-one years and three quarters, without inconvenience; forty large small-shot; and that of a man who walked 130 miles with a piece of a gunstock in his brain; (*vid. Busch. in Petersburger Abhandl*, Part II. p. 215, 1823;) also that mentioned by Mr. Rogers, of a piece of a cannon carriage, three inches long and three ounces weight, being in the brain for twenty-one days, (*vid. Med. Chir. Trans.* Vol. XIII. 1827.)"—pp. 163, 164.

"Its influence over the entire system is very great and important, its sympathy consequently is very delicate, and easily excited by the various changes going on in the general system. The severest headach, which seems to the patient quite distracting, may be caused entirely by the presence of an irritant in the stomach; and disturbance of the circulation exhibits its first effects upon the brain, in excitement or depression of the mind, as the case may be. . . . . Now a derangement of function may occur, without any evident derangement of structure or any perceptible change in it, as is seen in those cases of insanity where no difference can be perceived in the brain from that of a sane person; we then call the effect functional, yet probably some minute and subtile changes in the particles of brainular matter do take place, for we cannot conceive of insanity in any other way, but as dependent upon deranged organization. Of disease of the brain in insanity, Otto says, 'Those pathological conditions which we consider especially grounded in the nervous system, as mental and nervous disease, appear but in very rare instances to have their primary seat in it.' Esquirol, that in the examination of the bodies of 277 insane persons, he found but 77 with diseased structure of the brain; Pinel found 68 out of 161; Georget, not one half. Flourens considers that disease of the mind can only be caused by organic vices in the brain; according to Casauvieilh and Boucher, the medullary (white) substance is affected in epilepsy and catalepsy, and the grey in true diseases of the mind. The dynamic conditions of the brain, then, may be vigorous, or weak, or altered in their character, without any apparent and evident alteration in the structure of the brain."—pp. 166—168.

Phrenology comes next under consideration; and although we do not feel inclined to go with Mr. Redford in his arguments against it, nor to agree with him that it is as visionary as the dicta of Virgil's Sybil, yet we must allow that he has brought together much interesting matter upon the subject, especially the account of Dolce's notions about organs, from a very rare Italian book, published at Venice, 1575, and which shows a very remarkable origination of a theory, since worked out with much ability and zeal by Gall and Spurzheim. Mr. Redford sums up with saying,—"That a very different property or quality may reside in two structures absolutely the same as to form and quantity."

"That the most perfect function may be performed by a small organ, and the completeness of that function does not depend upon perfection of form or quantity, but upon the perfection of the minute structure and of the subtile organical operations going on in it.

"Now there appears no reason whatever why the brain should not be studied by the same rules as are applied to other organs; the beautiful structure which we have described as forming it, and which can be seen and demonstrated, is no doubt necessary to the performance of the function of the mind; but we have not been able to show anything like the phrenological subdivision of this structure, or any great differences in form or quantity of the organ, either in general, as regards the brains of different individuals, or in particular, as regards parts of the brain in any special case. There are other reasons also, derived from observation of effects of injury and disease, which we have before stated, for considering the perfection of structure as highly important."—pp. 196, 197.

Our author, having, as he thinks, demolished the phrenologist, offers a theory of his own, the chief foundation of which seems to be the analogy observable between sensation, as in sight and hearing, and the mental action; some interesting remarks are offered, too, about visions, as also upon the origin of life and mind, traced in the curious experiments upon polypes; but for these and much more that will be found interesting, we must refer to the work itself.

We have thought fit to enter thus fully into this book, because of the originality with which the materials are handled, in reference to the most puzzling subjects of physiology; upon this, as well as the general condition and technical proficiency displayed throughout, we congratulate the author; a great merit also, in these days somewhat rare, is the purely scientific aim and love of the subject, which characterizes the work.

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*A Medical Topography of Tunbridge Wells; accompanied with an Outline of Hygiene.* By R. Hutchinson Powell, M.D., &c. Tunbridge Wells: Colbran. London: Churchill. 1846. pp. 174.

In the present age of expeditious and cheap travelling, no one can keep himself at ease at home: a home-staying man is now as much a wonder to his neighbours as, a century ago, was the adventurous man, who risked his life by a short tour on the continent. To most Englishmen of the last age, the customs even of our near neighbours the French were imperfectly known, and marvellous were the tales told of their dietary of frogs, rats, and mice; hence, in the old satire upon John Bull's love of good feeding, the old tradesman, a comfortable sort of person, about to embark from Dover to Calais was made to furnish himself with a stock of substantial food, especially of beef, lest, in his short sojourn in France, he should find himself compelled to undergo slow starvation on watery soups and detested frog's flesh.

But few of our ancestors ventured to cross the narrow sea which severs our chalk cliffs from those of France, or to mingle much with our so-called natural enemies; they contented themselves with visits to the natural beauties of their native land, and valued the mineral springs it possesses, to recruit their health, although they had not the charm of being far away from home. But now the tables are turned; Englishmen cannot be persuaded that any good thing can be found in their father-land; such is only to be met with abroad; distance lends a charm, and gives a value to what in their own country they would despise. Any miserable foreign village which boasts a mineral spring, a sea view, or mountain scenery, is flocked to by thousands of English, who seem desirous of enriching the penniless foreigners by their superabundant cash. What a miserable piece of snobbishness (as *Punch* would call it) now prevails in society,—the say, I have been on the continent,—when perhaps this great traveller has had but a day's trip, or a little more, to the barren north coast of France, to which thousands yearly repair, and return with as much knowledge of France and Frenchmen, as the Englishman gains who contents himself by strolling on the cliffs at Dover.

We have given vent to these remarks from noticing the undeserved neglect into which many lovely and health-giving spots in England have fallen, among which we may mention Tunbridge Wells, the topography of which is the subject of the book under notice. Of late years, most English watering places have found a champion to set forth their praises which may have declined, and, in most cases, it has been a medical man who has played the part, which is all very well when he contents himself with making known the curative influence of the place, or that of its mineral waters; but the contrary, when he lowers himself by anything like puffing. In Dr. Powell's treatise there is quite enough said respecting the medical virtues of the Tunbridge wells, considering that he is a medical man in the place. The system of professional men publishing such works by subscription is to be deplored; it renders them too much like the editor of "our village" newspaper, or the local poet, who brings his lucubrations into light by the aid of subscribers to it.

Dr. Powell first presents us with some account of mineral waters in general, then gives the chemical composition and properties of those of Tunbridge Wells in particular. We have next a long list of diseases in which the water of the Wells proves beneficial; and in some of them, from his account of the composition of the waters, and from our own knowledge of them, we should expect benefit to be derived from their use, especially in that large class of diseases comprehended under the general appellation of female disorders. The author's defence against the animadversions of Dr. Granville respecting the Wells, we look upon as quite satisfactory; and in that defence he has well set forth the utility of the salts of iron, even when in very minute doses. Several succeeding chapters are occupied by a brief but interesting account of the geological character of the locality, of its meteorology and climate, and of its statistics. The author then recurs to the climate of Tunbridge Wells with reference to the diseases to which it may prove serviceable. The last chapter is devoted to "an outline of hygiene," and this has especial reference to the locality under consideration, which, according to the account before us, abounds in everything desirable.

Allowing for the prejudices attaching to a resident, this little work gives a very fair description of the advantages of Tunbridge Wells as a resort for invalids. The author admits that one will meet with, in the place, rather more dust than is agreeable, as we found on a recent visit. But such is a trifling, and not permanent inconvenience, and we agree with him as to the general beauties of the spot, and as to the good which a residence there, aided by the drinking of its chalybeate waters, may do to many invalids. The old and still lasting repute of the mineral waters of the Wells is a guarantee of their efficacy, and they must stand in the first rank among chalybeates. For three centuries this town has been celebrated for its springs; in the last century it was the resort of the élite of the day, among whom we may mention Dr. Johnson, Lord Chesterfield, and many other distinguished contemporaries; and, as the author will see from the preliminary observations with which we set out, we lament with him the—if we may so call it—morbid taste or predilection which the present generation manifests for every foreign locality, although it be inferior, both as to natural beauties and sanitary efficacy, to numerous spots in our own loved island; and although it costs them much more inconvenience, discomfort, and expense.

To give our opinion of the treatise more concisely, we must say that it very well fulfils its object, in setting forth the advantages of Tunbridge Wells, as to situation and climate, as a resort for many classes of invalids, and in recalling attention to the efficacy of its waters. Moreover, it is a book which will prove also interesting to the non-professional reader, so far as the general account of the place is concerned, and the Hygienic rules laid down. It is, moreover, embellished with two engravings, of the Wells as they were, and the Wells as they are; the former a somewhat quaint picture, illustrating the dress of the age, 1664—and with a map of the locality, and an outline section of its geology.

## Medical Societies.

### MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 19 & 26, 1847.—MR. DENDY, PRESIDENT.

ON THE RELATION SUBSISTING BETWEEN THOUGHT, VOICE, AND ARTICULATION, AND ON THE DERANGEMENT TO WHICH THESE FUNCTIONS ARE LIABLE FROM MENTAL EMOTIONS. By JOHN BISHOP, Esq., F.R.S.

THERE are few persons whose emotions on some subjects do not disturb the equilibrium of the nervous force to such an extent, as to interfere materially with the normal exercise of the intellectual, respiratory, and vocal functions. The extraordinary derangement of nervous force displayed in excited emotions, the control exercised by these emotions over the rest of the nervous system, and their influence on the living being in health and disease, render them a subject alike important to the physiologist and the pathologist. When the force which produces emotion is in excess, its tendency is to paralyze the intellectual, and to disturb the vital functions, in such a manner as to induce organic disease, and in some cases even sudden death.

Whatever may be the nature or cause of the changes in the brain which correspond to the several kinds of emotion, the changes themselves are, in the opinion of Müller, propagated from the brain to the medulla oblongata, the latter in its turn influencing the action of the respiratory muscles through the medium of the corresponding nerves, and affecting in an especial manner the motor nerves and muscles of the face. Dr. M. Hall has brought forward many facts which tend to show that the emotions are seated in the medulla oblongata, or at least in some part of the nervous centre below the cerebral hemispheres; and he has pointed out their influence on the paralyzed side in hemiplegia, when that of the brain is cut off.

The influences of the passions are transmitted by the motor nerves, producing effects corresponding to the nature of the passion; and may either increase, diminish, or even paralyze, the action of remote parts during a longer or shorter period. It is however observed, that similar phenomena may be produced by different emotions, and that weeping, sighing, and sobbing, may alike follow intense joy, anger, or pain. Anxiety, fear, and terror depress the action of the brain and spinal cord; and the legs in consequence tremble, and are scarcely able to support the body; the look is vacant, and devoid of expression; the functions of the respiratory and vocal organs are deranged, and cannot be controlled by the will.

In dealing, then, with this question, we are restricted to the study of the phenomena themselves, and to the circumstances which experience shows will tend to restore to its normal in-

tensity the force, which is either excessive or deficient, in some portions of the nervous system.

The phenomena of the animal and vital functions show that the whole of the nervous matter is influenced by a force, which is in constant action in the automatic, and in occasional action in the voluntary functions;—that this force is limited in amount;—and that consequently, if an undue portion of it be expended upon any particular function, the other functions, or at least some of them, will necessarily be deteriorated. The connexion between the formation of ideas and the various emotions is well established, and the latter are placed in some degree under the control of the will; indeed, were not the emotions regulated by the intellectual power, man would not occupy the lofty position which he now holds in relation to the lower animals, but would be the prey of his own passions. That volition has a decided control over the emotions, especially those which are exhibited through the agency of the voluntary muscles, is unquestionable; but its control over the organic system is very much restricted; and on the stomach, heart, and other organs supplied by ganglionic nerves, the emotions act almost independently of volition, except under extraordinary efforts of the mind.

It is therefore not surprising that such functions should have a great influence over the voice, speech, and respiration. The emotions which arise in the system of a person when he is about to address an audience are often so overpowering, that the voice loses its natural volume, becomes tremulous, and sometimes inaudible, the respiratory functions are irregular, the flow of ideas is impeded, and the articulating organs perform their office so imperfectly, that he who is generally ready and fluent in conversation, hesitates, stammers, and cannot utter a single connected sentence. Now, if persons who at other times have a perfect voluntary control over the organs of voice and speech, partially lose it under the circumstances just mentioned, *à fortiori*, those who have at all times an imperfect control over their articulation will, in similar states of feeling, find their powers paralyzed and their speech defective. It is to this point more especially that I wish to draw attention.

In the memoir on stammering which I formerly read to the Society, I endeavoured to explain the principles on which the successful treatment of defective articulation must be based. On the present occasion, my purpose is to explain the conditions necessary to be observed in order that the control over speech, when acquired, may be maintained; since without such knowledge the duration of this power is uncertain, and the patient is liable to relapse. In most cases which have come under my observation, patients who had attained the habit of speaking very fluently when not over-excited, relapsed the moment anything occurred which produced emotions of fear or anxiety. In order to counteract this tendency, it is necessary, as soon as the power to articulate correctly in private is acquired, to accustom the patient to read and speak daily before strangers. Under this discipline, continued for a longer or a shorter time, the emotions gradually subside, and the power of volition over them is strengthened, and it is not until the patient has been thoroughly exercised that any dependence can be placed on his retaining what he has acquired.

In many persons, the intellectual and vocal organs are capable of acting very well separately, as, for instance, in the solution of a difficult equation by the former, and in ordinary reading aloud by the latter; but the same persons often fail in combining these functions, as is evident in those who, without being under the influence of fear, nevertheless cannot express their ideas clearly in public. This defect in the power of association generally commences early in life, and is chiefly owing to the imperfect training of the vocal and mental functions in our schools. It must be remembered, that none of the series of actions under consideration is automatic, but that all are dependent on volition, exercised almost simultaneously, through the instrumentality of a multitude of organs. The working of such exquisite machinery cannot be acquired without much practice; and when, on investigation, we find that such a variety of successive physical changes is necessary for the production and vocal expression of a single idea, it is rather a matter of astonishment that the generality of persons speak so well as they do. It is, moreover, an object of considerable importance to lessen the excitability of patients labouring under these nervous affections, by appropriate medical treatment, which may tend to aid the practitioner in bringing the patient into such a state as will enable him to exercise a voluntary control over the mental and vocal functions simultaneously.

It might be imagined by some persons that this is merely a psychological inquiry, and beyond the range of therapeutical studies; but on more mature reflection it will be found, in this as in other cases, that those who exclude from their view the mental states of patients, and restrict themselves to the consideration of their bodily conditions, neglect the operation of an agent which controls more or less all the functions of the system.

Mr. Barlow observed, in reference to the effects of emotion upon paralyzed limbs, to which the author had adverted in the early part of his paper, that he had, some time ago, described a case of hemiplegia occurring in a child five years of age, in whose affected extremities there was not the slightest voluntary motion, but perfect reflex actions and strong muscular contractions, consequent on agitation of the mind. Thus, when he dipped his hand into water, as though for the purpose of sprinkling some upon the child, it became agitated, the fingers of the paralytic arm contracted, and the limb was bent and raised forcibly, and convulsively; and whilst it remained so, it was curious to watch the contrasting effects of passion, as exemplified by the affected and healthy arms. The latter, being controlled by voluntary power, shared not in the deranged motions of the former. He had seen another very similar case, in which affections of the mind, as fear, joy, surprise, excited an arm to lively action, which, beyond all doubt was completely lost to all efforts of the will; and Sir Charles Bell had alluded to a most interesting case, in which the facial had ceased to operate as a voluntary nerve, but retained its office as a nerve of expression. As to the immediate relation of emotion to stammering, it was a familiar fact that it mostly aggravated, and at times produced and perpetuated, the affection. He well remembered seeing a patient whom Mr. Bishop had treated, brought before the Society to show his improvement: confused by the spectators, the boy so hesitated that no true judgment could be formed upon the matter. Though very opposite in its cause to such cases as had been mentioned, he would just make reference to a remarkable instance of stammering dependent upon intestinal irritation, which Dr. Bostock had narrated; and it was reasonable to suspect that physical irritation of one kind or other in remote parts originated the affection more frequently than was supposed. Now if this were the case, one plain reason was beheld why cases of stammering should be entrusted to medical inquiry, and not, as frequently happened, placed in the hands of persons who were in perfect ignorance of the real nature of the disease. Dr. Marshall Hall, referring to certain forms of the affection, had aptly likened it to "a very partial chorea." Complex and various, and hard to be discovered, often, as its causes were, it demanded comprehensive and scientific investigation, and rational treatment, physical and moral. With respect to the opinion which he had expressed, as to cases of stammering being most advantageously submitted to medical observation, he might observe, that he had been led to the remark by Dr. Bostock's relation of a particular case. He could not suppose that like instances would not hereafter happen, nor that the form of irritation which was active in that instance was the only one able to excite the malady; and he had yet to learn the exact circumstances under which it was a recommendation to a treater of stammering to be ignorant of the structure of those parts by which articulation was performed, and, perhaps, to be incapable of recognising a larynx if he should chance to see one.

Mr. Streeter said that the subject of impediment of speech was one which he had long regarded with attention from special family circumstances. The alleviation of stammering was a common field in which elocutionary art and medical science had met, and were contending for the mastery. He believed the subjects of this infirmity cared little whether they were to be designated as pupils or patients, could they but attain effectual and permanent relief. It was certainly gratifying to our profession to remember, that at an early period this distressing affection had engaged the attention of medicine. A Dr. Wallis, as long back as 1687, prescribed directions to a patient for helping his speech. It was, however, but just to add, that the merit of publishing those directions belonged to Mr. Thelwall, the distinguished elocutionist, who gave them to the medical profession, in 1805, in the *London Medical and Physical Journal*, accompanied with an excellent commentary. He also published two letters to Mr. Cline, sen., to arouse attention to this subject, and expressed his hope that "the study and treatment of impediment of speech would be taken up by the profession as a branch of medical science." Mr. Streeter had also, on his way to the Society this very evening, been informed by Mr. Richard Cull, that a committee had actually been formed, in 1812, by Sir Astley Cooper, Sir Humphry Davy, Mr. Thelwall, and Dr. Callcott, a doctor of music, for the express purpose of

investigating the mechanism and functions of voice and speech; but which led to no result, in consequence of the untimely death of the last-named gentleman. The subject had likewise been pursued by Dr. Arnott and Dr. M'Cormack. With respect to treatment, the elocutionist relied upon exercises of the vocal organs; the surgeon, upon certain operations upon the tongue, the uvula, the tonsils, &c. Operative interference he held in utter abhorrence, and vocal training, though always useful, was often inadequate, in the choreal and tetanic varieties, to a perfect and permanent cure. The specialties of the defective utterance, and of the anatomical conformation, must be carefully studied in each instance before deciding on its appropriate treatment.

Mr. Bishop here objected to discussing the whole subject of the etiology of impediments of speech on a paper, entitled, "The Relations, &c.'

The President considered the whole subject of impediment too comprehensive for one evening's discussion, and hoped the speakers would confine their remarks within the limits expressed by the title of the paper.

Mr. Streeter said he would endeavour to keep within the limits desired by the author, and prescribed by the chair. He thought the author had not clearly distinguished, in his present paper, between confusion of ideas, want of words, and incapacity of uttering words. Confusion of ideas arose from imperfect operation of the intellectual powers; want of words, from imperfection of verbal memory. Neither of these ought to be confounded with vocal incapacity to utter ideas previously arranged and clothed in language by the mental powers. Thi s last arose from some imperfection of the vocal organs, or from an imperfect command over the voluntary movements of the respiratory and vocal muscles. Neither could he coincide in the theory, adopted by the author, that the medulla oblongata was the seat of the emotions. This extraordinary conception could only have arisen from confounding the expression of emotion, by the instrumentality of the respiratory movements, (over which part of the medulla oblongata presides,) with the primary seats of the emotions—viz., the superior, the lateral, and the posterior parts of the cerebral hemisphere. Not less extraordinary was the hypothesis of the existence of one common stock of nervous energy, which, if too rapidly expended upon one part of the system, caused a deficient supply to the remainder. Did excessive action of the optical nervous apparatus lead to more than exhaustion of itself? It did not create a deficiency in the gustatory, the auditory, or the olfactory functions. The real fact was, that each separate nervous centre generated its own peculiar nervous energy, whether it was associated with intellectual, emotional, motive, or sensual functions, and that each cerebral nervous centre sent down its mandates to the automatic or excitomotory centres of the medulla oblongata and medulla spinalis by descending nervous fibres, and thereby produced all the voluntary or instructive or morbid movements of the body.

Mr. Bishop said that the hypothesis of independent centres of nervous force mentioned by Mr. Streeter was inconsistent with the observed phenomena of the mutual influences existing between the intellectual, mechanical, and chemical functions of the body. If independent centres of force really existed, over-excited action of one portion of the nervous system need not disturb the equilibrium and normal action of the rest, which is contrary to all experience, and to the old maxim of the

"Mens sano in corpore sano."

Dr. Marshall Hall said that the subject of stammering was not unworthy of the study and investigation of the scientific physician and surgeon; and from its nature, it was entirely out of the reach of any but the anatomist, the physiologist, and the psychologist. All this would be obvious, if the definition of this disease, which he was about to propose, were correct, and that it was so he was persuaded from long and assiduous attention to the subject. Stammering was the alteration or interruption of the acts combined in the function of articulation—first and chiefly, by emotion; and secondly, by excited reflex action. It was an affection of the organs of speech, not, as a distinguished member of our profession once supposed, of the larynx or organ of voice. If this definition were correct, a ray of light might be thrown upon the subject by the recent investigations in the physiology of the nervous system; and that it was correct, he was, he thought, prepared to prove. On Friday, the 16th inst., he sent a young friend of his to Mr. Bishop for his opinion. This gentleman, a member of the University of Cambridge, stammered shockingly whenever he was accosted by a stranger, whereas in his own family he spoke without hesitation. Who could fail to see the rationale of this extraordinary fact? The same gentleman was also comparatively free from hesitation when in good health; but his infirmity—he (Dr. Hall) could call it no less—was extremely augmented by derangement of the stomach, intestines, or general health. His case so far resembled that of an interesting communication of the late Dr. Bostock, published in one of the volumes of the *Transactions* of the Royal Medical and Chirurgical Society. This derangement acted in two ways: first, by inducing greater susceptibility of the spinal system; secondly, by inducing through that system excited reflex action; but chiefly, indeed almost entirely, the former. Who but a physiologist, then, could comprehend this important subject? Who but a physician or surgeon could select and adduce all the appliances for remedying this sad malady? Nearly allied to stammering were chorea and the paralysis agitans. These, like stammering, were greatly the result of emotion. He had known chorea cease for a moment on removing emotion, by fixing the attention on another topic. He had seen a patient afflicted with paralysis agitans, who was all agitation and could not take a step, become still and capable of walking, by the security inspired by the mere touch of his hands by those of another person. Remove emotion, inspire confidence, and the malady ceased for the time. Allied to this affection were others, but in a peculiar manner. The laryngismus stridulus—some eccentric forms of epilepsy—belonged to this class. But in these, excited reflex actions constituted the greater part of the disease, emotion the less.

Every man had a right to his own opinion, and he trusted that no one would take offence if he said he was greatly disappointed on reading the opinions of the fellows of that Society on the subject of the laryngismus stridulus, as reported in a late number of The Lancet. It was not for him to criticise those opinions; but he might be permitted, perhaps, to observe, that they fell far short of our present real knowledge of the important subject. He was of opinion, that the laryngismus stridulus consisted in excited reflex actions, and of the effects of emotion, until convulsions had once taken place, when the brain became involved in what *was* an affection limited to the spinal system.

If, again, this definition were true, how did it guide us in our treatment. It was a gift conferred by physiology upon the art of medicine.

The principal excitants of these reflex actions were causes of irritation, existing, first, within the gums and sockets, from teething; second, in the stomach, indigested food, acidity; third, in the intestines, retained fæces; and fourth, the external atmosphere.

There had been much dispute even on the minute topic of lancing the gums, as to how much or how little these almost insensitive tissues may be lanced or scarified. He would not wait to discuss this question now, but he would say, let us take care that the omission of lancing the gums sufficiently did not lead to convulsions, and its effects on the organ of intellect. The stomach and intestines must be kept effectually free from crudities. He had time to say but one word especially on the influence of the atmosphere. When our little patients were doing well in every respect, we had frequently to endure the disappointment of our efforts in relapses. These relapses were frequently traceable to change in the direction of the wind, to the north, east, or north-west. Now for the deduction to be drawn from this fact of observation: the air of the room should be preserved from currents by securing the door and windows, and be well imbued with vapour; and the little patients should be surrounded by a curtain of single or double net or lace, (such as might be bought for sixpence the square yard.) Every source of irritation—of infant emotion, if he might so express himself—must also be avoided. These things, properly and effectually done, he had seen all symptoms of laryngismus, all strabismus, all spasm of the fingers and of the toes, cease at once. Such an event occurred in the case of a patient of Mr. Stilwell, of Uxbridge; and in another, in one of Dr. Grant's, of Thayer-street, within the last week or two: all actual convulsion was averted, the brain was spared, and excited reflex actions disappeared.

It should be observed, that the effects of emotion differed from reflex action, in being, generally speaking, more clonic, less tonic, or lasting. This was an important source of diagnosis. But, indeed, had not our knowledge of the spinal system become the source of all diagnosis of the diseases of the nervous system? Could we study, really investigate a case of this class of diseases, without a due knowledge of this system? No. He repeated, this was a gift and boon conferred by physiology on the art of knowing and curing diseases. It taught us the nature and value of symptoms.

It was our sole diagnostic. But who really knew or understood the subject? No one who had not seen with his own eyes the actual experiment or experiments. This one remark he made for the correction of a certain weak and ignorant set of persons who wrote and spoke foolishly on this subject.

There was another question to which he must allude. It was this:—What was the precise seat of these emotions (perhaps he ought to say, lower emotions) and passions to which he had ascribed so much importance? It had been asserted by those who wrote to call his opinions into question, that he had assigned the medulla oblongata as the seat of these emotions. Now, he had not stated any opinion quite so boldly. He had, on the contrary, said, "there is good reason to suppose" that the emotions act through the medulla oblongata, &c.

The allegation relative to his opinion on this subject was a little like the similar allegation in regard to the excitors of inspiration—an allegation which was repeated in the last part of the *Encyclopædia of Anatomy and Physiology*. The writer quoted his second memoir, p. 87. He wished he had had the patience to turn the leaf and read pp. 88 & 90, §§ 162 & 169.

The only thing, however, of real moment to the art and science of medicine, was—What are the facts which lead us to any opinion on the subject?

Now, first, the hemiplegic arm, removed from the influence of volition by a clot of blood in the cerebral hemisphere, is agitated by emotion. This was fact the first. The seat of emotion is therefore seated below that of volition, whatever both and each may be.

Secondly.—In the idiot, although the cerebrum, cerebellum, and intellect, may be reduced in the utmost degree, anger, voracity, and lust, were frequently manifested in the highest. These emotions were therefore seated otherwise, and lower down, than the intellectual faculties.

Thirdly.—Disease seated in the medium lobe of the cerebellum had been known to induce sexual excitement. It may act either on that lobe, or on the adjacent medulla oblongata.

Fourthly.—M. Segalas and M. Andral said distinctly, that injury and disease of the cerebellum induce sexual excitement when they reach to the medulla oblongata.

Fifthly.—Sexual excitement had existed, as in the case of M. Cruveilhier, when the cerebellum had been defective or absent.

Sixthly.—Whatever the precise seat of emotion and passion might be, they undoubtedly act through the medulla oblongata and the spinal and ganglionic systems, affecting especially the expression, the respiration, the heart, the secretions; to which might be added, the deglutition, the sphincters, &c.

Seventhly.—Allied to the emotions and the passions were pleasurable and painful sensations.

He knew not whether we might positively conclude that all these had the same seat. But he could positively assert, from an experiment which he once witnessed in Paris, performed by M. Longet, that the rabbit, deprived of all cerebrum, and of all cerebellum, was susceptible of pain when any part greatly endowed with sentient nerves, as the tail, was pinched with the forceps.

He wished all these facts to be taken for just what they were worth. "Valeant quantum valere debent." If they did not fix the seat of emotion, passion, &c., in or near the medulla oblongata, they effected that localization with great probability.

In speaking of the emotions, he wished to be understood as speaking of the lower emotions, which most nearly approach the passions: such were, the love of money, perverseness of temper, anger, fear, &c. Such were seen in the idiot, in the imbecile, &c. When intellect was gone,—when the higher organ of intellect was absent, these remained occupying the lower portion of the encephalon, and if not seated in, acting through the medulla oblongata. More than this he had never said or meant to say, whilst these last words he had said over and over again. Of the precise seat of the higher emotions, such as veneration, honour, dignity, he had never treated. Of the lower, such as envy, hatred, malice, as they were traceable chiefly in persons of weak intellect, they were placed low in the encephalon. However they might differ on this point, let them at least unite in endeavouring to trace the effects and influence of emotion in inducing, modifying, and curing diseases. Wide was this field. Emotion was the great cause of insanity on the one hand, and hemiplegia on the other. It excited the attacks of epilepsy and of laryngismus; it turned the scale, in certain affections, for or against the patient, according as it was of the elevating kind, as hope, or the depressing, as fear. The other day a patient of a friend of his, seen by Dr. Robert Lee, died of uterine hæmorrhage, in which the loss of blood was so moderate, that these gentlemen could not believe or imagine that the hæmorrhage was the sole cause of the fatal event. The fact was, that the poor sufferer had been affected by some recent events, and had for some time laboured under the depressing conviction that she should not recover from her accouchement. It was the combined depression or exhaustion of the nervous and sanguineous system which destroyed life.

To return to the subject of stammering, it might be truly said that it could scarcely exist without emotion, just as tetanic spasm in tetanus, and the closing spasm in laryngismus, would scarcely exist without excitants: and it is only to be cured by mental discipline, adequately directed and adequately combined with attention to the general health, &c. It is a complication entirely out of the reach of the non-medical person, involving some of the most abstruse views of psychology, physiology, and pathology.

## British Medical Journals.

### TETANUS FROM A FALL, WITHOUT EXTERNAL INJURY; TEMPORARY RELIEF FROM THE INHALATION OF ETHER.

Dr. Brady related to the Surgical Society of Ireland a case, of which the following particulars are an outline:—

A man, twenty-six years of age, slipped in walking, and was thrown with considerable violence on the "broad of his back." He was stunned, but did not lose his consciousness, and walked home—a distance of half a mile. He felt, during the evening, none of the effects of the fall.

"The following morning he complained of feeling stiff and sore all over his body. He got up during the day, and dined heartily, though complaining frequently of increasing stiffness, especially about the throat and neck. After passing a restless and an uneasy night, he fell asleep towards morning, but soon awoke in a fright, crying out that his jaws were closing, and begging for a spoon to keep his mouth open. From this time the symptoms continued to increase with rapidity; the jaws became more closely approximated; the muscles of the neck more stiff and painful; the head was retracted; the painful rigidity extended over all the muscles of the back, and he began to suffer from excruciating pain in the epigastrium, and from this point all round the body. In this state he was admitted into Cork-street Hospital on the following day. The trismus and opisthotonos had by this time attained a great degree of intensity, though a knife or the handle of a spoon could be still introduced between the teeth; the abdomen presented to the eye the appearance of fulness and tension, and felt as hard as a board; the pectoral muscles were rigid and swollen, forming by their prominence a deep furrow in the line of the sternum; the muscles of the extremities were not affected then, but the spasms subsequently attacked the calves of the legs. The pulse was small, hard, and frequent; the action of the heart weak, and the respiration feeble and languid; the bowels had been freely evacuated two days previously. Deglutition was difficult and very distressing, producing generally an attack of the paroxysms of spasm. He spoke distinctly, and was able to give a detailed account of the accident and of the progress of the symptoms.

"The inhalation of ether was suggested, and tried; but in consequence of the retracted and painful state of the patient's neck and back, and his inability to sit up, some difficulty was experienced in getting him into a position in which he could inhale freely; and at his own suggestion, he was placed partially resting on his knees and hands, and supported in that posture. When he had inhaled for about a minute and a half, his eyelids were observed to drop suddenly, and his face to assume an expression of repose, upon which the mouth-piece was withdrawn; and being asked how he felt, he said he was relieved; the mouth-piece was then reapplied, and he continued to inhale for one minute more, when those who were sustaining him, feeling him sink down, let him go, and he fell on his back on the bed, the spasmodic tension of the muscles of the back being so much relaxed as to admit of his lying in that position. No inconvenience whatever attended the inhalation; it did not even produce cough, or any irritation about the larynx. He lay thus, in an apparently calm sleep, for about four minutes, during which the affected muscles, if not

completely, were very much relaxed, and he exhibited no feeling of pain even when the limbs were pinched. On recovering from this state, he exclaimed—"Where am I?" and being questioned as to how he felt, he said he had had a "delightful dream," and proceeded with surprising volubility to describe what he had seen in it. He continued to talk in this way for a quarter of an hour, when, stopping suddenly, he cried out that the "cramps" were returning. A spasmodic attack soon followed, after which he remained in the same state as before the inhalation. Doubts had from the first been entertained by some present as to the propriety of employing the inhalation at all, in consequence of the intense state of spasm of the muscles of the throat and neck; and as its influence seemed so transient, it was now urged that it would be better to adopt more energetic treatment. Accordingly, a blister was applied along the spine, and the vesicated part dressed with mercurial ointment; a drachm and a half of the same ointment was rubbed into each axilla; and calomel and opium in the form of bolus, as he could not swallow pills, were given every third hour. No impression, however, appeared to be made on the disease by these measures; on the contrary, after some time, the paroxysms of spasm began to occur more frequently, returning every ten or fifteen minutes."

The severity of the disease increased; when next it is reported—

"It was now evident that if he did not die otherwise, he would be asphyxiated before many hours. Yet his mental faculties did not seem in the slightest degree impaired, and when not suffering from the attacks of spasm, he conversed freely with those about him. Being asked if he recollected the inhalation on the day before, he at once said that it was the only thing that had given him relief, and begged it would be repeated. Preparations were, indeed, made to gratify him in this respect, but as the apparatus was about to be applied, he was seized with a kind of convulsive twitchings or clonic spasms of the muscles of the face and neck, which had ushered in all the later paroxysms; and after a short spasmodic struggle, he expired about twelve o'clock, being ninety hours from the time the accident occurred, and about seventy from the first manifestation of the symptoms."—*Dublin Med. Press.*

The case is interesting, from the rarity with which tetanus thus originates, and also from the effects which followed the inhalation of the ether. Another case is recorded by Mr. Broughton, in the last number of the *Provincial Journal*. It is to the following effect:—

TRAUMATIC TETANUS; INHALATION OF ETHER.

"A miner received an accident by which his forearm was crushed. The writer found it necessary to amputate the limb below the elbow. Tetanus in a severe form followed on the eighth day. Narcotics, sedatives, blisters, purgatives, &c., were made use of without benefit. The inhalation of ether was tried on the third day after the tetanus had shown itself. The spasms immediately ceased; the patient slept for ten minutes; the spasms returned with consciousness, but in a less severe form. With similar effects it was three times applied. Before the apparatus could be got ready a fourth time, at the patient's request, a violent spasm came on, followed by another, and he sank."

There is not much encouragement in either of the cases here related.

RESEARCHES ON HYDROPHOBIA.

From page 464, we continue our extracts from Dr. Eckel's researches on this disease. Having already referred to the principal facts in its history and symptoms, we now have to consider the pathology and treatment. The author dissected the body of every rabid dog that died in the institute; his inquiries do not reveal the true seat of the disease. They indicate rather where it is not than where it is. Except congestion, and that generally of the abdominal organs, a perceptible lesion was rarely to be seen. In the blood itself, which has received the poisonous influence, and in which a further development takes place, and its action on the nervous system, does it seem possible to be able to trace the true pathology of the disease.

"It further appears, from the observations and experience of Dr. Eckel, that in the 141 cases of rabies adverted to, twenty-eight transmitted the malady by the act of biting to thirty-six persons, twenty-two dogs, two horses, one cow, and one goat. Of the thirty-six persons bitten, three died hydrophobic. In one of these the disease showed itself only on the 104th day after the infliction of the wound, and the patient died on the fourth day after the attack. In the two horses and the cow, the virus produced no effect; but the bitten parts had been well cauterized with concentrated hydrochloric acid, and the suppurative action set up lasted for six weeks. The goat, which was bitten in the lip, was left to nature, and it became rabid; the disease manifesting itself on the twenty-second day after the bite, and death taking place on the fifth day subsequent to the appearance of rabies.

"Many experiments performed by Dr. Eckel have proved to his satisfaction that rabies is not transmitted at distances, nor by mediate or immediate contact of the bodies of animals living or dead, but only by the bite of the rabid animal, or by inoculation. During those experiments by bites and inoculation, the shortest period in which the disease showed itself was, in the case of the goat, twenty-two days. The longest period was observed in two of the persons bitten. In one it was days, in the other, 102 days. In a pig, forty-nine days transpired, and in a sheep, thirty-five days.

"It also appears, from other experiments instituted by him, that the potassio-tartrate of antimony, calomel, tincture of nux vomica, disulphate of quina, opium, and hydrocyanic acid, when administered to dogs suffering from true rabies, do not produce the same action as is ascribed to them in other diseases, or under other circumstances; and that they have not the least influence on the duration or the termination of the malady, which they do not in the least modify, even when given in extraordinarily large doses."

And thus the treatment is left in almost the same unsatisfactory condition that it had previously been. The author makes some further interesting remarks, which, as they indicate the condition under which the disease may be usefully remembered in our attempts to prevent its occurrence, if we cannot cure, we may prevent.

"The physiological characters of the dog, which influence more particularly the generation of rabies, and which are to be sought for in the vegetative, sensitive, and irritable phases of his nature—the fact of his immoderate venereal desires, and his extraordinary fecundity—his quick growth, and the speedy development of his faculties—his appetite, and necessity for animal food, putrefied in most instances—his rapid digestion, and continual voracity—his excretions, so repulsive in their odour—the faculty of bolting his food, with an equal facility of vomiting it up again—the rapid renewal of the blood—the acceleration of the respiration and circulation—the development of the brain—the large amount of instinct—the activity of the intellectual faculties—the facility of impression—its natural pugnacity and passion; on the one side, an unlimited attachment; on the other, an implacable hatred, of which no other animal seems to be capable—his temperament; in youth sanguineous, in old age melancholic;—all this indicates a peculiar predisposition to the diseases of which rabies seems to be the type, *par excellence*. Add to this, the many changes to which domestication subjects the dog. If one considers the ill-treatment he often receives, being sometimes nearly starved to death, at others, fed to excess; often exposed to the intensity of heat and of cold; sometimes allowed an immoderate indulgence of the venereal desires, at others prevented at the very moment of satisfying the same; and if we reflect for a moment on the effects produced on the morals of some degraded beings of the human species by venereal desires, we may easily understand the results that follow their restraint, and also the entire prevention of satisfying them. In the dog, where the ejaculation of the semen is to follow so closely upon its secretion, he not being, like man and other animals, provided with a vesiculæ seminales, it will not be difficult to comprehend how a nervous irritation, with a sanguineous decomposition, and finally rabies and death, should become developed in him.

So long as the specific cause of the pathological nature of rabies remains undetermined, it would be impossible, *à priori*, to decide on any curative method so as with certainty to combat the disease. Much here must be left to chance. Confining ourselves to the careful observation of the malady, allowing every liberty and every latitude to animals in order to admit of a full manifestation of their instinct, is the only way by which we may one day hope to arrive at an efficacious therapeutic treatment of rabies."—*Veterinary Record.*

# THE LANCET.

LONDON, SATURDAY, MAY 15, 1847.


THE great body of the medical profession will learn with much satisfaction that the Government has consented to the appointment of a SELECT COMMITTEE OF THE HOUSE OF COMMONS to investigate the subjects of "Medical Registration, and the state of the Law relating to the Practice of Medicine and Surgery" in this country.

This fair and honourable conduct on the part of SIR GEORGE GREY and his colleagues will obtain for them the grateful acknowledgments of the persecuted members of the medical profession. There can be no mistake on the subject. The Government is acting on the occasion in a spirit of justice which must procure for them the lasting gratitude of the medical fraternity. All ranks and classes of the profession throughout the empire must derive courage and advantage from the course which ministers are pursuing on the long-agitated question of medical polity. The monopolists, as well as the mean betrayers of their medical brethren, have been heard at the Home Office; but they have utterly failed in their object. Inquiry before a SELECT COMMITTEE, where all the objections against the Bill may be brought to a focus in the form of evidence, which can be laid before the House, the profession, and the public, is sanctioned by the Ministers of the Crown. The motion, it is true, may be resisted in the House of Commons by members of that assembly who might allow themselves to be influenced by the private representations of delegates from certain corporations. The ministers, we repeat, are in favour of an inquiry before a SELECT COMMITTEE. Still the motion for the appointment of such a Committee may be lost, because there may vote against it a majority of members of the House of Commons, who may be present when the motion is made, who are indifferent to the position which legally-qualified practitioners ought to occupy in this country, and who are unacquainted with the fraudulent —the murderous—practices of the audacious quacks.

Explanatory letters, addressed by medical practitioners to their representatives in the House of Commons, would be highly beneficial at this juncture. Every qualified physician, surgeon, and apothecary, should feel it to be an imperative, a vital duty, to address his representatives in parliament, and beseech them most earnestly to support a motion for the appointment of a COMMITTEE. Activity and perseverance in a cause so full of truth and justice can accomplish everything. But it is time that a new feature should be visible in the representations which are to be henceforth made in Parliament. The conduct of the corrupt self-elected governing authorities of the Colleges must now be assailed, exposed, and condemned. The manner in which they have neglected their duties to the profession ought to form one of the subjects of all future petitions to the Houses of Parliament. It ought to be stated that instead of advancing the interests of the profession, they have retarded the progress of science, and that instead of upholding the rights and privileges of legally-qualified medical practitioners, they have basely allowed them to be destroyed. *Thirteen thousand members of the College of Surgeons of England* can bear painful testimony to the truth of this statement. The time has come, then, when renewed energy and activity are demanded on the part of the profession. The work of petitioning has already been admirably performed; but it must be *continued* without relaxation or abatement. Those members of the profession who have already petitioned should petition AGAIN, and immediately; and all others who have not petitioned, should follow the example so nobly set before them by those noble and high-minded men, whose representations, embodied in petitions, have already operated so advantageously upon the views and opinions of her Majesty's ministers.

But the opposition of the Presidents and Councils of the London Corporations ought in future to be specially noticed in the petitions which may be presented to Parliament. These institutions have been productive of nothing but evil; and this ought to be stated. Their governing bodies have no feelings in common with the rest of the profession; they do not speak the sentiments of their professional brethren; they do not act in accordance with the views of their professional brethren. Such persons look only to the promotion of their own narrow objects; they reject the great national cause of medical science; they disregard the best interests of humanity. By such men it is forgotten that there exists a national community. To our professional brethren, then, throughout the empire, we again exclaim, "PETITION! PETITION! PETITION!" and do not forget to condemn the conduct of those unjust and selfish corporations, which are offering a determined opposition to a Bill which has been framed with a view to place the rights of all legally-qualified practitioners on a just foundation, and thus prepare the way for the utter annihilation of quacks and quackery.

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PROMINENT among the measures that now float in the political horizon is Sanitary Reform. A few years only have elapsed since it might have been beheld "arising out of the sea" of commissioners' statistics—"a little cloud like a man's hand." Now, notwithstanding obscurity of outline, and incompleteness of detail, it has acquired a magnitude and importance second to none; and while it bids fair to refresh as with genial rain the face of social existence, it may also ultimately modify the condition of the civilized world. Its especial interest to medicine as a science will hereafter demand our attention from time to time. As one of the principal organs of a profession which is the skilled witness on these topics before the bar of public opinion, we feel bound to give the subject that prominence which its bearings upon the profession and the public deserves.

Our metaphor of a tropical storm would be imperfect, were there a complete absence of that conflict of opposing elements which appears to lessen, but which in reality increases, the promised good; since it is only after the wind and tempest that the parched earth receives the long-desired rain. In the present case, the opposition is from no less an antagonist than that mighty apotheosis of selfishness whose endearing appellation is "Vested Interests." Doubtless the name is in allusion to the amplitude of waistcoat which the rubicund, nummular, and well-to-do votaries of this British Juggernaut possess. Be that as it may, they are indeed what we have described them—prosperous, cheerful, and respectable men, and occasionally facetious withal.

Much as they command our admiration, truth compels us to dissever from them the numerous members of the medical

profession; though certainly, if any can claim the protection of the State to the existing order of things, their expensive and toilsome education, their still more laborious practice, and the liability to punishment for incompetency which the law enforces, would give them such a right of appeal. Yet the medical profession, which will shortly be infamously swindled out of fever, cheated of dysentery and diarrhœa, robbed of a large per-centage of skin diseases, and amerced of no inconsiderable amount of phthisis and other items which go to make up the nosology—the medical profession, we repeat, submits to this prospect without a murmur; nay, more—with a short-sightedness that must amaze the clear-headed representatives of the "interests" aforesaid, it actually appears to rejoice thereat; and the whole of its members might be correctly divided into two sections, one of which heads, or indeed causes, the movement, while the other constitutes itself a partaker of the suicidal deed by wishing success to the former, and by supplying it with well-attested and annoyingly corroborative facts. This is odd, to say the least of it. Though we could scarcely expect of physicians, surgeons, and general practitioners, the acuteness of aldermen, the bonhommie of butchers, or the sagacity of sewage commissioners—though "non omnia possumus omnes"—i. e., we cannot all be Sir Peters—yet the "natural class differences" of intelligence will not explain the contrast.

We believe the facts to be these:—That however much the daily avocations of the professional man may diminish his surprise at human misery, his disgust at horrible stenches and sights, still his humanity is practically developed in contradistinction to the sympathizing "Dear me! who-could-have-thought-it!" school of philanthropy; moreover, the fountains of human feeling are not dried up, even by a scientific education; and did "medical gentlemen" adopt the fashion of the day, and parade those feelings, perhaps they too would unfold more of true sympathy for the woes of others than the public give them credit for. Knowing that there is every probability of diminishing the general aggregate of human misery, by attacking that vast portion of it which human vice and ignorance bring on themselves; recollecting that they were men before they entered the profession; that they will be again included in the common destinies of all men, by death; they pursue a noble course, helping with might and main to advance the happiness of their species, regardless whether income improves or suffers by the progress, and deriving motives to industry, not incentives to idleness, from the fact, that their skill has, under Providence, already done so much to raise the average duration of human life.

This is most natural. In all departments of art and knowledge, scientific and practical men are constantly attempting, and as constantly effecting, improvements. We ought to beg pardon, and say, in all but one, since it appears that drainage in the city of London has reached perfection, and its professors the goal of their ambition.

Perhaps it is better, after all, that there should be two sides arguing out the question; and while we could expect no less than what is here stated from a profession, the extent of whose knowledge is as little appreciated as is the moral sublimity of its most ordinary operations, we may also safely confide the task of opposing the cry of the poor and needy to those who now live by the slaughter of children, by the more protracted disease and death of the industrious poor, and by the more or less of misery and discomfort of all classes. We do leave it accordingly to cœlelminthate and sterelminthate entozoa, to epizoa, to pulex and pediculus among insects, to certain low arachnidans, and, in a word, to "vested interests" in general. Finally, in bidding sanitary enactments, as we do, a hearty and hopeful "God-speed," we are sure that we do but express the unanimous feeling of the profession. Its very divisions on other subjects afford a most significant import of the value of its unanimity in this particular case.

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We extract the following advertisement from a recent number of the *Glasgow Herald:*

"*Medical Lecturers, &c.*—Wanted immediately, a Certificate of Practice of Medicine, and two of Midwifery and Diseases of Women and Children, during the year 1844-45—these Certificates having been destroyed, and copies being now unattainable.

"Any information directed to D., 9, Claremont-place, Pentonville, London, will meet prompt attention, and be considered strictly confidential. They must be available for the London examining bodies."

It is evidently addressed to the medical teachers of Glasgow, with the impudent hope that some one lecturer on "Midwifery and Diseases of Women," and another, on the "Practice of Medicine," will be found dishonest enough to forward, for a consideration, the Pentonville advertiser false certificates of attendance on the lectures specified. The roguery of the proposal shines very transparently through the "certificates having been destroyed," the "prompt attention," and the "strictly confidential." Such an attempt to obtain false certificates for the examining bodies by bribery, is, we hope, unparalleled; it is no less an insult to the faculty of Glasgow than to the entire body of medical lecturers throughout the kingdom. From these and other indications which meet us from time to time, it is evident that the licensing bodies had need be more severe than they habitually are in the examination of certificates and the other documents presented to them as preliminaries to examination. Cases are bruited about in which diplomas have been granted upon certificates falsely obtained, either by the dishonesty of pupil or teacher, or upon forged certificates. Certificates have been granted to boys at school. Men from the West Indies, pretending to go through the whole curriculum of an English medical education, have obtained their diplomas without being scarcely longer from home than would be necessary to complete the voyage to and fro. Others, from some kind of imposition or other, have passed the College of Surgeons and the Apothecaries' Hall when an alibi could be clearly proved upon their certificates. At the College of Surgeons personation has even been resorted to; it is at the present time matter of common gossip at the College, that one man has passed the College three times for different individuals under different disguises. It is high time that all the examining bodies should strengthen themselves against the possibility of such frauds. The sure way to do this is to examine thoroughly into every suspicious case, and to prosecute to punishment all detected parties. Does any of our readers know anything of D., 9, Claremont-place, Pentonville? We can promise any communication on this head "prompt attention." Such information might also prove very useful to the authorities at the Hall and College.

## House of Commons.

MORNING SITTING, WEDNESDAY, MAY 12TH, 1847.

### MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

On the order of the day being moved for the second reading of this Bill,

Mr. HAWES presented a petition against the measure, from the Master and Wardens of the Society of Apothecaries of London, and said that it was right that he should state that he had other petitions to present, not then with him, in favour of the measure.

Sir ROBERT INGLIS presented a petition from the Council of the Royal College of Surgeons of England, against the Bill.

Mr. WAKLEY presented one hundred and thirteen petitions in favour of the measure, all of them praying the House to enact the Bill into a law in the present session of Parliament.

Mr. WAKLEY then said, that as her Majesty's Government had consented to refer the subjects of Medical Registration, and the State of the Laws relating to the Practice of Medicine in this Country, to a SELECT COMMITTEE, and as he hoped to make the motion for its appointment in the course of a few minutes, he had now only to postpone the motion for the second reading of the Bill until Monday fortnight.

Agreed to.

Immediately afterwards, the House, on the motion of Lord MORPETH, went into Committee on the Health of Towns' Bill, and, at twenty minutes to six o'clock, when (on Wednesdays, by a rule of the House) the Speaker peremptorily leaves the chair, a motion being made that the House be counted, and not forty members being present, the assembly necessarily broke up.

The motion of Mr. WAKLEY for the appointment of a Select Committee was placed on the paper for the following day, (Thursday,) and notice of it will be given daily, until it can be brought before the House.

## Correspondence.

### THE OPPOSITION OF THE COUNCIL OF THE INSTITUTE TO THE MEDICAL BILL.

*To the Editor of* THE LANCET.

SIR,—I cannot but express my astonishment and regret, on reading the resolutions published in the public papers by the Council of the National Institute of Medicine, against the provisions of Mr. Wakley's Medical Registration Bill; and for the following reasons:—

1st. The National Institute has invited every legally-qualified medical practitioner, however humble his qualification may be, to join that National Association, with the guarantee of being admitted to the full privileges of that class of practitioners, whenever they obtain their expected charter.

2nd. By such a procedure, they have, nominally, given a legal guarantee to practise, to those practitioners who do not possess the licence of the Apothecaries' Company.

3rd. On the face of their former proceedings, this apparent generosity to their pseudo-legalized brethren was hailed as an omen of that good feeling in the profession which it has so long needed; and in that way has increased their numbers and influence.

4th. That, in consequence of some offence given by, or pique at, Mr. Wakley, the Council now come forward and say Mr. Wakley's Bill "would permit persons possessing a single qualification to practise the three branches of the profession:" notwithstanding they have already registered such persons in their list.

5th. The Council intimate that Mr. Wakley's Bill "would give increased facilities for practising medicine to the chemists and druggists:" when, on the face of the Bill, every possible means have been taken to prevent such unjust and illegal interference.

6th. As the Council of the National Association know, as well as I do, that the provisions in Mr. Wakley's Bill are just what the profession have a wish and a right to require and demand—i.e., a legal recognition to practise according to the value of their degrees obtained by examination, after regular study; and "that the mere certificate of the registrar would not constitute the only title to practise;" and a ready mode of securing those legal privileges they have obtained; preventing the lives of her Majesty's subjects being tampered with by a host of ignorant quacks;—they (the Council of the Association) cannot any longer expect the support of those medical practitioners who think rightly on the subject.—Your obedient servant,

E. J. SHEARMAN, M.D.

Rotherham, May, 1847.

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SIR,—I wish to call the attention of the profession to the necessity there is for the MEMBERS of the NATIONAL INSTITUTE, who are desirous that the Medical Bill should pass into law, to acquaint the Council of the Institute with their sentiments; and also a further intimation, that should they take upon themselves, in opposition to such wishes, to oppose the above valuable measure, such conduct would compel an immediate withdrawal of their names from its list of members.

I am a member of the Institute, and have written to the secretary that I am wishful for the Bill to pass into a law; and from conversation which I have had with several of its members, coupled with the expression of opinion in other places, I feel sure that a great majority of its members must be for the Bill; and if the Council do venture to oppose it, they ought not to suffer them to use the weight of their numbers in endeavouring to defeat a measure, about the success of which they are all so anxious.—I remain, Sir, your obedient servant,

SAMUEL BEECROFT.

Hyde, May, 1847.

### MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*To the Editor of* THE LANCET.

AT a meeting of medical practitioners residing at Wakefield, held at the Dispensary, on the 8th of May, W. Starkey, Esq., in the chair, it was resolved—

1. That this meeting, approving generally of "The Bill for the Registration of Medical Practitioners, and for Amending the Laws relating to the Practice of Medicine in Great Britain and Ireland," petitions be presented to Parliament in its favour. Proposed by H. Dunn, Esq., seconded by W. R. Milner, Esq.

2. That the petitions be sent to the Hon. W. S. Lascelles for presentation. Proposed by J. Bennett, Esq., seconded by S. Marshall, Esq.

3. That the thanks of this meeting be presented to Thos. Wakley, Esq., for his unwearied endeavours to improve and amend the present condition of the medical profession. Proposed by Dr. Wood, seconded by E. Walker, jun., Esq.

4. That a copy of these proceedings be sent to THE LANCET and *Medical Gazette*. Proposed by I. Burrell, Esq., seconded by S. Secker, Esq.

Signed { W. STARKEY, Chairman.
{ R. S. ROGERS, Hon. Sec.

### WANT OF MEDICAL MEN AT SEA AND ABROAD.

*To the Editor of* THE LANCET.

SIR,—The steam-vessels of the Peninsular and Oriental Company carry no surgeons, although, in their prospectus, printed, I presume, some time since, they undertake to do so. I refer to those plying between Southampton and Gibraltar; the passage occupies from five to seven days; the fares are very high: and it need hardly be remarked, that in five days, casualties might occur amongst smaller numbers than those collected in these vessels. Such employment would probably be welcomed by many scientific persons; and their employment might be productive of much comfort to passengers.

It is quite extraordinary to see the absence of enterprise amongst physicians and other qualified medical men, (I trust I speak correctly.) In Lisbon, a large city, the practice is monopolized, as regards the English residents, by a kind of English apothecary-surgeon. At Seville, where there are also many English residents, and numberless English visitors, no English medical man resides. I write feelingly, as I am now suffering from this want. Surely, Sir, these places offer fields for the display of English medical talent.—Your obedient servant,

A SUBSCRIBER.

Seville, April, 1847.

## QUACK MEDICAL BOOKS.

*To the Editor of* THE LANCET.

SIR,—Yesterday evening, I received, by the Parcel Delivery Company, carriage paid, a small parcel. Upon opening it, I found it contained a quack medical book, with the name of La Mert, of Bedford-street, Bedford-square, on the cover, &c., as the author, together with the note I now send to you. It appeared to me a most impudent thing to send a book and note of this kind to a gentleman's private residence, or, indeed, to him at all, and I was at a loss to know what I ought exactly to do. However, as it appeared to me a very gross proceeding, as well with reference to the public at large as to the respectability of the medical profession in particular, I thought I could not do better than to send the note to you with this explanation. Your well-known great exertions for the honourable character of the medical profession, and in being editor of THE LANCET, will, I hope, excuse me for intruding upon your time. The book I immediately sealed up, and placed it in a drawer, to await the call the party alleges he shall make for it. No doubt you are aware of the nature of the work, and if you think it worth while to notice the conduct of the party, I shall be very glad to have been the means of exposing such conduct.—I remain, dear Sir, your very obedient servant, JOHN MOORE.

New-square, Lincoln's-inn, April, 1847.

*** We insert the enclosed; it needs no comment in the present instance at our hand. We should recommend that the party calling for the book be given into custody as a vendor of obscene trash under the guise of medical writing.

## INDICTMENT OF DR. VENABLES.

*To the Editor of* THE LANCET.

SIR,—Observing, in this day's LANCET, the declaration of Dr. Venables, that an indictment is the *only* mode of inquiring into his conduct at Cronin's trial, I am induced to suggest what may be considered a rather simpler, and certainly an equally satisfactory, proceeding.

I propose that the learned doctor may be granted an opportunity of *proving* the correctness of his opinion by the following experiment:—

Let the druggist who compounded Cronin's mixture prepare another bottleful precisely in the same manner, and bring it into an assembly of medical men. Then let any trustworthy friend of Dr. Venables bring into this court one-sixtieth of a grain of strychnine, and in the presence of all, let it be added to the said mixture. Then let Dr. Venables swallow three tablespoonfuls of the mixture thus (as he made Mr. Justice Coleridge believe) rendered harmless. He will then openly prove both the truth of his opinion, and his sincerity in giving it; and in a manner, too, so satisfactory and convincing, that he will never feel obliged to give himself any further trouble on the subject.—Faithfully yours, SCRUTATOR.

London, May, 1847.

## ON THE MISUSE OF ETHER AND THE FORCEPS, IN THE PRACTICE OF MIDWIFERY.

*To the Editor of* THE LANCET.

SIR,—In your journal of April 10th, I made some remarks on the late Cæsarian operation at St. Bartholomew's Hospital, and showed that the treatment of the case was contrary to the established rules of practice in this country. Dr. P. Smith was one of the gentlemen who saw the patient about the 7th of October, and the operation was not performed till the 26th of January, at which he assisted; but it does not appear, from the report of the case, that Dr. Smith, at any time between October and January, suggested the propriety of inducing premature labour. In the last number of THE LANCET he has, however, condemned, in still stronger language than I did, the performance of the operation. "With far more reason," he says, "might the objection be urged to the practice of inducing premature labour, and still more strongly against that of destroying, in utero a living fœtus. And yet it is now universally admitted, that to risk the life of the mother, by refraining from these operations is not *only unjustifiable, but highly criminal.*"

Dr. P. Smith is a strong advocate for the use of ether in midwifery, and he thinks the following advantages may be derived from it:—1. The saving of suffering. 2. The saving of a part of the shock of labour. 3. The obtaining sleep, or quiet, during the progress of the case. 4. The more speedy relaxation of the os uteri and perinæal muscles. 5. During operations, the very great advantage of having the patient lying perfectly still. 6. The removal of the dread of labour during pregnancy. "In all the cases published," he says, "the relief has been great and immediate; in none has there been any untoward event." "Let it be remembered, however," he adds, "that two of Baron Dubois' ether cases, which terminated fatally from metro-peritonitis, were forceps cases."

The first case related by Dr. P. Smith, which has led him to anticipate such great advantages from the use of ether, was that of a lady, aged forty, whose first labour began at half-past twelve A.M., on Sunday, the 28th of March. The premonitory pains increased in severity till three A.M., when they became regular. At five A.M., "the intervals became shorter, the uterine contractions coming on every ten or fifteen minutes, and the suffering they occasioned, even at this early period of labour, was very considerable." At eight A.M., Mr. Fisher was called, and he found the os uteri dilated to the extent of half-a-crown; pains frequent and energetic till four P.M., when they were strong and expulsive, recurring every four or five minutes; bowels open; tongue moist and clean; perspiring profusely; vagina cool and well lubricated; *os uteri dilated to the size of the rim of a tea-cup;* and the child presenting in the first cranial position. The head rested on the floor of the pelvis, and forcibly pressed, during each pain, against the converging tuberosities of the ischia, the distance between which was barely four inches. The membranes were entire, and distended with liquor amnii; they protruded through the opening os, the *margins of which were rapidly yielding;* the uterine structure was soft and dilatable. Being satisfied that there existed no abnormal complications to forbid the inhalation of the ether, its exhibition was commenced by Mr. Tracy, at a quarter-past four P.M., immediately after the spontaneous rupture of the membranes."

From three in the morning till four in the afternoon no labour could have proceeded more favourably than this: the presentation was natural, the os uteri widely dilated, and, soft and yielding, the membranes had just given way, and the head began to pass through the outlet of the pelvis; the practitioner was "satisfied that there existed no abnormal complications;" "the more speedy relaxations of the os uteri and perinæal muscles" was not required; nor was it desirable, at the time, that the patient should obtain sleep or quiet. The third and fourth great advantages expected by Dr. P. Smith from ether were already gained, and there is every reason to believe, that had this patient been left to herself, the child would have been expelled with ease and safety in no long time. But she had "been informed of the benefit resulting from the employment of ether by inhalation." She had probably read with wonderment in the newspapers the famous case of distortion at Auld Reekie, "and she was very urgent for its immediate adoption."

A prudent and experienced practitioner would have sternly refused to comply with her request; but Dr. P. Smith went to the residence of this lady, provided with an ample supply of ether, and accompanied by "Mr. Tracy, of St. Bartholomew's Hospital, who has not only invented an ingenious and simple apparatus for administering this agent, but has successfully applied it in several hundreds of surgical cases;" and they immediately commenced its exhibition, and before the labour was completed, actually "eight ounces and a half of pure ether" were consumed. Half an ounce introduced into the stomach by Orfila killed a dog; but this lady inhaled eight ounces and a half, and is still alive! The inhalation was continued, at intervals, with the usual effect of producing insensibility, from a quarter-past four o'clock till half-past six P.M. At forty-five minutes past six, "as the head had made no advance, and had been firmly impacted for half an hour, the cranial bones overlapping considerably," says Dr. P. Smith, "I determined, after ascertaining by the stethoscope that the child was alive, to apply the short forceps. This was accomplished at seven P.M., after emptying the bladder, and again narcotizing the patient. It was evident, from the extent to which the handles of the forceps were separated, that the head was a very large one, and that it would require considerable compression, as well as traction, to bring it *through the disproportioned pelvis.* To accomplish this with safety to the mother, and with a prospect of saving the life of the child, I made my efforts at intervals of two or three minutes, during which I relaxed my grasp of the head, and held the handles of the forceps loosely, in order that the brain might recover from the effects of the severe pressure to which it was subjected during traction. By these means the head was delivered in fifty-five minutes from the first applica-

tion of the instrument, and at fifty-five minutes past nine P.M. a living male child was born. After the introduction of the forceps, some difficulty was experienced *in consequence of the forcible* extension of the patient's legs, and the constant disposition to straighten the body during the strong expulsive efforts. With the assistance of Mr. Fisher and another gentleman, the pelvis was held in a favourable position, the right leg was separated from the other, and flexed on the abdomen, so as to admit the handles of the instrument between the thighs. By these means, and by occupying a position in front of the patient, I could easily employ traction in the direction of the outlet with my right hand, whilst with the left I supported the perinæum."

One of the great advantages anticipated by Dr. P. Smith from the use of ether is, "that during operations in midwifery the patients will lie perfectly still. This patient it however appears, instead of lying perfectly still, caused great embarrassment to Dr. P. Smith while working with the forceps in front of the person, "in consequence of the forcible extension of the patient's legs, and the constant disposition to straighten the body during the strong expulsive efforts." So violent were the tetanic actions of the muscles of the trunk and extremities caused by the ether, that two strong assistants were "required to hold the pelvis in a favourable position," and bend the right leg on the abdomen, and separate it from the other, "so as to admit the handles of the instrument between the thighs." In what position the patient was placed during the operation is not stated; but the position of Dr. P. Smith must have been sufficiently novel, in *front* of the patient during the fifty-five minutes he was making strong traction with the forceps, and while the pelvis was being kept fixed by the help of Mr. Fisher and the other gentleman. The scene altogether must have been one of the most novel and interesting ever witnessed in the practice of midwifery, and especially when the patient came to her senses, "five minutes past eight P.M.," expressing a hope that she would soon be delivered, and adding, that she was very comfortable, and thus expressed herself: "It is a dream!—it must be a dream! Oh, what a good thing it is that I had the ether!"

I am, Sir, your obedient servant,

SPECTATOR.

London, May, 1847.

## THE SYRIAN MEDICAL STUDENTS.

*To the Editor of* THE LANCET.

SIR,—I read with much surprise, in THE LANCET of last Saturday, a paragraph, in which mention is made of my name, and in which it is stated that, in a letter addressed to you, and inserted in your journal of the 20th of March, I had denied that Mr. Assaad Kayat had brought to this country and educated at his own expense four Syrian medical students.

Now, Sir, if you and your readers will do me the honour to refer to the letter in question, you will see that I never denied anything of the kind. For aught that I knew to the contrary, Mr. Kayat might have brought over to this country four or four hundred students, and whether or not he had done so was a matter which in no way concerned me. But that which did concern me was, to deny that my friend Abdallah Asmar was one of these, or that he had any connexion whatever with Mr. Kayat; and I beg to remind you that *this* was your original assertion, made on what you call good authority, in THE LANCET of the 27th of February, and not simply, as you now put it, that four students had been brought over. Everything which I stated in my former letter I now re-assert, and as I explained to you the relation in which I stood to Mr. Asmar, I have a right to ask that my statements with regard to him may be credited. And I must observe, Sir, that it is as inexplicable to me what good authority could have told you, in the first instance, anything so entirely unfounded, as it is how you could construe my correction of an inaccuracy with regard to an individual into a general denial of Mr. Kayat's benevolence, or how the inscription in the books presented by the College of Surgeons can be made to confirm the inaccurate report.

I must ask that you will do me the favour to insert this letter in the next number of THE LANCET, first, because the paragraph of Saturday is a substantial, though not a verbal, re-affirmation of the original incorrect statement, and might, if not again contradicted, be referred to as such hereafter; and secondly, for my own sake, that I may be put right in the eyes of Mr. Kayat, whose liberality I am bound to honour, while by you I am made to deny it.

I am, Sir, your obedient servant,

Sloane-street, May, 1847. EDWARD CATOR SEATON.

## FRACTURE OF THE THIGH.—DEATH FROM ENGORGEMENT OF THE LUNGS.

*To the Editor of* THE LANCET.

SIR,—As the following case, which lately occurred in the Middlesex Hospital, narrowly escaped being recorded as an instance of the fatal effects of ether, I am induced to send you this account, as there seems a disposition just now with some persons to attribute every untoward event which may occur after the inhalation of ether to the effects of that agent. There seems a determination, on the part of some persons, to forget the well-established fact, that death does occasionally occur after severe local injury, where no so-called vital organ has been involved, and where it is not always possible to connect the immediate cause of death with the original lesion.

Henry W——, aged thirty-five, a tall, powerful man, a painter, was admitted on the evening of March 1st, having just before fallen down an area, a height of about ten feet. It was found, on examination, that the right thigh was fractured about the junction of the upper with the middle third. There was considerable degree of swelling and shortening of the limb. No other injury was detected. The thigh was placed on the double inclined plane—the treatment usually adopted for the first few days. As there was considerable spasm and retraction of the muscles, it was proposed to get the patient under the influence of ether, to relax the spasm of the muscles, and in that state to apply the long splint. This proceeding, however, was very fortunately put off for a day or two; for in the evening of the 3rd, forty-eight hours after his admission, the patient, who had previously made no complaint of pain or uneasiness, but appeared going on very favourably, was seized with vomiting after taking a little beer, which he had been allowed for the first time. Mixed with the contents of the stomach were some small elongated clots of dark blood. His head was hot; his tongue tremulous, moist, but somewhat furred; his pulse rapid, but weak. He appeared muddled and confused, and rambled a good deal. Bowels confined. Ordered, calomel, five grains, and a dose of the house medicine six hours after.

4th.—Passed a very restless night, not sleeping more than half an hour, continually rambling and tossing about. At ten A.M. appeared scarcely conscious of what was passing around him; face pale and void of expression; lips not livid; the breathing very hurried; but there was very little action of the alæ nasi; pulse quick, and very weak; tongue tremulous, moist, but somewhat furred. Nothing satisfactory was made out by auscultating the chest. Considerable tenderness over the liver; bowels not yet open. The house medicine had been rejected by vomiting, the vomited matter being again mixed with the elongated clots of blood. Ten grains of calomel in powder were placed on the tongue; a sinapism to be applied to the epigastrium; beef-tea and wine. Was not sick after he took the calomel. Continued through the day to become gradually weaker; his breathing very hurried, and his pulse extremely rapid and feeble. Towards night, his pupils were somewhat dilated, and did not contract on exposure to light: he appeared then perfectly insensible. Latterly he became very restless, tossing about his arms and his sound leg, so that it was with some difficulty he was kept in bed; his breathing was accompanied by loud mucous rattles; and in this condition he died at half-past ten P.M., twenty-six hours after he first exhibited any unfavourable symptoms.

The body was examined sixteen hours after death. Muscles rigid; skin pale.—Head: Arachnoid dry, opaque in parts; no increased vascularity of the membranes; veins tortuous; substance of the brain firm, rather more than usually vascular; a small quantity of serum in the ventricles. The man, it appears, was a patient in the hospital, about six months before, with delirium tremens; but is said to have led a very sober life since he quitted the hospital.—Chest: Lungs scarcely subsided in the slightest degree; both slightly adherent at the upper part by old adhesions; both remarkably congested throughout their entire extent, (the first stage of pneumonia;) no part preserving the natural appearance, but no part so dense as to sink in water. A quantity of bloody, muco-serous, frothy fluid was found filling the trachea and bronchi. In some of the bronchi were firm dark clots of blood, exactly resembling those which were brought up during life, mixed with the contents of the stomach, and therefore suffered to come from that viscus; but which had no doubt been expelled from the bronchi in the action of vomiting. The pericardium contained a small quantity of clear serum. The heart, which was firm and perfectly

healthy, was filled with a large quantity of firmly clotted blood on both sides, extending into the arteries. The viscera of the abdomen appeared quite healthy. The stomach was contracted, and contained a small quantity of dark fluid, but no blood. The thigh, which was much swollen, but the skin not discoloured, contained a considerable quantity of blood, injected amongst the muscles, and between their fasciculi.

This patient evidently died from congestion of the lungs, which proved thus rapidly fatal in consequence of the whole of both lungs being simultaneously involved, leaving no portion to carry on the function of respiration.

Had the ether been inhaled in this case, as was proposed, would it have been possible to persuade any one that it was not the cause of the congestion of the lungs, and of the death of the patient?—I remain, Sir, your most obedient servant,

East Grinstead, April, 1847. HENRY ROGERS.

## ARE IMPROVEMENTS IN MEDICINE AND SURGERY PROPER SUBJECTS OF PATENTS?

*To the Editor of* THE LANCET.

HAVING been recently made aware, by disagreeable experience, of the existence among the members of the medical and surgical profession in England of a strong and general feeling against the taking out of letters patent for improvements in medicine and surgery, and being persuaded that this feeling is founded in error, and in the non-appreciation of the true interests of the profession and of society, I venture to address you a few remarks upon the subject, in the hope that they may contribute to the cause of truth and science.

The feeling alluded to has its origin, no doubt, in an opinion, that it is contrary to dignity, liberality, and humanity, that any member of the healing profession should endeavour to monopolize or appropriate to himself the advantages of an improvement in an art or science which so nearly concerns the welfare of every human being. It seems base, mercenary, and cruel, to say to a suffering fellow creature, I will not allow mitigation of your pain, administration to your disease, or removal of the cause of your distress, unless you first pay me a consideration for so doing. It is therefore held that every improvement in medicine and surgery should be made a free gift to society. This is apparently liberal and humane, amounting to self-sacrificing, and noble, amounting to magnanimous; and as it pleases the imagination and consoles the heart, it is applauded as generosity, and made imperative as a part of duty.

If it were a mere question of the remuneration of inventors or discoverers, it would not perhaps be worth while to make the slightest attempt to disturb the prevalent feeling upon the subject, though it may be affirmed, and it is undoubtedly true, that it never can be for the good of society to sacrifice the rights of any individual, much less those of a benefactor. But the question is by no means confined within these narrow limits,—it is a question as to the very creation or discovery of such improvements in future time,—it is a question, not merely of equity towards the discoverer, but of the policy and interests of society itself; for I am quite sure that, constituted as men are at the present day, no stimulus can be found sufficiently active to call forth ingenuity and effort, especially in cases involving the outlay of much time, industry, or money, except the stimulus of reward. Perhaps at some future, far-distant day, when it shall be more easy for men to satisfy their physical wants, and gratify, without expense, their natural propensities and desires, purely philanthropic exertions may be relied upon for the advancement of science and art. We are informed, that in some instances small bodies of early Christians "had all things in common;" but it does not appear that the custom was either generally adopted or long continued, even among assemblies zealous with the enthusiasm of new-born faith, and confirmed by the testimony of present miracles.

The natural and proper reward of successful skill and industry is property; and though when the laws and rights of property are respected, society may derive advantage from holding out inducements to exertion not founded in a sense of property, it may be safely affirmed, that such other inducements are comparatively of little or no value except they concur with or reinforce the natural laws and rights of property. The instinct of property is the very foundation of civilized society; without it men would become first idle, then ignorant, and finally barbarous; and any system or custom which militates against that instinct tends, in the same degree in which it opposes it, to idleness, ignorance, and retrogradation. Who will sow, without hire, that another may reap? or build a house, without wages, that another may live in it? or toil and watch, without recompence, that others may live easy? And if there be any such, so forgetful of themselves, it would not become society to take advantage of their devotion; however magnanimous such disinterested exertion might be, society would fail against "dignity, liberality, and humanity," as well as against its own best interests, if it allowed such exertions to go unrewarded. But there are none such, or, at least, none wholly such, or such to any practically useful degree; so that counting upon such disinterestedness is altogether absurd—an absurdity so manifest, that no one exhibits it in his private affairs; and if he were to do so, he would soon be roused from his dream by the rough handling of experience. In such a case as this it is a great error to suppose that society can safely adopt any other course than such an one as would be politic for an individual. The principles, instincts, operations, and parties, are the same in both cases, and in no age and in no country has society, or even armed or despotic government, been able to extort from men valuable labour without valuable remuneration; and just in proportion as the remuneration is valuable and certain and wisely bestowed does society derive advantage from the exertions remunerated. Compare Egypt and England, Wallachia and the United States.

If there be any property which may be said to be inherent and absolute, it is the property which a man has in his own thoughts. Property in chattels, in land, even in one's own person, may be disputed, as it frequently is violated; but our thoughts are our own, beyond dispute—beyond the reach of violation; ours to give forth or to keep back, to add to or to take from, to sound abroad or to enjoy in silence; ours to reserve as defensive armour, or to employ as offensive weapons. Our inventions and our discoveries being, in the first place, merely thoughts, are our own; and upon the first suggestion of them we are masters, to let them die, or give them birth—to arrest their growth, or to develop them to maturity. Few inventions are born mature. They spring not, like Minerva, perfect from the brain of Jupiter. They come into the world, in general, like man himself—weak, defenceless, helpless; needing much care and attention, much painful nursing—"fleus animal"—at its birth, though the invention may also claim "cæteris imperaturum." This care, attention, and painful nursing, who will devote to it but its parent? Certainly not society. There is no foundling hospital for infant inventions, and if there were, it is very doubtful whether any of them would survive the treatment they would there receive. It is as clearly for the advantage of society to grant to inventors and discoverers a certain temporary ownership in their inventions and discoveries, as it is to grant to parents a temporary right of control over their children: in no other known way can they be protected from injury, developed, and brought to useful maturity.

It may be said, this is good reasoning in regard to mechanical inventions and discoveries, but the case is very different when improvements in medicine and surgery are concerned. A physician is neither an artisan nor a tradesman; he is a member of a profession calling itself liberal, occupied with practical science and benevolent art; and it is necessary to this proper formation and support of his character, that he should be kept as far as possible from the contamination of mercenary traffic. I have stated the objection strongly, in order that it may be allowed its full weight. The proper and sufficient answer is, that to receive compensation for valuable services is not mercenary. We have the very highest authority upon this point—"the labourer is worthy of his hire;" nay more: to exact or expect valuable services to be rendered without compensation—this is mercenary—this is grasping—this is ignoble. Does the physician decline to receive his fee in advance because he is not a tradesman—because he is concerned with high science and benevolent art? Does he go about doing good gratuitously? By no means: he cannot, he ought not; and were he to attempt to do so, he would become a burthen upon society. No other system of subsistence can be devised so economical, so convenient, so just, so politic, for society itself, as well as for the individual, as that of compensation for services rendered; and the imperfect state of the law in England, which impedes the physician in the recovery of compensation for professional services, thereby fostering the ridiculous custom of exacting payment in advance, and bringing the members of a liberal profession thereby into contempt, is an evil of which the profession have a good right to complain, and one which, being an infringement of the natural law of compensation, ought speedily to be abolished.

It may further be asked—why should the person who happens to discover or invent an improvement in medicine

or surgery be allowed the monopoly of it?—he may abuse his power, and tax society for its use in a most extortionate manner. The answer is easy: no one ever does happen to discover or invent any useful improvement. As a general rule, it may be laid down, that useful improvements, like useful books, are never the result of accident, but always the result of profound or comprehensive mental effort, or of long-continued and patient experiment and research, and in all cases the result of much previous preparation and discipline. The publication only is sudden; accumulations of atmospheric electricity are gradual and long-continued—the flash alone is instantaneous. Nor is the exclusive right to use an improvement granted to its author a monopoly, any more than the exclusive right to a house or a ship possessed by the rightful owner thereof is a monopoly. Nor is there the slightest danger of the author of a useful improvement becoming an extortioner. I know of no instance of any patentee practising extortion. I have frequently known inventors and discoverers to be the victims of extortion. Besides, if honourable feeling would not prevent the member of a liberal profession, being the author and possessor of a useful improvement, from exacting unreasonable terms for the use thereof, a sense of his own interests, the infringements of pirates tempted by large profits, and the omnipotent voice of public opinion, would soon teach him reason and moderation; and even if the author of the improvement should, against common sense, persist in an extortionate course, society might despise the individual, but it could not complain, in any event, that it was any worse off than it was before the improvement was made.

It is also said—certainly valuable services should receive a valuable reward; but in the case of useful improvements in medicine and surgery, the author should receive some other than pecuniary reward. I would ask, what other? Honour? Doubtless he should receive honour, but what is honour without the means of subsistence?—"vox et præterea nihil." I would further ask, what honour? Rank? But it is the custom of governments to attend promotion with a suitable grant of pecuniary means to support it. Promotion without means to support it is a burthen and a charge; nor have I heard that such a grant has ever been declined. Fame? But fame is frequently the balanced resultant of rival claims; generally, the residuum of detraction and calumny; besides which, by whatsoever fiery trials it may have been purged, it is almost universally posthumous. The living cannot reward the dead.

In a country in which birth and wealth hold hereditary tenure of the places which naturally belong to talent and merit, and in a profession to which the career of political and social advancement is, beyond a certain humble degree, absolutely barred, it is futile to propose other rewards than those which include pecuniary considerations; all others, when tested by manly and practical sense, will be found to be mere baubles and children's toys.

It is further said, admitting that useful improvements in medicine and surgery should receive pecuniary reward, the sale of licences is not the best way of obtaining it; let there be public subscriptions and parliamentary grants. Reward by subscription and grant is no doubt a very proper, and sometimes may be the best, form of recompence; but the objection to it is, that there is no existing constituted tribunal or authority to see justice done, and it may be doubted whether any human tribunal could be erected, which, in ordinary cases of improvements, would be able to appreciate their value, so as to avoid, on the one hand, extravagant appropriations to splendid but useless combinations; and, on the other, parsimonious remuneration to unostentatious but practically important discoveries. No such tribunal has ever yet been attempted in any civilized country; probably for the reason that it is the opinion of men of sense that it would be found impracticable. Besides, the author of an improvement is the best judge of what is to him the value of his invention, and he may safely be left to work out the maxim, that every one should be allowed to do what he will with his own, provided he do not injure others.

The last objection which I shall answer is this: that the profession and society are getting on very well under the present feeling, and it would be injudicious to make any change. Nothing is well that can easily be made better. Society and the profession are both suffering from the absence of that healthful stimulus which would be given by removing the social obstacle to the free operation of the natural law of compensation for services rendered. The proper compensation being withheld, the services are not performed to anything like the extent, or anything like so beneficially, as they would be if freedom were proclaimed. With the stimulus of the hope of the united natural rewards connected with the exclusive right to dispose for a limited term of one's own improvements, rewards of wealth, honour, fame, possibly also rank and power, some of which would, and all of which might, attend the successful development of an important improvement, the profession, and particularly the younger members of it, would be roused into a state of vigorous energetic exertion. Individuals, prompted by the particular suggestions or biases of their minds or circumstances, would devote themselves with enthusiasm to special branches of study, research, and experiment. New, repeated, and continued assaults would be made by the soldiers of fortune in the profession upon the stubborn fortresses of Nature, and she would be compelled to relinquish to the peaceful conquerors the successive spoils of victory.

Duke-street, St. James's, April, 1847. JAMES A. DORR.

## THE AGE OF MANUALS.

*To the Editor of* THE LANCET.

SIR,—My attention was last week directed to a subject of very great importance to every man who expects to gain any reputation in the practice of medicine, by a gentleman who styles himself a "Looker-On," and who refers to the mode of examination on physiology, from manuals. Agreeing with his opinion as to the evil tendency of this system, I beg to call your attention to the judgment evinced by the senate of the University of London, and beg to ask why they have rejected a candidate for the examinership in comparative anatomy and physiology, who may rank with the illustrious Müller, and chosen a mere reader in this branch of knowledge, and who, not merely a reader himself, would prevent others being so much as readers, by compiling manuals, as they are termed, for students.

If I may be allowed to venture an opinion, I would say, that this blinding of the judgment has arisen from a private pique. What can the graduates of this institution think when they see themselves degraded, peradventure, by a senate against whose decision there is no redress? Does not this call for some change in the constitution of this institution, which might become one of the first Universities of Europe, were it based, as the government of Cambridge and Oxford is, on the representative system.—Your obedient servant,

London, May, 1847. JUSTITIA.

P.S.—The election I refer to was that of Examiner in Comparative Anatomy, vacant by the resignation of Mr. T. Rymer Jones, promoted to the *distinguished* lectureship on animal hydraulics, at the Polytechnic Institution! The candidates for the examinership were, Professor Grant and Dr. Carpenter, the former being the rejected candidate. Was this Sir James Clark's doing?

## THE AGE OF MANUALS.

*To the Editor of* THE LANCET.

SIR,—I find, in THE LANCET of May 1st, that "A Looker-On" seems alarmed lest medicine should be "made easy." I confess I am myself glad to find that some writers are taking pity on medical students, and giving some light food to digest. "A Looker-On" talks of "medicine being made easy" for pupils just as you give pap to infants. Let me ask him what is more proper for infants than pap? and if a student can derive as much useful information from "Manuals" as he could from a number of works which have *not* the advantage of being readable, why try to hinder him? "A Looker-On" would have them to peruse books with matter as difficult of digestion as saw-dust or stones. He thinks that French and other foreign languages should be made a part of study for the English medical student, and compulsory at the examination. I confess I think it very essential to be able to read those languages; and although I may be deemed egotistical, I can say I am completely master of Latin, French, and German; and can read them nearly as fluently as English; still I prefer my native tongue; as what Englishman does not? unless, perhaps, it be a few such as "Looker-On," who may perhaps be the author of some incomprehensible work which he is afraid the present "Manuals" will supersede. He may, while "looking-on," have *seen* what no one else has seen, or even wished to *see*. If so, I would advise him to keep it to himself, as it would be useless to any medical pupil. Students would be superficial indeed, and the profession would be degraded, if there were many to think with "A Looker-On," which I firmly believe there is not.—I am, Sir, your obedient servant,

A FRIEND TO THE MEDICAL STUDENT.

## GROVE HALL LUNATIC ASYLUM, BOW.

We have been requested by Dr. Palmer to publish the following official communication:—

Office of Commissioners in Lunacy,
19, New-street, Spring-gardens, April 22, 1847.

Sir,—The Commissioners in Lunacy, considering the publicity that has been given to the circumstances attending the death of William Rank, a pauper patient in your Asylum, and the committal of two of your attendants for manslaughter, direct me to express to you their satisfaction at the prompt way in which you, in the first instance, brought the subject under their notice, and also to the aid rendered by both Dr. Palmer and yourself throughout the inquiry.

They direct me further to say, that the fact of both the inquest and the post-mortem examination having originated altogether with yourself and Dr. Palmer, is very creditable; and affords the best evidence of your desire to secure humane treatment to the patients in your Establishment.—I am, Sir, your obedient servant, R. W. S. Lutwidge, Sec.

To Mr. Edward Byas, Grove Hall Asylum, Bow.

## PETITIONS IN FAVOUR OF THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL,

*Received and Presented by Mr. Wakley to the House of Commons.*

May 8th.—Robert Nathaniel Stone, Bath; William Wood, M.D., Wakefield; Benjamin Mucklethwaite, Esq., 2, Howard-street, Sheffield; Henry Hiller, Esq., 12, South-street, Sheffield; John Moore Neligan, M.D., 16, Leeson-street, Dublin; Francis Potter Beamish, Esq., 2, Royal-terrace, Ramsgate; Robert Jones, Esq., Strefford, Salop; Medical Practitioners of Birkenhead, eighteen signatures; Hugh Wood, Esq., 6, Norfolk-row, Sheffield; Edwin Hearne, Esq., 31, Bernard-street, Southampton; James Lafarelle, Esq., Alton, Hants; Louis Leslie, Esq., Alton, Hants.

May 10th.—Samuel Lawrence Gill, Esq., Bromley, by Bow; Joseph Cheetham, Esq., 41, South-street, Sheffield; George Parker May, M.D., Maldon; George May, Esq., Maldon; Charles Elam, M.B., 83, Norfolk-street, Sheffield; Mariano Martin de Bartolomé, M.D., 3, Eyre-street, Sheffield; Practitioners of Ramsbottom, Lancashire, two signatures; Practitioners of Bury, Lancashire, ten signatures; Donald Mackeith, M.D., Sandhurst, Kent; W. B. Hepworth, Esq., Ormley, near Leeds; Samuel Beecroft, Esq., Hyde, Manchester; William Spink, Esq., Chapel-town, near Leeds; Medical Practitioners of Birmingham, eleven signatures; ditto, sixteen signatures; East London Medical Association, nine signatures; William Honner Fitzpatrick, Esq., St. Paul's-square, Liverpool; Medical Officers of the North Dispensary, Liverpool, four signatures; Robert Talbot, M.D., 5, Dublin-street, Liverpool; John Dixon Kilner, Esq., Vauxhall-road, Liverpool; James Nuttall, Esq., 49, Richmond-row, Liverpool; Mungo Park, Esq., 100, Old-street, St. Luke's; Arthur Bernard M'Cann, Esq., 22, King-street, Portman-square; Henry Obré, Esq., 33, Grove-place, Lisson-grove; William Kirby Lerew, Esq., Portman-place, Maida-hill; H. Gardner, Esq., 41, New Church-street, St. Marylebone; Edward Norton, Esq., 29, Upper Baker-street, Regent's-park; H. H. Cort, Esq., 34 *a*, York-street, Portman-square; Henry Guy, Esq., 21, Dorset-place; Robert Dendy, Esq., 103, Milton-street, Dorset-square; I. J. Coham, Esq., 27, Dorset-street, Portman-square; Matthew Norton, 16, Gloucester-place, New-road; Henry Hodson Rugg, 15, Broadly-terrace, Blandford-square; Patrick Burke, 13, Upper Montague-street, Montague-square; John Denny, Esq., 1, London-road, Southwark; John Macartney Nolan, Rockingham-row East, New Kent-road; James Hutchinson, Esq., 53, Mount-street, Lambeth; Thomas Bromley, Esq., Stangate-street, Lambeth; Peter Berrell, Esq., 53, Mount-street, Lambeth; John Sewell, Esq., 59, Lower Marsh, Lambeth; William Hitchman, Esq., Cirencester; Edward Rowland Bower, Esq., Cirencester; James Holmes, Esq., Stratson, Cirencester; David Ruck, Esq., Cirencester; Albert Iles, Esq., Fairford; John William Perrin, Esq., 42, Chiswell-street; Moses Franks, Esq., Heckington, Lincolnshire; Joseph Curtis, Esq., 1, St. James's-terrace, Kentish-town-road; Thomas Pitcairn, Esq., 71, Bedford-street East; Robert Fidler, Esq., 71, Northumberland-street, Liverpool; Martin Sinclair, M.D., 1, Worcester-street, Hulme, Manchester; Medical Practitioners of Loughborough, twelve signatures; Medical Practitioners of Liverpool, thirteen signatures; Michael M'Gee, M.D., Kirkcubbin, Ireland.

May 11th.—Medical Practitioners of Rotherham, two signatures; Thomas Willan, Esq., Bishopsfroome, Herefordshire; Isaac Massey, M.D., Nottingham; Medical Practitioners of Liverpool, forty-seven signatures; Francis C. Mallalieu, Esq., Fairfield, Manchester; Medical Practitioners of Handsworth, four signatures; Medical Practitioners of Lichfield, eight signatures; Medical Practitioners of Coleshill, Warwickshire, eight signatures.

May 12th.—Arthur Bernard, Henry Obré, William Kirby Lerew, H. Gardner, Edward Norton, H. H. Cort, Henry Guy, Robert Dendy, J. J. Coham, Matthew Norton, Henry Hodson Rugg, Patrick Burke, Medical Practitioners of St. Marylebone, twelve petitions; Thomas Dobson, Esq., Holbech, near Leeds; Edward Bishop, Kirkstall, near Leeds; James Wild, Sheffield; G. C. Steet, St. John-street-road; J. H. Baylis, Kennington; J. E. Smyth, Lambeth-walk; R. S. Nightingale; Jas. Saner, Finsbury-square; Henry Powell, Finsbury-square; Mr. Maxwell, Tysoe-street, Wilmington-square; A. P. Hambleton, Somers Town; Henry Suthern, 4, Great Percy-street, London; H. C. Robinson, Pentonville; W. E. Haymon, Judd-street; J. E. Pattison, Islington; George Pratt, 51, Goswell-road; G. Ridsdale, 1, Euston-square; William Bayes, Pentonville; W. H. B. Wilkinson, Pentonville; W. C. Byars, 47, Chichester-place, King's Cross; Richard Phillips, Pentonville; Arthur Kitt, Islington; John Kirkwood, St. Pancras-road; F. G. Broxholm, Islington; Henry Pratt, St. Pancras-road; W. E. Hayman, Acton-street, Gray's-inn-road; Practitioners of Rotherham, two signatures; Practitioners of Mansfield, eight signatures; Thomas Brown, W. L. Thomas, W. T. Coleman, J. Winkworth, J. Lovegrove, Horsham, county of Sussex.

The above petitions were presented by Mr. Wakley on Wednesday, May 12th.

*Petitions Presented by other Members to the House of Commons.*

April 29th.—William Henry Brown, Doctor in Medicine, Member of the Royal College of Physicians of London, Belgrave House, Park-road, Old Kent-road.

May 6th.—From Kidderminster; W. E. Johnson; R. G. Mayne; Hugh Beaver Davies; James Andrew Welch; John Dalston Jones; Hugh Clark; Joshua Barlow; William Briggs; John Chadwick; John Nicholson; John Lyell and James Drummond; H. W. T. Ellis and Phineas Samuel Ellis; Frederick B. White; William Williams; John Hole; J. B. Williams; William Scott; B. Abbott and others; H. W. Welch; and Stourbridge, &c., &c.

May 10th.—From William J. Mackarsie; Egerton Baines; Napoleon Fitton Chadwick; William Ainley; Greenwich; John Anderson Jamieson; Alexander Henry; Julius Berncastle; Joseph Neville; George Bottomley; William Kershaw; John Morris; Liverpool; Birkenhead; John Augustus Lloyd; and Joseph Lovegrove.

May 11th.—John Jervis; R. Brookes, junior; Charles Brookes; Horatio Henry Handy; Edward Dixon; W H. Cooke; George Coates; Sackville Evans; Charles West; Edward Hart Viner; W. Holland Baylis; James Coultsread; T. B. Bryant; David Williams; John Launcelot Ion; Daniel Morgan; W. Smith; Thomas Appleton; John Ryan; Robert Pridie; Robert Fowler; Evan Jones; Charles Brady; W. Newnham; Edman Scott; John Hutchinson; F. Yeldham; Robert Hooper; W. H. Galsworthy; J. Burridge; Charles Carruthers; James Hurly Pring; William Jones; Practitioners in Medicine, Surgery, and Midwifery, (five petitions;) Apothecaries of Ireland, (Committee;) Esquire Dukes; Clement Bruat; Edward L. Humphries; Hildebrand Phipos; William Lyndon Francis; George Gould; Edward Bowman; Frederick Cauet; Edgar Cockell; Oldham; William Tarleton; James F. Clark; Thomas Trevethan Spicer; William Leahy Echlin; William Arpthorp; Robert Cross; Charles Bayfield Miller; A. Howse; B. Harvey Holl; Charles R. Maxwell; J. W. Peake; Herbert Brown; H. Thomas; H. T. Mayne; J. Wilson; Miles Marley; Henry Miller; Alfred Lloyd; T. Wordsworth; J. Faithfull; J. Burrell; John Evans; Paull Chilcotte; J. S. Mackintosh; H. Cooper; F. Godrich; David Smith; Alexander Bayne; John Snow; Peter Marshall; Henry Guy; W. Watkins; Abdallah Asmar; W. Laycock; Edward Salt; James Hunt; Robert Gosset Brown; William Carbbe; William Moon; Charles Bloxam; Henry Hammond; Richard Marley; J. K. Rose; Edward Wooldridge; James Hicks; G. H. Watson; Henry Davis and others; William Mutrie Fairbrother; Frederick Charles Jones; John Brady; Joseph Peplow; Henry Smith; John F. Grace; Charles Houlton Webb; John Hurd; John Juffrau; Michael Lawrence Mason; Edward Evans; Christopher Flanagan; Alexander M'Nab; Arthur Cocke; Archibald Cocke; William G. Taylor; G. B. Wadsworth; Charles Housby; Robert Tate; Robert Brookes; Benjamin Meredith Bradford; W. Thomas

Borthwick; Colchester; William Hoggins; Henry Hodges; and Shirley Palmer.

May 12th.—Mr. Duncombe presented ninety-one petitions; Mr. Macaulay presented seven petitions from medical practitioners in London.

Petitions received May 12th and 13th.—P. R. Burchell, Kingsland-road, Shoreditch; Ignatius Wilkins, Wadebridge, Cornwall; W. B. Owen, Finchingfield, Essex; William Scott, Holbech, near Leeds; G. H. L. Rickards, Armley, near Leeds; J. Mackenzie Taylor, Holbech, near Leeds; J. P. Ramskill, Leeds; Thomas F. Sagar; W. M. Atkinson; Henry Bell; Robert Fowler; Francis Sharpe; J. Cooper Pigg; Matthew Jackson; B. E. Holwell; J. M'Farlane, G. Bulmer; R. P. Pell; W. Almond; R. G. Horton; Charles Loe.

*Petitions against the Bill.*

May 11th.—From the President and Censors of the Royal College of Physicians of London.

May 12th.—From the Royal College of Surgeons; Edward Bean; John Callander; James Espier, Falkirk, Stirlingshire; William Favell, 105, Norfolk-street, Sheffield; Thomas Wood Foster, Ecclesfield, near Sheffield; Robert Roper, 85, West Bar, Sheffield; James Walker, 16, Union-street, Sheffield; Henry Thomas, 79, Norfolk-street, Sheffield; Arthur Gaved, St. Mabyn, Cornwall; John Deakin, Howard-street, Sheffield; E. D. L. Gillott, 264, Glossop-road, Sheffield.

Petition of William Henry Duff, for alteration.

## Medical News.

Apothecaries' Hall.—Names of gentlemen who passed their examination, and received certificates to practise, on Thursday, May 6th, 1847:—Richard Scott Boley, Bristol; John Rogers, Worcester; Edward John ap Ellis Eyton, Overton, Wales; William Butler, Stoke Newington; Henry Chawner; Robert Martin Craven, Hull, York; James Graham Nichol, Crook, Durham; George Frederick Burroughs, Sussex.

The Coffinites.—Flitcroft, who, it will be recollected, was convicted, under the Apothecaries' Act, at the last quarter sessions, and sentenced to one month's imprisonment for administering lobelia inflata, cayenne, &c., as medicine, was liberated last week, and on Saturday entered the town in a car, drawn by four horses, and accompanied by Dr. Coffin and others, the temperance band playing through the streets. In the front was Mr. Clewes, *alias* "Old Mott," a reformed drunkard, on horseback, who amused the public by his grotesque appearance. In front of the car there were several banners and a flag, the latter of which had the following inscribed upon it:—"Release of the persecuted Flitcroft." At five o'clock a tea party was held at the Temperance Hall, and addresses were delivered by Dr. Coffin, Flitcroft, and others. —*Halifax Guardian*, May 8th, 1847. [Such is the "Io triumphe" of quacks!]

Royal College of Chemistry.—His Royal Highness Prince Albert, together with the president and vice-presidents of this College, on Tuesday inspected the laboratories,—the most complete in the world,—which have just been finished. The prince paid much attention to the arrangements of the balance-room, the museum, the professor's private laboratory, and the various furnaces for organic analysis, cupell furnaces, steam boiler, and gas closets, situated on the basement story; and expressed himself highly satisfied with all the arrangements.

Lock Hospital.—The funds of this hospital have just been enriched by the munificent donation of £1000, bequeathed to it by the late Lord Saye and Sele.

Medical Oath.—The following is a translation of the oath formerly taken by the Student of Medicine at Montpelier on the day he was admitted to the degree of Doctor, after assuming the doctorial gown and bonnet:—"I, A. B., before the statue of Hippocrates, in presence of the professors of this school and of my dear fellow-students, do swear, in the name of the Supreme Being, to be faithful to the law of honour and probity in the practice of medicine. I will give my gratuitous attendance to the indigent, and will never require a fee beyond my labour. Admitted into the interior of families, my eyes shall see nothing that passes, my tongue shall preserve the secrets that are entrusted to me, and my conduct shall never tend to corrupt morals or favour crime. May mankind grant me esteem if I am faithful to my oath, and may I be covered with the opprobrium and contempt of my brethren if I break it."

Charing-Cross Hospital Medical School.—The annual distribution of prizes and testimonials of honour to the students most distinguished for their acquirements in the various branches of medical study at this institution, took place on Saturday, May 1st, 1847—the Right Hon. Robert Vernon Smith, M.P., in the chair. The following were the successful competitors:—*Chemistry:* silver medal, Charles Woodd.—*Materia Medica:* silver medal, C. Terry; certificate, C. Woodd.—*Anatomy:* senior class, silver medal, Joseph Fayrer; certificate, C. R. Durell; junior class, bronze medal, C. Terry; certificate, C. Woodd.—*Midwifery:* senior class, silver medal, Joseph Buxton; certificate, C. R. Durell; junior, bronze medal, G. M. Young; certificate, J. M. Todd.—*Physiology:* senior, silver medal, Joseph Fayrer; junior, bronze medal, C. Terry.—*Medicine:* senior, silver medal, C. R. Durell; certificate, Joseph Buxton; junior, bronze medal, G. M. Young; certificate, G. W. Paternoster.—*Surgery:* senior class, silver medal, C. R. Durell; a book, Joseph Buxton; junior, bronze medal, G. M. Young; a book, G. W. Paternoster; certificate, F. W. Rawlins.—*Botany:* silver medal, Thomas S. Ludlow.—*Medical Jurisprudence:* silver medal, Joseph Buxton; a book, A. Butler.—*Governors Clinical:* silver medal, J. L. Green.—*Governors General Proficiency:* silver medal, C. R. Durell.—*General Proficiency:* the gold medal, C. R. Durell.—*Diligence and Good Conduct:* honorary testimonials, C. Terry, J. M. Todd.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—We beg to call attention to the annual dinner of this excellent charity, which, in The Lancet of to-day, is advertised to be held at the London Tavern, Bishopsgate-street, on Saturday, the 22nd inst.

Beth-holim Hospital.—Mr. John Dias, the honorary secretary to this hospital, has been presented by the committee with a handsome testimonial, in acknowledgment of their appreciation of his valuable services as honorary secretary on the occasion of the late ball in aid of the charity, the sum realized for which, after deducting all expenses, was £482.

Montreal.—A new medical journal, styled "*La Lancette Canadienne, Journal Medico-Chirurgical*," has been started here under favourable auspices. It is edited by Dr. Leprohon, is published in the French language, and intended chiefly for the service of the French practitioners in the Canadian provinces.

## CORRESPONDENTS.

*Mr. M'Gettigan*, (Hyde.)—The petitions in favour of the Medical Registration Bill enumerated in the last number of The Lancet, were those only which had been received by Mr. Wakley for presentation. Many have been presented to the House of Commons by other members of that House, and some of these are enumerated in the present number of The Lancet.

*D. H. G.*—Dr. Harvey, of Dublin, is now publishing a splendid work on the Saltwater Fuci, amply illustrated, in parts: Reeve, King-William-street. Van Voorst, Paternoster-row, has published a Manual of British Algæ, Marine and Fresh Water, written by Harvey. 8vo. 9s.

*Petitioner.*—There should always be at least the name of one petitioner on the sheet of parchment or paper on which the petition is written, and petitions ought not to be sent in detached parts. We would again suggest that petitions for presentation to the House of Commons should be forwarded to members of that assembly, for presentation, *without delay*. The conduct of the College of Physicians, the College of Surgeons, and the Society of Apothecaries, in opposing the Registration Bill, ought to be strongly denounced. The conduct of the Council of the excrescence called an "Institute," is really too contemptible for notice.

*Veritas* will find few to follow him in his praise of the Apothecaries' Society, or his eulogy of their licence. We join with him, however, in his estimation of the benefits of a sound general education as a preliminary to medical study.

The Address presented to *Dr. John Taylor*, with a service of plate, by the students of University College, with the reply of that respected and talented physician, shall be inserted, if possible, in the next number of The Lancet.

We have received numerous communications from various parties relative to the proceedings at the Royal Sea-Bathing Infirmary, from which we shall probably make a selection in our next.

From a great press of matter, we are reluctantly compelled to postpone, until next week, the replies to the numerous questions which have been sent to us within the last few days.

Communications have been received from—Mr. Maurice James O'Connor, (Whickham;) Mr. T. Snow Beck; Mr. W. Cantrell, Druggist; Mr. Thomas Taylor; Mr. Holmes Coote; Mr. M. Franks, (Heckington;) Mr. Waddington, (Margate;) A Liberal Licentiate of the Apothecaries' Society; Mr. Burford Norman, &c. &c.

## Original Papers.

ON THE

# CAUSES, PATHOLOGY, AND TREATMENT

OF

# DEFORMITIES IN THE HUMAN BODY.

(WITH CASES AND ENGRAVINGS.)

BY JOHN BISHOP, ESQ., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, SURGEON TO THE NORTHERN DISPENSARY, LATE SENIOR SURGEON TO THE ISLINGTON DISPENSARY, ETC.

### No. IX.—PATHOLOGY & MORBID ANATOMY OF DEFORMITIES.

*Conditions of the body in caries, rickets, mollities ossium, and difficulty of obtaining the natural history of these diseases.—Difficult problems presented in the study of these cases.—No theorem furnished to solve the questions presented.—Movements of the vertebræ consequent on the absorption of their bodies; parts of vertebræ attacked.—Hypotheses of Ambrose Paré and Dr. Harrison refuted.—Constitutional symptoms.—Effects on the spinal cord.—Hypothesis of luxation of vertebræ untenable.—The proposition, that prominence of the spinous processes is not owing to their being driven backwards, demonstrated.—Figure of the spine due to the form of the bones.—Intervertebral cartilages sometimes hypertrophied—sometimes absorbed.—Spongy structure of bone most liable to be affected with caries. Cases of caries.—Hypothesis of dyscrasy of the blood.—Views of Pott, of Sir B. Brodie, and of Dupuytren.*

THE pathology of the body under the various conditions which terminate in caries, rickets, mollities ossium, &c., deserves the most careful and unwearied attention, not only on account of their aggravated nature and injurious effects, but also on account of their general prevalence. Their duration is modified by various circumstances. When caries is associated with syphilis or scrofula, the period of time over which it extends is greatly augmented; in syphilitic patients, frequently terminating only by the death of the victim; but in those cases which are not aggravated by a specific cause, and which occur in young persons, the duration of the malady more defined, and extends over a shorter period, varying from three to about seven years. It very rarely happens that these cases are left entirely to nature; and since we do not know precisely how far the remedies employed may have affected their character and duration, it is impossible to give a strictly natural history of the disease; still an approximation may be made to such a history, because, in spite of all the means hitherto devised, the disease will frequently run its course through certain stages, present certain characteristic phenomena, and terminate in certain organic changes, leaving permanent and lamentable traces of its effects. Notwithstanding this melancholy truth, it is a disorder in which much might be done both to weaken the intensity of the exciting causes, and to diminish their effect.

The study of the derangements of the vital functions, coincident with the earliest appearance of the symptoms common to them all, is the first and most important step towards obtaining a correct and general knowledge of the pathology of the disorders. After this, the symptoms peculiar to the various forms and stages of the different diseases require to be most closely observed, and rigidly discriminated. In reference to the whole of the perturbations of the vital and animal functions which come under our observation, it is necessary to make a clear distinction between causes and effects. The nature of many of the pathological changes being beyond the reach of our observation, we are obliged, from the alterations of structure discovered by means of morbid anatomy, to infer what were the pathological conditions that preceded the death of the individual. But here we are met by another difficulty. In most cases, the patient either wholly recovers, or at any rate survives the active stage of the disorder; and thus a long series of changes may intervene before the opportunity of an examination occurs, and hence the determination of the actual derangement of the system during the progress of the complaint is rendered much more uncertain. We have in these cases to deal with disordered functions in parts of the system where the mechanism cannot be inspected, and in which the laws of the functions themselves are undetermined. In fact, this problem is one of much greater complexity than that inverse problem of the planetary perturbations which has been recently solved by Mr. Adams and Le Verrier, and which has terminated in the discovery of a new planet. We have no observations analogous to those furnished by Flamstead, Picard, and Bouvard, and no law like that of gravitation on which to found our investigations. The perturbations of the functions of the animal system are much more difficult of solution than those simply relating to the motion of bodies, because they are influenced by dynamical and chemical forces that are themselves controlled by an agency the nature of which is yet a mystery.

It may be said that we have no men in the medical profession of the same powerful intellect as those who have brought the exact sciences to such a pitch of perfection. But have we not had Dr. Thomas Young?—have we not had Cuvier?—have we not had John Hunter? Of these, the first was a man of the most distinguished talent, and possessed so profound a mathematical knowledge of the physical sciences as would have rendered him competent to resolve problems such as those under consideration, had the necessary data for this purpose been furnished; but to his philosophic mind the art of medicine appeared a complete chaos, and the only physiological question he attempted to investigate was abandoned by him, as he himself has stated, through despair of bringing the subject to a satisfactory conclusion. Cuvier and Hunter spent the principal part of their lives in describing the mechanism by which the animal functions are performed, but could not proceed further. They could neither detect the nature of the forces by which the machinery is moved, nor the laws of its motion; their labours were limited by these boundaries, and all their attempts to proceed further than the classification of animals according to their organization, completely failed. It is well known that Matteucci and others have made experiments with a view to determine the kind of force associated with nervous matter when in action; and, considering what has been already accomplished it is not impossible that similar experiments may lead to successful results. After what has been said, it will not be expected that a general theorem should be furnished, whereby all questions relating to the physical changes going on in the living body may be solved, as has been done with respect to all those changes which affect merely the various movements and attitudes of the body, both normal and abnormal.

Experiments have shown that the old particles of the bones, like those of all other parts of the body, are carried away in the vortex of the circulation, and are replaced by new particles, similar in their nature, composition, and structure, to their predecessors. Where there is so much activity in the movement of the particles, and while the mechanism is so complex, it is easy to conceive, without knowing the nature of the forces employed, that so large a number of organs concurring to one end must be as liable to derangement, either primarily or secondarily, in the osseous system, as in the other structures of the body. Spontaneous caries of the vertebræ does not present itself simply as a local affection, there evidently being a peculiar condition of the system under which the disease is induced. Before any local symptoms sufficiently marked to fix the attention arise, the general system betrays that something is wrong. Patients predisposed to this affection show symptoms of constitutional derangement, usually at some period between the limits of infancy and puberty. They are observed to become gradually weak and languid, with the mind depressed, and temper fretful, and to suffer fatigue merely from the act of standing, accompanied by a desire to rest the body against any adjacent object for support; the appetite is deficient, corresponding to the atonic state of the digestive organs; the normal balance of the assimilating, absorbing, and secreting processes is disturbed, as may be inferred from the pallid countenance and anæmic state of the body; the pulse is usually feeble and quickened; the skin subject to periodical perspirations, which are usually nocturnal; the urine contains phosphatic earths, which the assimilating organs do not replace in the diseased bone. When these perturbed conditions of the system have continued a short time, pain is felt in some portion of the vertebral column, which is increased on alternately extending and flexing the body. The locality of the injury may now be detected, either by pressure with the finger causing increased pain, or by gentle percussion; the latter being the most efficacious method, owing to the transmission of the impulse from the spinous processes to the body of the bone, which is commonly the seat of the mischief. If any absorption of the bodies of the vertebræ has taken place tending to diminish their height, the spinous processes of the diseased and adjacent vertebræ will appear, on viewing the back laterally, to project slightly backwards, either within or without the mesial plane,

and the number of the projecting processes will in some measure indicate the number of diseased vertebræ, deducting at least two, for the vertebræ immediately above and below. In the first stages of the disease, the projections of the spinous processes are only just perceptible. As the absorption of the osseous matter proceeds, they increase, and the trunk falls forwards—the amount of the distortion depending on the number of vertebræ affected, and the quantity of matter lost. As the malady progresses, the pain in the back increases, and the nervous system becomes more disturbed. When the absorption is completed, the bodies of the vertebræ above and below come in contact, and afford to each other a fulcrum which resists further distortion, and gives support to the head and trunk. In subsequent stages, the intervertebral cartilages and ligaments of the part affected become diseased and absorbed, leaving the sheath, at the anterior column of the spinal cord, exposed. If any of the vertebræ happen to press permanently on the cord, paralysis of the lower extremities results; if the pressure is produced only in particular attitudes, spasmodic contraction of the muscles of these extremities supervenes, very commonly in the adductors, by which the legs are thrown across each other, and remain in this posture until the pressure is removed by changing the attitude of the body.

Fig. 1.

Fig. 1.—From the *Museum of St. George's Hospital*, numbered c. 28. Caries of the vertebræ, natural size. Description in catalogue. Three last dorsal and two first lumbar vertebræ; the anterior part of the last dorsal and first lumbar has been destroyed by caries; bony anchylosis has taken place between these vertebræ on the right side, but there is little deformity.

Sometimes the bodies of the vertebræ are attacked with caries only at their anterior surfaces, as seen in Fig. 1, and in these cases the spinous processes do not project; so that provided the disorder has not penetrated to a great depth beyond the anterior surface of the bone, no external malformation is produced. But the effects are very different when absorption begins at the superior and inferior surfaces, in which case the spinous processes of the diseased bones soon become prominent by the changes in the positions of the adjacent vertebræ, above and below. Dr. Harrison has however stated that, when the bodies of the vertebræ become absorbed, the spinal column, though unsupported where the vertebræ are wanting, is generally preserved nearly erect by the resistance it meets with from the contiguous viscera; but this opinion is so completely at variance with experience, and also with our knowledge of the mechanical functions of the bodies of the vertebræ, that it is perfectly unnecessary to offer any further remarks on the subject. Another untenable view taken by Harrison, and also by Ambrose Paré, is that, when the spinous processes of one or more vertebræ become prominent, the cause of the projection is the incomplete *luxation* of the vertebræ; and Harrison states, that *sub-luxation* often produces pressure on the spinal cord, or some of the spinal nerves at their origin, followed by an endless train of complicated nervous symptoms. The explanation given of the mode by which the sub-luxation of the vertebræ is supposed to takes place is as follows:—"The muscles destined to move the spine are attached to the articulating fibrous structure, and not to the vertebræ which it encloses: this substance is stretched by them, and in weakly habits becomes preternaturally elongated, partly by the muscular force *pulling* it, and partly by the bones being *pushed* against it in the various turns and gesticulations of the body. As these parts gradually give way, the joints slowly enlarge and admit of greater motion. A slight luxation is first produced in one joint, and afterwards in several." It will merely be necessary to refer the reader to No. II. for sufficient data to refute these opinions respecting the derangement of the mechanism of the spine; and, but for the reputation and extensive practice of Dr. Harrison, and the extraordinary treatment which was founded on these opinions, they would not have been cited in these papers. In order, however, to prove beyond dispute that the prominence of the spinous processes of the vertebræ does not depend on their being driven backwards and dislocated, when their bodies are absorbed, it is only necessary to observe the real directions taken by them, as exhibited in the numerous morbid preparations in the museums of the metropolitan hospitals. Thus we observe, in Figs. 2, and 3, (*see opposite page,*) that the positions of the spinous processes resulting from absorption of the bodies of the vertebræ, are not relatively altered, except by the vertebræ being compelled to rotate in the mesial plane. The humped back is owing to that part of the spine which rests upon the diseased portion being thrown forwards, and the amount of the deformity depends upon the number of bodies diseased, and the degree and direction of the absorption, and such will be found to be the relative positions of the vertebræ in all, or nearly all, the morbid specimens in London.* When anchylosis begins to take place between the vertebræ, before any considerable portion of the bodies is absorbed, the distortion will be comparatively trifling.

*Abstract of Case.* (Fig. 3.)—Thomas V——, aged thirty-nine years; admitted July 10th; died July 11th, 1839.

*Autopsy.*—The lower extremities were swollen and anasarcous; the lungs adhered to the pleura; the heart was nearly double the natural size, owing principally to the dilatation of its cavities, its walls being only slightly hypertrophied, and the valves healthy; the peritonæum was thickened, and contained six quarts of opaque serum; the liver was congested with blood, and presented a nutmeg appearance; the spleen was small; the kidneys were natural; the stomach was closely attached to the liver by peritoneal adhesions; the mucous membrane of the large and small intestines was vascular, but otherwise healthy; the bodies of the ninth, tenth, eleventh, and twelfth vertebræ were destroyed, and anchylosis had taken place.

*Remarks.*—This is a case of extreme angular curvature, the trunk being bent at an angle greater than 45°; the patient, nevertheless, lived beyond the mean term of human life.

It often happens that, among several diseased bones, the amount of absorption is variable, those nearest the centre of the curve suffering the most.†

* This may be familiarly illustrated by bending a pen, the plume of which represents the spinous processes.

† The author takes this opportunity of expressing his thanks for the advantage which he has derived, in being allowed free access to the Museums of several of the London Hospitals, as well as for the permission to make drawings of such morbid specimens contained in them, as illustrate his views in these papers.

FIG. 2.

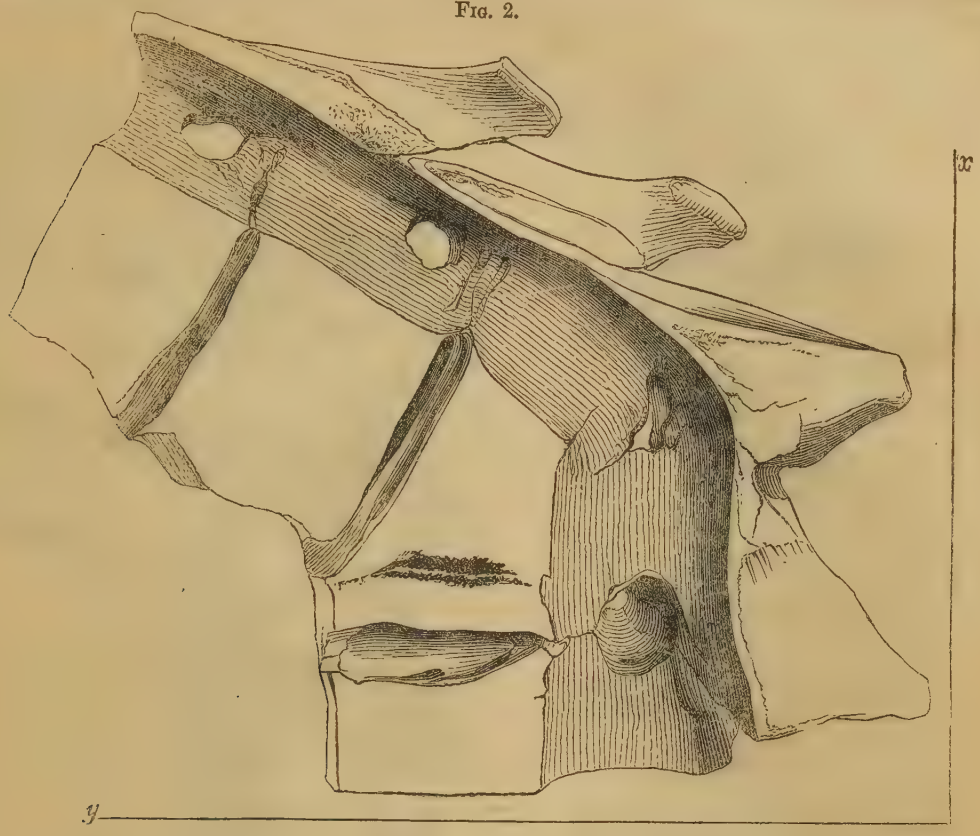


FIG. 2.—*Guy's Hospital Museum*, No. 1020[25]. Specimen of a mesial section of some dorsal and lumbar vertebræ, six of which are completely consolidated into one bone, with extreme angular flexion; *y* and *x* are horizontal and vertical lines.

FIG. 3.

FIG. 3.—*Guy's Hospital Museum*, No. 1024[25]. Abscess, and partial absorption of the bodies of two dorsal vertebræ, producing curvature of the vertebral column; lines *y* and *x* as in fig. 2.

When the disease begins in the superior or inferior processes of the body, the adjoining intervertebral cartilages must necessarily be destroyed; but if it commences on the anterior face of the bone, this does not necessarily take place to the same extent, and the effects on the figure are very different, for some of these cartilages may be absorbed, without producing any sensible distortion of the spine, (Fig. 4.) It

Fig. 4.

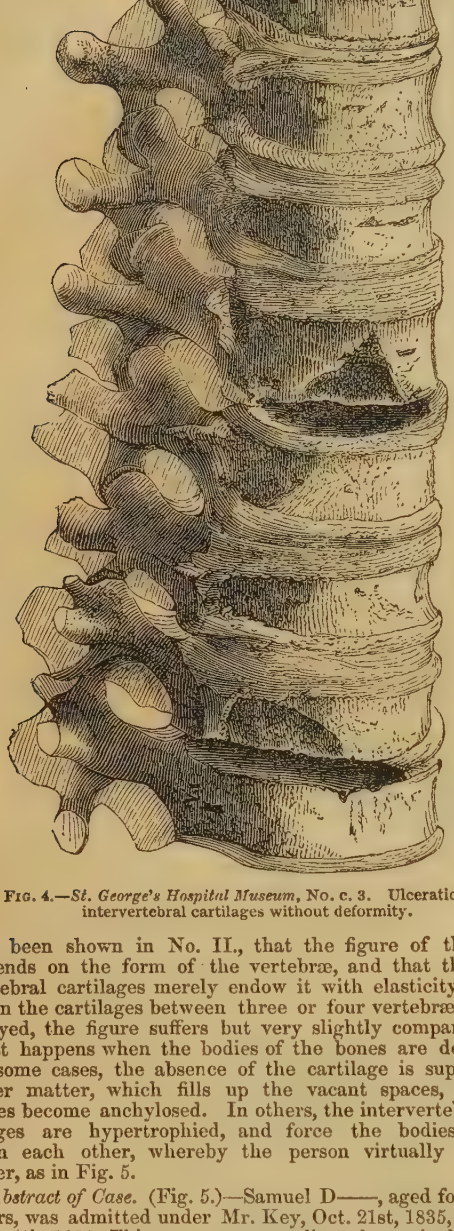

Fig. 4.—*St. George's Hospital Museum*, No. c. 3. Ulceration of intervertebral cartilages without deformity.

has been shown in No. II., that the figure of the spine depends on the form of the vertebræ, and that the intervertebral cartilages merely endow it with elasticity; hence, when the cartilages between three or four vertebræ are destroyed, the figure suffers but very slightly compared with what happens when the bodies of the bones are destroyed. In some cases, the absence of the cartilage is supplied by other matter, which fills up the vacant spaces, and the bones become anchylosed. In others, the intervertebral cartilages are hypertrophied, and force the bodies further from each other, whereby the person virtually becomes taller, as in Fig. 5.

*Abstract of Case.* (Fig. 5.)—Samuel D——, aged forty-eight years, was admitted under Mr. Key, Oct. 21st, 1835, and died Jan. 4th, 1836. This was a very complicated case, including fistulous stricture, paraplegia, hypertrophied intervertebral substance, diseased hip-joint, exostosis, psoas abscess, dysentery, peritonitis, fæcal abscess, and hypertrophied kidney, attended with delirium, and terminating in death.

*Autopsy.*—The chest presented nothing remarkable; the spleen was natural, but its capsule was discoloured, separated by a fluid, and connected with an abscess; the peritonæum was vascular, with partial adhesions, but there was no visible effusion; the colon was ulcerated, and perforated by many apertures; pus was found lodged in folds of the peritonæum, lying in front of the left kidney; the kidneys were of unequal

Fig. 5.

Fig. 5.—*Guy's Hospital Museum*, No. 1289[48]. Hypertrophy, and partial ossification of intervertebral cartilages.

size, the lesser containing three or four minute portions, which had suppurated; the prostate gland was small and firm; the urethra thickened, and contracted near the middle of the penis, with a sinus leading to the perinæum; there was a psoas abscess on the right side, reaching to the origin of the muscle; the right hip-joint was filled with pus; the head of the femur was hypertrophied; the ligamentum teres gone; and the neck of the bone encircled with exostoses; the vertebræ were not ulcerated, but the lumbar region was slightly incurvated on the right side; the intervertebral substance was hypertrophied, and partially ossified; and the bodies of the adjacent bones presented irregular patches of exostosis. Between the second and third lumbar vertebra, the osseous matter projected into the vertebral canal, and pressed on the spinal cord; the canal was diminished at this part, to one-third or one-fifth of its natural size.

*Remarks.*—In consequence of the patient being affected with so great an amount of disease, he was sleepless, and frequently delirious, a condition which was doubtless much aggravated by the pressure on the spinal cord. He was treated with astringents for the diarrhœa; and with opiates to allay the spino-cerebral irritation.

In other cases these cartilages are absorbed, and the bones come in contact. This condition may be detected by the crepitus emitted on twisting the body laterally, also by the pain induced, and by the absence of deformity, which symptoms will assist us in forming a correct diagnosis. Notwithstanding the great extent to which the vertebræ are often destroyed by caries, it has always excited surprise how so much damage can occur without producing the most serious effects on the stru

ture and functions of the spinal portion of the nervous system; but it must be remembered that the structure of the vertebræ is not uniform, that those portions which are destined to protect the spinal cord and nerves are much denser and harder than the body of the bone, and also less vascular, and therefore less liable to disease; hence we often find the body in a state of active organic disease, without the other portions of the bone being affected. The notches in the bones, through which the nerves pass from the spinal cord, are situated in the harder portions of the bone, and are thereby protected from injury, even when the body of the bone has been destroyed. When the bodies of six or seven consecutive vertebræ are destroyed, and the body of the patient is bent forwards, as in Fig. 3, we are likewise led to inquire how it is that the spinal cord is not injured. If a mesial section be made through the diseased bones, as in Fig. 2, it will be observed that not only is the vertebral canal entire, but that, in fact, its area is largest at the bend—an arrangement which tends most effectually to protect the spinal cord; but this end is obtained only by the consolidation and anchylosis of the several remaining portions of the diseased bones. This is the most natural and most desirable termination of caries of the vertebral column, and when effected, it leaves the osseous system otherwise in a healthy state. The chief evils which result, are the changes which the figure of the person undergoes, and the effects produced in those regions of the body which are connected with the several parts so changed. When the disease of the vertebræ continues, and no disposition to anchylosis can be induced, the malady assumes a more formidable character; the bodies waste away, leaving a great chasm between the vertebræ in parts, (Fig. 6,) and often exposing the sheath of the cord. This sometimes happens in scrofulous and syphilitic persons, and a train of constitutional derangements ensue, ending only with the death of the patient.

In some of the more severe forms of caries of the spine, the disease is not confined entirely to the cancellated portions of the bone, but extends to the harder and denser lamellated structure, of which the arches and processes are chiefly composed. This occasionally happens when the disease attacks the cervical vertebræ, but may take place in any portion of the vertebral column. In these cases, the patient very rarely survives the attack. A case of diseased cervical vertebræ in a boy, twelve years old, is related by Lebert. The child used the recumbent position. Every movement of the head was accompanied with great pain. The spine was bent, and a fistulous opening, opposite the fourth vertebra, led to the diseased bone. The patient was greatly emaciated, and on one occasion, when moving the head, he was seized with convulsions, and died.

*Autopsy.*—The lungs were found free from tuberculous deposit, and the left ventricle of the heart was hypertrophied. The cervical vertebræ were diseased in their whole extent, the caries being arrested only at the condyles of the occipital bone. The bodies of the vertebræ were chiefly affected, being in part destroyed, blackened, and softened, and presented some detached pieces of bone. The diseased portions were surrounded with a yellow lardaceous tissue. The brain was of the ordinary consistence, with some venous congestion of the superior part of the right side, and a milky-coloured serous fluid was found in the arachnoid membrane. The spinal cord was sound, and the pus in the vertebræ, on being inspected under the microscope, was found to be free from tuberculous matter.

Another case, mentioned by the same author, is worth recording on account of the morbid appearances exhibited on a microscopic inspection of the carious vertebræ after death. A man, aged forty-eight years, of a strumous habit, was affected with lateral curvature of the spine at the first lumbar vertebra, and several of those adjacent to it were displaced from their normal position. There was a psoas abscess in the right groin, which was not opened during life. He presented occasionally symptoms of partial paraplegia. Towards the termination he had cough, with signs of tubercular consumption, and died of pleuro-pneumonia.

*Autopsy.*—The lumbar vertebræ were found diseased at their anterior part; the cellular tissue was atrophied; the walls of the bodies were infiltrated with pus, and had cavities wherein detached pieces of bone were found; the surrounding surfaces of the vertebræ were softened, so that they were easily cut with a scalpel. In the most diseased parts a fistulous channel was found, connected with pouches, pouring out purulent matter on the psoas and iliacus muscles, which gravitated to the groin. A pyogenic membrane, two millimetres in thickness, was found in the bone, of a pale-red colour in some places, and of a slate colour, presenting a velvety appearance,

Fig. 6.

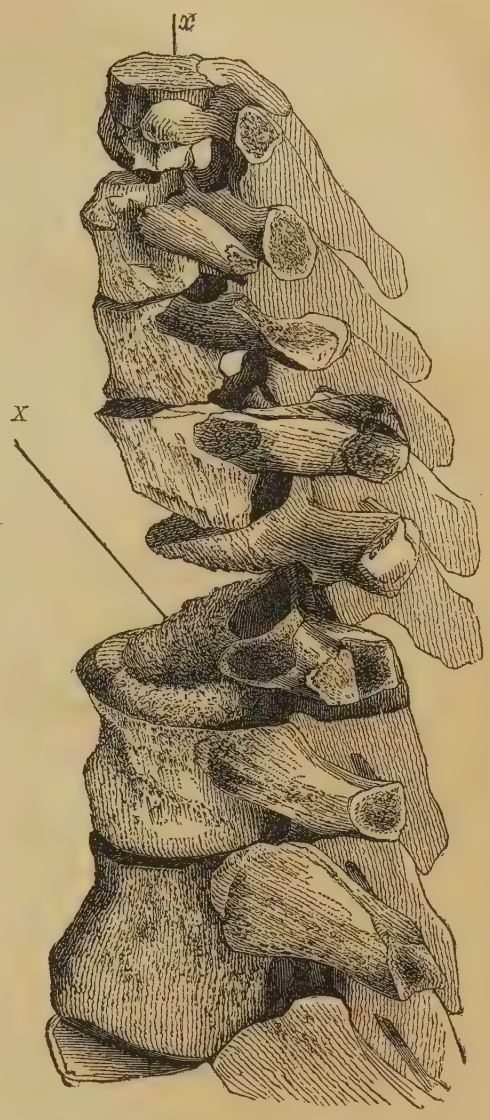


Fig. 6.—*St. George's Hospital Museum*, No. c 12. Caries of several of the vertebræ; the body of one being entirely destroyed, anchylosis had not taken place. *x*, a vertical line, and *x'* the direction which the spine must take when the remaining portions of bone lie in contact.

in others. It was folded, and could easily be detached from the bone. The pus of the abscess was of a pale-yellow colour; the serum had been almost entirely absorbed when it was placed under the microscope. There were found—first, globules of pus, varying in size from 0.$^{mm}$.008 to 0.$^{mm}$.011; secondly, large granular globules, varying from 0.$^{mm}$.02 to 0.$^{mm}$.25; and also numerous fatty vesicles. In some parts the concrete pus was of a consistence that rendered it capable of being sliced with a scalpel; it contained fibrinous matter, which, according to Lebert, was probably derived from the fibrin of the purulent coagulated serum. In those portions of the vertebræ in which the ulcerative process had not yet taken place, there were found softened portions with great vascularity of the parts, and pus in different states. Between the vertebræ which were most diseased, there was a red liquid, composed of the detritus of the diseased bones, calcareous salts, globules of blood and of pus. The pyogenic membrane contained numerous vessels, the smallest of which were 0.$^{mm}$.0 25.

The morbid anatomy of carious diseases of the bodies of the vertebræ tends to show that the attack may commence either at the surface, or in the internal structure of the body, and that its early stages are associated with an inflammatory condition of the parts. The capillaries being gorged with blood

do not yield a supply of nutriment, but exude purulent matter, which ends in the production of an abscess. In general, this exudation takes place through a very great number of capillaries, which are separated from each other by lamellæ and canals of bony structure; the areolæ of the bone become infiltrated with pus, which hardens, and is partially absorbed when the inflammatory process is arrested, and it then sometimes assumes the appearance of a miliary tubercle. This inflammatory condition of the capillaries, exuding pus, and diminishing the deposit of nutritive matter, whilst the process of absorption continues, must cause the wasting of the bones. As the deposition of pus continues, the areolæ are dilated and absorbed, and the matter issues from the interior of the bone by fistulous openings. According to Lebert, the capillaries also exude a liquid, which becomes organized into a plastic tissue that destroys the osseous areolæ. This tunic, being very vascular, furnishes a secretion which continually moistens the fistulous openings and diseased portions of the bone. The origin of these inflammatory conditions of the bones, when it is not occasioned by violence, Lebert considers due to an altered condition of the blood itself, especially to a tuberculous dyscrasy, although the bones are very rarely subject to tuberculization.

The few distinguished surgeons who have devoted any attention to the pathology of caries seem to have entertained very vague notions of the nature of this disease. Mr. Pott, for instance, — considered a great authority in these matters,—observes, that "the primary and sole cause of all the mischief is a distempered state of the parts composing, or in immediate connexion with the spine, and most frequently ending in caries of one or more vertebræ: from this proceed all the ills, whether general, local, apparent, or concealed. This causes the ill health of the patient, and, in time, the curvature." The view here taken does not advance us a single step in the discovery of the cause of caries, and is perfectly useless; in fact, an explanation in which nothing is explained, effects being made to stand in the stead of causes. Sir B. Brodie considers that the pathological history of caries may be arranged under three heads:* —First, "It has its origin in that peculiar softened and otherwise altered condition of the bodies of the vertebræ, which seems to be connected with what is called a scrofulous state of the constitution. In these cases, ulceration may begin on any part of the surface, or even in the centre of the bone; but in general the first effects of it are perceptible where the intervertebral cartilage is connected with it, and in the intervertebral cartilage itself." Secondly: "In other cases, the vertebræ retain their natural texture and hardness; and the first indication of the disease is ulceration of one or more of the intervertebral cartilages, and of the surfaces of the bone with which they are connected." Thirdly: Another order of caries, but of more rare occurrence, "in which the bodies of the vertebræ are affected with chronic inflammation, of which ulceration of the intervertebral cartilages is the consequence." It will here be observed, that Sir B. Brodie is of opinion that caries arises in the bodies of the vertebræ, and is associated with a scrofulous constitution. This opinion furnishes views of a far more definite nature than those contained in the statement of Mr. Pott, but leaves to future investigators the complete solution of the problem—namely, the determination of the cause of the disease. Dupuytren appears to have entered this field of inquiry by first asking himself, "What is the origin of this singular alteration, and to what class of lesions is it to be referred? Why is its progress so slow? Wherefore should it select the vertebral column for its attacks; and why should its existence in this part remain hidden, until revealed by the presence of pus at a considerable distance from the seat of the disease?" He then states, that the solution of the difficulties which surround the subject is to be sought for in the illustration afforded by cases. He considers that the anatomical changes may be referred to three heads—first, internal suppuration, which is the origin of symptomatic abscess; secondly, deep-seated suppuration in contact with the bones, involving a separation of the adjacent fibrous texture; thirdly, a change in the bones themselves. In six cases examined by him, the fibrous tissues which strengthen the vertebral column were dense, and thickened, and presented evidence of chronic inflammation; the periosteum was stripped off to a variable extent, and pus was found deposited between the denuded bone, and the tissues by which it is naturally surrounded. In almost every case, there existed an extensive, but more superficial suppuration along the muscles and vessels, the pus being without fetor, and not sanious, as in scrofulous cases, but homogeneous and healthy, such as is the result of simple inflammation. In a large number of morbid cases, examined for Dupuytren by M. Dalmas, the latter remarked that there never existed any definite relation between the amount of disease affecting the bones, and the extent of the external disorder; for, in some cases, the bones were diseased only at a single point, whilst the affection of the adjacent textures was very considerable; whereas, in other cases, five or six vertebræ were denuded and bathed in pus, whilst the surrounding parts were healthy. Dupuytren further remarks, that caries, considered in the abstract, consists in a simple denudation of the bone, accompanied with an erosion, and, consequently, an irregularity of surface, the dark colour of which is apparently an adventitious circumstance, dependent on the admission of air and the contact of pus, the bodies of the vertebræ and the intervertebral cartilages being sometimes destroyed; a more rare result being a thinning or wasting of the osseous texture. From this account, it is clear that Dupuytren has overlooked all the premonitory symptoms of the formation of caries, and the condition of the patient while the causes of mischief are being developed. The origin and progress of these affections are known to be very insidious; but there is a chain of symptoms significant of the seat and nature of the malady, which might be detected when the patient is carefully examined. He has not solved his own questions relative to the slow progress of the disease, nor why it should more frequently invade the vertebral column than other portions of the skeleton. The consideration of these questions will be resumed in my next paper.

* Diseases of the Joints, p. 243.

AN ACCOUNT OF

## THE SIXTIETH CASE OF PLACENTAL PRESENTATION.

By ROBERT LEE, M.D., F.R.S.,
LECTURER ON MIDWIFERY AT ST. GEORGE'S HOSPITAL.

On Sunday last, the 16th May, 1847, about eleven o'clock at night, Mr. Angus requested me to see a patient with uterine hæmorrhage, in the ninth month of her first pregnancy. Five weeks before, she was suddenly attacked with hæmorrhage, which lasted for a few hours, during which time she lost about a pint of blood. The hæmorrhage then ceased, but returned again with violence after some days, so that she was compelled to remain constantly in bed, the least movement producing a return of the flow of blood. "In this state she continued five weeks, subjected to an almost constant draining of blood, and at times losing suddenly about half a pint, more especially on excitement or making the least exertion." Dull pain occurred on the morning of Sunday, with profuse hæmorrhage, which continued at intervals during the day. When I first saw the patient, she was very pale, faint, and restless, and the blood was flowing profusely. On examining, I found the os uteri so high up as scarcely to be reached, and the orifice so little dilated as not to admit more than the point of the middle finger, with which the placenta was felt adhering all round to the cervix. I had never met with a more formidable case, as it was not merely impossible to pass the whole hand, but to introduce two fingers to turn the child. A sponge was introduced into the vagina, and pressed up against the os uteri; cold air was freely admitted, and cold vinegar-and-water applied over the hypogastrium. The hæmorrhage was not restrained in the slightest degree by these means, and at two o'clock in the morning it was obvious the patient would soon sink if not delivered. I then passed the whole hand into the vagina, and carried forwards at the back part the middle finger, between the uterus and placenta, where it was detached so as to reach the membranes, which I tore open, and allowed the liquor amnii to escape. The head of the child presented. Two doses of ergot of rye were then given, and a binder firmly applied around the abdomen. For a short time she seemed to rally, active uterine contractions took place, and we hoped that the hæmorrhage would be arrested, and the head expelled, without the employment of any other artificial means; but these favourable appearances soon vanished, the flow of blood again took place profusely, the pulse could scarcely be felt; the respiration was hurried, and she incessantly threw her arms around her: stimulants were freely administered without any effect.

At six A.M. we resolved to attempt to complete the delivery with the perforator and crotchet. The left hand was completely introduced into the vagina, the fore and middle fingers were with difficulty forced through the os uteri, and the head touched, while strong pressure was being made over the fundus uteri. Along the groove formed by these fingers the perforator was with much difficulty passed up, and the head

opened. The crotchet was next introduced along these fingers, and passed through the opening in the head, and a firm hold obtained. With the points of the fingers outside the head, and the crotchet within, firm, slow, and gradual extracting force was employed; and in about half an hour of great exertion and anxiety we had the satisfaction of feeling the os uteri gradually dilating, and the head descending through it into the pelvis. There was no hæmorrhage during the operation, which was completed in another quarter of an hour; and in no long time, with a little artificial assistance, the placenta followed. At eight o'clock the hæmorrhage had entirely ceased, the uterus had contracted, and the pulse was in a satisfactory state. In the evening (17th) Mr. Angus informed me that his patient was doing remarkably well, without one unfavourable symptom. The following is his report the day after, on the 18th, (Tuesday:)—

66, Frith-street, Soho, 18th May, 1847.

My dear Sir,—Since witnessing the case of Mrs. W. yesterday, which is the second of the kind I have had with you, I have been strongly impressed with the idea of the little attention given to this species of operation by the profession generally. Here is a patient who has lost two or three pints of blood during the day; the countenance is blanched, the pulse feeble, beating about 130; she is gasping for breath, calling on the nurse to open the windows, and exhibiting all the urgent symptoms of death. A great part of the liquor amnii has escaped, and yet there is scarcely a trace of pain; the os uteri will only admit two fingers, and its mouth, like an undilatable cartilaginous ring, with the draining of blood still going on.

What then is to be done? The patient is on the verge of sinking, and will probably die undelivered; the usual mode of turning is impossible; the amusing theory of peeling off the placenta cannot be entertained; then comes in this useful hint—if the perforator can be introduced by the side of the placenta, and the brain evacuated, a constant gentle pull will both stop the hæmorrhage, and lead gradually to dilatation and pains and delivery, as was prominently exemplified here. I have been induced to reflect more on this particular mode of delivery, from a firm conviction that our patient would have died after a few hours, or probably sooner, either in the act of our turning the child, or that she would have sunk undelivered from loss of blood.

I am glad to say that unless from the usual symptoms of reaction after the loss of so much blood, she is doing well, and seems very thankful for our assistance to her.—I am, sir, yours truly,

Alexander Angus.

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ON

## ETHER-VAPOUR, AND THE FATAL CASE OF MRS. PARKINSON.

By EDWIN HEARNE, M.B. Lond., and late House-surgeon to University College Hospital.

The report in The Lancet of the coroner's inquest, as copied from the *Times* of March 19th, 1847, held on the body of Mrs Ann Parkinson, who died after an operation performed under the influence of ether, has induced me to make an humble effort to controvert an erroneous impression which I fear has taken deep hold of the public mind in consequence of opinions there expressed. I do so by adducing testimony in corroboration of the happy effects of the power of that mighty agent in alleviating animal suffering, and hope that every other surgeon who has had the opportunity of testing its action will do the same, in order that the largest possible number of cases may be laid before the profession, which will enable us to give a calm, deliberate, and impartial investigation to this important subject. I will therefore now briefly state the results of my own practice.

Case 1.—A mechanic, from the Portsmouth Dockyard, applied, with his face swollen and gums diseased, to have a molar tooth removed, which had caused him considerable suffering on account of abscesses having formed in his gums and cheek. He inhaled the vapour of sulphuric ether from a common bladder, to which a simple tube was attached, and became fully under its influence in about two minutes, when the tooth was removed without difficulty. On coming to himself, which he did quickly, he declared that he had not experienced the slightest pain, but fancied he had been holding an agreeable conversation with a gentleman standing by, nor would he believe that the tooth had been extracted until he examined his mouth with his own finger. He expressed great surprise, and was delighted at the result, and called a few days after to tell me that he had suffered no inconvenience since the operation.

Case 2.—Feb. 5th.—A lad, aged thirteen, had been suffering from a scrofulous affection of the knee-joint for the last eight years, attended by abscesses, which discharged profusely for a considerable portion of that time, so as greatly to injure the poor boy's health. At the time he came under my observation, the leg was firmly anchylosed at a right angle with the thigh, the whole limb much wasted, and the knee very painful, especially at night, which totally prevented sleep, and continued to injure and wear down his general health. He inhaled the ether from Robinson's apparatus, modified by Coxeter, surgical instrument maker, (I have used no other since,) and became fully under its influence in about two minutes. The limb was removed, the arteries tied, the sutures inserted, the plaster applied, and the patient put comfortably into bed, without experiencing a single disagreeable sensation. On introducing the knife, not a muscle was observed to move. The little patient, in the most placid manner, was holding an imaginary conversation; and whilst the arteries were being tied, he exclaimed, "You may take off my leg, for now I am in heaven: it is a most beautiful place, with angels all around; and I'll pray for you to come." On removing the inhaler, he said, "The angels are going away—do send them back!" He was taken out of the operating room singing "Hallelujah." Consciousness returned almost immediately after he was placed in bed. No case could possibly progress more favourably. The dressings and sutures were interfered with on the fifth day for the first time. Union had taken place to a great extent by the first intention. The transparent isinglass plaster was then applied, and no further interference was required until the fourteenth day, when the cure was almost complete. Another week, and the case may be reported as well. Many other cases, after amputations, I have treated with the same success.

I cannot help contrasting this system (for the introduction of which we have chiefly to thank Mr. Liston) with the filthy grease and plaster &c., requiring a renewal of the dressings every other day, thereby breaking up the tender and newly united parts, almost universally used when I entered the medical profession, and still very commonly adopted, not only by general practitioners, but even by hospital surgeons.

Case 3.—The patient, a young man, applied to have two bicuspid teeth removed, which was quickly accomplished after two short inhalations. He stated that he felt a little pain with the second, but laughed heartily, and was much pleased with the result. The influence of the ether passed off in a few minutes.

Case 4.—A young man, after having inhaled the etherial vapour for five minutes, was relieved of an incisor tooth without having the slightest idea that any operation had been performed. He quickly recovered from its effects.

Case 5.—A mechanic was relieved of three molar teeth and a stump after separate inhalations of considerable duration. The first was removed without difficulty, but he was not altogether insensible to pain. During the other inhalations, he was jocose and excited when the ether was being administered. When the pupils had become dilated, and I considered him in a fit state to have another removed, the mouth-piece was taken away, but he rose from his seat, saying he was not yet in a proper condition; but after allowing him to inhale some minutes longer for each tooth, I at last succeeded in extracting all he desired to have removed. After it was over, he had some indistinct recollection of each extraction, but stated that the pain was nothing in comparison to what he had endured in an attempt that had been made some years before to remove one of them. The effects of the ether did not entirely leave him for more than an hour, but he felt no inconvenience after, although he had inhaled a very large quantity. He stated that he was not in the habit of drinking spirits, but took two or three pints of beer daily.

Case 6.—A middle-aged female, of an irritable temperament, who had suffered much from neuralgia, for the relief of which she had been in the habit of taking ether, applied to have two molar teeth extracted. After inhaling the etherial vapour for four or five minutes, its influence began to be marked by dilatation of the pupils &c.; she then suddenly uttered several shrieks, and was quite hysterical, but quickly recovered. On her being desirous of again trying its effects, the desire was yielded to, and a slight hysterical fit was again produced. I did not judge it prudent to carry its influence further, but extracted one of the teeth as soon as she became a little calm. Sensation appeared much obtruded, as she suffered very little pain.

Case 7.—Another patient came to have a molar tooth re-

moved. He inhaled the ether five or six minutes, and appeared to be under its influence; but before the tooth could be removed, notwithstanding it was extracted without difficulty, consciousness had partially returned, and the operation was not altogether painless. The inhalation should have been continued a few minutes longer.

Case 8.—A servant of the above applied to have a bicuspid tooth removed, when I took the precaution of keeping up the inhalation a full minute after the etherial influence was well marked. The tooth was extracted, and in about half a minute she awoke, crying. On asking her the reason, she replied that she was going to a neighbouring village in a fly, with some friends, when she was suddenly upset. She came to herself very quickly, and suffered no inconvenience.

Case 9.—March 10th.—Was that of a poor woman, aged forty-five, who had laboured under scirrhous disease of the right breast, for the last eighteen months. She first applied to me about three months ago, and wished to have the disease removed, on account of the intensity of her sufferings. An examination quickly revealed the nature of her complaint. I found the whole mammary gland involved, also, some of the absorbent glands under the pectoralis major muscle; the nipple was much retracted, and a perpendicular line of integument, about three inches in length, discoloured; the disease was perfectly moveable from below. I then refused to operate, on the ground that I should not be justified in submitting her to a very painful, and, perhaps, dangerous operation, for the sake of mere temporary relief. She then applied to some other medical men, who advised an operation. A consultation was held on the case, at the Infirmary, when the majority of the medical staff decided against any operative procedure. She again fell under my care, and on the discovery of the valuable influence of ether, my chief ground of objection was removed; and on her declaring to me, that she would rather die than live in her present misery, I again examined the tumour, and found that no material alteration had taken place in the disease, with the exception of the discoloured line of integument having ulcerated, which discharged profusely a thin ichorous fluid, that had the effect of rapidly wearing down her strength. I now proposed, for the purpose of temporarily relieving her from her distressing affliction, that the tumour should be removed; to this she gladly consented. After inhaling the etherial vapour between four and five minutes, the pupils dilated, and she presented every evidence that she was fully under its influence; the mass of disease was quickly removed; a few arterial twigs ligatured; sutures, plaster, and bandage applied; without the poor patient having any idea that anything had been done; but so quickly did she recover, that, on my adjusting the last fold of the bandage, the pin touched the skin, when she immediately cried out that I was pricking her. She was then placed in bed, and progressed very favourably for some days; the sutures and part of the plaster were removed on the third day, when much union had taken place. On the fourth day, without my direction or knowledge, she foolishly took a drastic aperient; from that time, she became so depressed, that I almost despaired of her rallying; the new adhesions gave way, allowing the wound to gape, and altogether presenting the most unfavourable appearance. What seemingly trivial influences will sometimes destroy our hopes! The use of wine, ammonia, &c., and lately, animal food, has been resorted to, under which she is progressively improving; the wound is cicatrizing; and everything assuming a favourable aspect. She has suffered comparatively little pain since the operation. So far my object is gained.

Case 10.—March 22nd. A young man, aged seventeen, applied to have some tendons divided, in consequence of contracted toes, which gave him much pain and inconvenience. He had scarcely commenced inhaling the etherial vapour, when convulsive twitchings, affecting the whole body, manifested themselves. I desisted for a time, when they immediately ceased, and then again attempted to administer it, but with the same result. Believing that I was not justified in persevering in its use, I performed the operation by subcutaneous incisions without further difficulty, and much to the satisfaction of the patient, as he is now able to attend to his ordinary duties without inconvenience.

The last case shows that we are not to use the ether indiscriminately; but the preceding ones not only demonstrate that it may be used in a large number of cases without any deleterious effects resulting, but with the greatest possible good. Before administering it for operative purposes, I took it myself, and gave it to several friends, in order to observe its effects on as many individuals as possible. In no instance have I regretted doing so.

I cannot close my communication without making a few remarks on the case which led me to address you. After reading with the greatest care the account given at the inquest, touching the death of the poor patient, I cannot see one particle of evidence favouring the idea, that the inhalation of ether was the cause of her death. I have not hastily arrived at this conclusion, but have impartially investigated the evidence adduced. It appears that she was in a delicate state of health at the time of her marriage, susceptible to cold upon the slightest occasion—the disease, a malignant tumour, of upwards of a year's growth, being as large as an egg, very painful, and impeding her walking within nine months after her marriage. It is important to bear in mind, that malignant tumours affecting young subjects, even if left quite to themselves, grow rapidly, and quickly produce a depressing influence on the general health. Leeches and punctures would tend to aggravate those evils.

Previous to the operation, the precaution was taken of administering the etherial vapour twice, so as to allow of any peculiarity in its action being observed. What were the effects? On Saturday, March 1st, after inhaling for about ten minutes, it made her laugh very much, and whilst under its influence she was pinched very severely. When she recovered from its influence, she said she felt quite comfortable; but was aware she had been pinched, although she said it did not give her pain. The influence continued about two hours and a half, during which time she was hysterical. (Similar effects have been experienced by other weakly females.)

The following Monday evening she was again subjected to the vapour, when its influence was much more rapid, and she became quite unconscious in about four or five minutes. She remained so for about a quarter of an hour or twenty minutes, when she became conscious, but the effect of the ether did not leave her for about an hour; she was not hysterical the second time. (These effects were quite normal.) She complained of a little headach after the Saturday's administration. (This is not unusual.) On Tuesday, March 9th, after ten minutes' inhalation, when apparently unconscious, she underwent a tedious and protracted operation, according to a witness, occupying fifty-five minutes, whilst the operator states twenty-five minutes, and it appears not altogether painless, the patient stating that she felt the cutting, thus showing that she was not to a great extent under the influence of the ether, therefore less likely to be deleteriously affected by it. The non-medical witness states that she did not appear to lose much blood, and the wound was dressed after the operation, and bandaged, and when placed in bed she appeared to be conscious; shortly after, she took some gruel, and said she felt better. Would not this show that she recovered from the effects of the ether as quickly and as fully as after the first two administrations? It does not appear that there was any evidence from a medical witness as to the quantity of blood lost. When we bear in mind the nature of the tumour, and that it is usually tolerably vascular, we cannot do otherwise than come to the conclusion that many ounces must have been lost in so protracted an operation. The account of the post-mortem examination is very unsatisfactory, since we find that those important secernents, the kidneys, were not even examined. I believe that I am borne out by high authorities in stating, that many of those patients who sink rapidly after severe operations, do so in consequence of the renal secretion being carried on imperfectly. The only abnormal condition noticed was congestion of the membranes of the upper part of the anterior lobes of the brain, with the exception of the blood being in a fluid state throughout the body. It does not appear that there were any symptoms specially referrible to the membranes covering the anterior portion of the upper part of the brain during life. With regard to the fluid state of the blood, I have noticed the same when death has taken place soon after an operation, without the ether having been used. I account for it in the following manner:—A given quantity of blood being lost during the operation, it would have the effect of partially emptying the vessels, to obviate which, the absorbents quickly replenish the vessels with a fluid of a diminished consistence, and patients, after operations, not being able to take any food but thin fluids, this condition would be necessarily kept up for a long time, and restored to its natural state in proportion to the rapidity of the patient's recovery. In the case in question, from the description given, the blood would have been naturally poor and thin; and in the disease under which the poor patient laboured, if I remember correctly, defective in red particles, according to the analysis of Andral and Gavarret.

Having carefully considered all the facts of the case, the naturally weak constitution, the malignant character of the disease, the protracted operation, with the shock attendant thereon, together with the loss of a certain quantity of blood, I think we have here a sufficient number of depressing influences to account for the loss of life, without attributing any share to the calmative influence of the vapour of ether, especially as it was used with impunity until the effects of the operation were appended to it.

There are few operative surgeons who have not had to deplore the misfortune of occasionally losing patients even more favourably situated, and after less severe operations than that of the case in question, and without the use of ether. I myself remember several; and one in particular very similar in many respects to that under consideration, although in this instance I believe life was happily preserved. The patient, a strong, middle-aged countryman, apparently in excellent health, applied to the Taunton Hospital to have a tumour, weighing about one pound, removed from the back part of his thigh. The operation was performed without much loss of blood, but it occupied the greater part of an hour in performing. He was so depressed by the shock of the operation &c., that for many days his life was despaired of. I left the neighbourhood whilst he was under treatment.

This patient had not the disadvantage of contending with a malignant tumour, and the state of health consequent thereon; it was the simplest kind of tumour, (fatty,) yet he nearly lost his life from the operation, notwithstanding no ether had been administered. I could produce many other cases if they were required. Let it be distinctly understood that I do not for a moment wish to reflect on the medical attendants for the unfortunate result; it would probably have been the same in the hands of any other surgeon: but I do reflect on them for prejudicing the public mind on such flimsy grounds, or, I would say, without any ground whatever, mistaking the *post hoc* for the *propter hoc*, against an agent destined, I believe, to assuage human suffering more than any known, and which I cannot but consider as one of the greatest discoveries of the age.

I cannot conclude without remarking how much of prejudice the operator in this case appears to have imbibed against the ether, even previously to the fatal operation; therefore, how little the public mind should be influenced by an opinion emanating from him! On being asked by the patient's sister-in-law what he thought of the application of ether, he replied that he had no faith in it; but at the time in question, he said he had performed an operation on a young man's toe with success under its influence!

I hope that the remarks I have made will serve the cause of suffering humanity, and tend to disabuse the public mind of an unfounded prejudice which I regret to think has already taken root.

Southampton, March, 1847.

## Selections from Correspondence.

### *Poisoning by Emetic Tartar.*

Mr. Freer (of Stourbridge) details a case of poisoning by emetic tartar, in which a horse-medicine, containing two drachms of emetic tartar, was taken in mistake for Epsom salts. Mr. Freer found the patient, a man, twenty-eight years of age, an hour after the poison had been taken, in the following state:—

"He was supported by two fellow-servants; his pulse imperceptible; tongue dry and red; countenance livid, and bathed with cold clammy sweats, and indicative of the greatest suffering; violent pain at the epigastrium, and over the whole surface of the abdomen, with constant spasmodic contraction of all the muscles, particularly of the abdomen and upper extremities. The fingers were firmly contracted down upon the points of the shoulders, and every muscle in an extraordinary state of rigidity; and he vomited once about half an hour after taking the poison, and after the vomiting, he had constant involuntary aqueous stools. I immediately administered an emetic of mustard and salt, which produced excessive vomiting of bilious matter. I gave him also frequent draughts of strong green tea, with brandy and decoction of oak-bark; applied hot applications to his extremities, and flannel, dipped in turpentine, over the surface of the abdomen. At the end of six hours, the cramps, vomitings, and aqueous stools continuing, I gave him a draught, consisting of castor oil, half an ounce; mucilage, one ounce; tincture of opium, thirty-five drops. Soon after this, the symptoms became mitigated, and he is now convalescing, without suffering any ill effects from so large a dose, excepting profuse night perspirations."

Mr. Freer calls attention to the three principal points observed:—

"1. The absence of more early vomiting.
2. The extraordinary contraction of the muscular system.
3. The rapidity of recovery after so poisonous a dose."

### *Gray's Supplement to the Pharmacopœia.*

Mr. Cantrell, of Belper, suggests that this work should be divided into two volumes—one to comprise the botanical and zoological parts, the other all the formulæ used in medicine and the arts; each volume to be sold separately. He complains of the size and price of the work, and asserts that it contains much that is useless to those for whom it is chiefly intended—viz., chemists and druggists, and the medical profession.

[In this respect we cannot but think he is greatly in error. The scientific division of the "Supplement," if carefully studied, will tend to raise the standard of qualification among its readers far above its present condition, while the possession of a set of formulæ only cannot but make them mere routinists. Knowledge of the kind conveyed in the work in question, is essentially requisite for chemists and druggists; nor will they attain a respectable position in their business until they are as well acquainted with its science as with its mechanical application. Had this edition of "Gray's Supplement" been in existence at the time of the Cronin affair, there would not have been a shadow of excuse for that unhappy transaction.]

### *Medical Reform.*

Gratus communicates his approval of the Medical Registration Bill, which he believes, if it become law, will work unspeakable benefit for the profession. He accordingly urges all those who are jealous of its honour and respectability to unite in aiding its progress through the Houses of Parliament; and states his opinion, that those who neglect to render their assistance will richly deserve the degradation and disgrace which the want of such a measure will bring upon them, as the result of their apathy. To the pertinent question which he proposes—By whom are the penal clauses to be enforced?—it may be answered, that when the time comes the necessary machinery for working the Act will not be wanting.

### *Bone-setters.*

Chirurgus draws attention to the malpractices of the bone-setters in the country, and to the injury which they do the regularly qualified surgeon. He states that even respectable and (apparently) educated members of society are in the habit of consulting these persons, either before or after they have obtained the advice of their usual medical attendant, in the belief, industriously kept up by the bone-setter, that the treatment of fractures, dislocations, and sprains, belongs to the latter, and not to the surgeon. Chirurgus expresses his regret that a clause has not been inserted in the Medical Registration Bill, by which the practice of these men may be checked; but in this he is decidedly in error, as the treatment of the injuries to which they especially apply themselves is purely surgical; and the fourteenth clause will consequently be available against them as unregistered practitioners. Were a separate clause drawn up against each distinct kind of illegal practice, the Act would be unwieldy and cumbersome in its operation, while its efficiency, instead of being increased, would be greatly impaired.

### *The Right to General Practice.*

Aliquis suggests that Edinburgh M.D.s may practise as physicians or as general practitioners in England and Wales, by visiting the sick and dispensing their own medicines, the charge being made for the professional visit, and not for the quantity of drugs consumed. He considers, that in this way the penal clauses of the acts relating to the College of Physicians and the Society of Apothecaries may be evaded.

[The recommendation is not novel, and the plan has been acted on for some time past by many high-minded general practitioners, not with the view of evading the enforcement of an Act of Parliament, but because they deemed the course to be more honourable than the plan previously very generally adopted, of charging for medicine only. In this point of view, the plan has been frequently recommended in the columns of The Lancet. The evasive infringement of the Acts of Parliament

advised by Aliquis, however, is objectionable; its fulfilment must necessarily derogate from a man's honour, and lessen his self-esteem. It is far better to seek the repeal of obnoxious and injurious powers, than to evade their execution by a trick.]

*Anomalous Menstruation?*

Mr. Jones, of Llantwith, Montgomeryshire, mentions that he has been consulted by a lady in independent circumstances, fifty years of age, suffering from the anomalous symptoms attending the cessation of the menses. She has been three times married, but has never borne a child. Menstruation commenced at the age of eighteen, and has occurred regularly every month since that time, never exceeding, on any occasion, from three to four days in duration. The peculiarity to which Mr. Jones wishes to draw attention is, that the discharge was throughout white one month, and sanguineous the next, the patient never suffering from either dysmenorrhœa or leucorrhœa. He is anxious to obtain a solution of this problem from some one or other of his professional brethren.

*Pyro-acetic Acid in Rheumatism.*

Dr. Tayler, of High-street, Deptford, has forwarded the particulars of three cases of rheumatism, in treating which he employed with success the internal exhibition of pyro-acetic acid, as recommended by Dr. Hastings in The Lancet, some time since. The first case was one of general rheumatism, the severity of the disease having been checked by the exhibition of colchicum prior to the use of the acid. Still the advantage derived from the latter medicine was so marked as to induce Dr. Tayler to use it in two other, but less severe cases. In both these it speedily effected a cure. The principal physiological action of the acid appeared to be the production of copious diaphoresis. Its real value in the treatment of this disease remains to be ascertained by repeated and more numerous trials.

*Stamina of the Rural Population.*

Mr. Charles Smith, of Highworth, Wilts, expresses his opinion, that within the last fifteen years, the rural population have degenerated greatly in strength and powers of constitution, and he wishes to learn from other practitioners, in different parts of the country, whether they have noticed a similar change in the inhabitants of the districts in which they respectively reside.

*Infantile Diseases.*

Mr. Roper, of Thornton Heath, describes two cases of disease terminating fatally in infants, the nature of which was not ascertained clearly in the first, even by a post-mortem examination; and in the second, only in consequence of the autopsy having been made. The symptoms in both cases were regarded as indicative of gastro-enteric irritation, and were treated accordingly, with at first some improvement, which, however, soon ceased. In the first case, the only appearance of disease discovered after death, besides emaciation, was a mottled appearance of the kidneys. The other viscera were healthy. In the second case, which, in addition to the signs of gastro-enteric irritation, was characterized by a trifling cough, some little oppression of breathing, and a pallid countenance, death occurred suddenly. The abdominal viscera were healthy, as were also the lungs; the heart was at least twice the usual dimensions, with some hypertrophy of the parietes; valves sound; the pericardium contained about half an ounce of serum; some of the mesenteric glands were enlarged. The little patient, a male, was about four months old.

*Uterine Injections.*

Mr. Hoskins, of the Birmingham Lying-in Hospital, in commenting on a paper by Dr. Cattell, published in The Lancet for December 19th, denies his claim to originality, as regards the use of uterine injections in cases of hæmorrhage, atony, or inaction of the womb, and as regards injecting the umbilical cord in cases of retained placenta from adhesions. With respect to the first point, Mr. Hoskins quotes Dr. Rigby, Dr. Young, and Saxtorph's notice of the employment of cold water injections into the uterine cavity, to arrest hæmorrhage, and also Dr. Ramsbotham's condemnation of this mode of treatment. He himself agrees in opinion with Dr. Ramsbotham, and he also condemns the use of stimulant injections in cases of uterine atony, on account of the danger of consecutive inflammation of the organ. He (Mr. Hoskins) considers the application of the child to the breast to be one of the best means that can be adopted to arrest uterine hæmorrhage after labour. Mr. Hoskins then proceeds to show, by reference to Mojon and Hoffmann, that the injection of the umbilical cord to detach a retained placenta, is not an original idea on the part of Dr. Cattell. Mojon recommended an injection of vinegar-and-water, and Hoffmann, one of brandy. Dr. Ramsbotham and Dr. Burns both object to the use of injections of the umbilical cord, the former on the ground that, while the operation is being performed, the blood may be gushing from the uterus, and the patient dying. Dr. Burns says we can never permanently remove the placenta by distention, and, therefore, ought not to try it; and Mr. Hoskins' objections are, he says, founded on the impossibility of injecting the placenta to any extent, whilst in utero, its vessels and cells being, for the most part, full of coagulated blood, which cannot, consequently, be drained out by allowing the umbilical vein to bleed.

Mr. Hoskins next proceeds to consider Dr. Cattell's views with respect to the treatment of after-pains. Dr. Cattell opposes the use of opium as a sedative in those circumstances on account of its impeding the restorative contractions of the uterus. In this opinion Mr. Hoskins coincides, as far as the exhibition of opium in large doses is concerned; but he does not consider that the same objection applies to the use of opium in small doses, repeated at proper intervals, so as to produce a state of quietude, without interfering with the necessary changes going on in the uterus.

*Obturator for Cleft Palate.*

Mr. Taylor, of Guildford, has furnished us with an account of a modification he has made in Dieffenbach's Indian-rubber obturator for small clefts in the palate. This instrument consists of thin plates of Indian-rubber, two rather larger than the opening, with a much smaller one between, sewn together with a strong thread, so as somewhat to resemble a shirt-stud. This plug is easily inserted by pinching up one of the plates with small forceps, first wetting it, to prevent the folds sticking, and then thrusting it well through the opening into the nose, where it afterwards expands, the under plate being, of course, closely applied to the roof of the mouth. The principal objection to the use of this obturator is, that it requires to be changed almost every week, in consequence of the Indian-rubber being softened by the saliva, so that the thread cuts through it. To prevent this, Mr. Taylor had a small piece of silver-foil placed in front of the mouth-plate, and sewn with it; and by this means he has enabled a patient of his to wear one of these instruments with ease and comfort for five months, in addition to which the opening in the palate has contracted so much, that there is a prospect of its complete closure.

## Reviews.

*The Preservation of Infants in Delivery; being an Exposition of the Chief Cause of Mortality in Still-born Children.* By Richard King, M.D., &c. London: John Churchill, 1847. pp. 61.

Experience is the great teacher of medicine; nevertheless, it will not render a man a physician, unless its results be carefully weighed and compared, nor unless, with it, the individual be fitted with the necessary groundwork of knowledge—knowledge itself primarily being derived from observation and experience.

Experience, therefore, being so precious, the medical profession must always be indebted to those who make known the results of their observations—observations which will be valuable in proportion to the well-disciplined state of the mind of the observer, his freedom from prejudice or preconceived opinion, and his powers of induction—of discovering the *propter hoc*, and of distinguishing it from the *post hoc*.

Medicine must advance, like all other sciences, by the special study of particular phenomena by different men, and by seeking the right interpretation of them, in order that some general principle may be arrived at. The monograph under notice is an inquiry into the particular causes of still-birth, by one who has especially cultivated the obstetrical branch of medicine.

Dr. King's attention was directed to the investigation of the causes of still-birth from its frequent occurrence, and because, in his opinion, those causes to which it is generally attributed are insufficient to account for it, and, in many cases, erroneous. Moreover, as the author believes, the wrong method of treatment has been frequently adopted where the infant's life has been endangered during birth.

From several considerations, he makes the assumption that there is a uniformity as to the time of detachment of the after-birth, which takes place in head presentations as soon as the head is born; in preternatural cases, as soon as the breech is expelled. In his experience, the placenta is attached more frequently to the anterior wall of the uterus than elsewhere; and he further assumes, that the placenta has the power of suction, like a sponge. On these grounds he argues that medical men have, in many instances, wrongly attributed death to pressure on the umbilical cord; and that they even have been too anxious to prevent this pre-supposed injurious pressure, since, in most cases, pressure on the cord is rather beneficial than not, by preventing the abstraction of blood from the infant, by the suction-power of the placenta, and so warding off death by syncope.

This, then, it is his object to make out—that still-birth is in the greater number of cases attributable to syncope, arising from the gorging of the placenta at the expense of the blood of the child, and that death from asphyxia is rarely to be dreaded, since new-born children, like the young of other animals, may survive after asphyxia of considerable duration.

On his own principle, as laid down, he would advocate the removal of the placenta, in the first place, in cases of placenta prævia, as recommended by Dr. Simpson and others; and also, in the Cæsarian operation, he believes that, to give a chance of life to the child, the cord should be tied, and the placenta detached previously to its removal.

For our part, we think that Dr. King's views will not fully bear the test of physiology, nor that of experience; however, it is right that his view should be fairly canvassed, and his arguments weighed, for, upon the whole, his little book promises to throw some new light upon our mode of practice in preternatural cases.

In conclusion, we must remark that the author has not the facility of composition, and of arranging his matter, so that his arguments may be brought to our mind in their full force, in order to exert their due effect.

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*A Treatise on Fractures in the Vicinity of Joints, and on certain Forms of Dislocations.* By Robert W. Smith, M.D., &c. Dublin: Hodges and Smith, 1847. 8vo, pp. 314.

Now that the profession is inundated with manuals, vademecums, and merely elementary works, which have been compiled with great industry, and so much matter thrust into them that they may be said to be over-nutritious, and apt not to be digested,—now that this is the case, we repeat, it is a pleasure to have a work like Dr. Smith's brought under one's notice, the object of which is to throw light upon some special surgical diseases, concerning which a degree of obscurity prevails, and various opinions are held.

Medical men have before them as a standard work on dislocations and fractures that of Sir Astley Cooper; wherefore, to have written a complete work on those matters would have been deemed unnecessary, as a useless multiplication of books—consequently, we cannot but admire the good sense of the author of the treatise under notice, in limiting himself, as he states in his preface, to those fractures in the vicinity of joints "of which he has had most experience, the differential diagnosis of which he found to be attended with the greatest difficulty, and whose anatomical characters he has had the most frequent opportunities of investigating."

Again: those forms of dislocations to which our attention is directed are such as have been but little brought under the notice of English practitioners by surgical writers. The author remarks,—

"The elaborate researches of Breschet, Dupuytren, Bouvier, Guerin, and others, have done much towards elucidating the subject of congenital luxations. It must still, however, be considered as being in its infancy, and therefore any addition to our knowledge of it cannot be deemed unimportant, the more especially as congenital and accidental luxations are frequently confounded."

Such, then, is the object of the work, the first chapter of which is occupied by the consideration of the diagnosis and pathology of fractures of the neck of the femur. In it the author enters very fully into the signs characterizing fracture, and the pathology of the symptoms, as they belong to the intra-capsular or extra-capsular variety. Concerning the difference of opinion which has existed, and still exists, among most surgeons as to the amount of shortening in the two varieties, and the consequent distrust of the symptom as a mark of distinction by others, Dr. Smith states that he feels "satisfied that the degree of the shortening of the limb may, with certain precautions, be considered as diagnostic of the seat of the fracture, and that it is greater when the lesion of the bone is external to, than when it is within, the capsular ligament—the retraction of the limb which immediately succeeds the receipt of the injury being that alluded to." In this opinion, which is ably, and, we believe, satisfactorily, supported by the author, he ranges himself with Dessault, Dupuytren, Stanley, &c., against Sir A. Cooper, Amesbury, Vidal, and others.

The chief causes opposing the retraction of the limb in intra-capsular fracture, are the cervical ligament, and the strong capsular ligament of the femur; and the degree to which shortening will proceed depends also on their degree of laceration, the direction of the fracture, and the relative position of the fragments. A consideration of the opposing forces renders the amount of shortening—two inches, as indicated by Sir A. Cooper—improbable, and it wants the confirmation of the experience of other surgeons:—

"But when the fracture is external to the capsule, and not impacted, there is but little to prevent the full force of muscular action upon the lower fragment of the bone, while, at the same time, the upper is depressed by the weight of the body; so that, from these two causes, a degree of shortening may be produced equal to, or even greater than, the entire length of the neck of the bone."

The case adduced by Sir Astley Cooper to support his opinion, that but a slight degree of shortening is present in extra-capsular fractures, is next examined; from which it appears that the influence resulting from the fracture having been impacted was overlooked, and that the necessary distinction between extra-capsular fractures, whether impacted or not, was not made by that distinguished surgeon. Another circumstance, in explanation of the difference of opinion between surgeons on this subject of shortening in extra-capsular and in intra-capsular fractures, Dr. Smith believes to be found in "a proper distinction not having been made between the shortening which occurs immediately after the occurrence of the fracture, and that which is noticed at a later period; for retraction may manifest itself, in a marked manner, instantaneously upon the receipt of the injury, or, in other cases, not till several days after it. Or, again, shortening may be little evident at first, but at the end of a few weeks become very perceptible; or many weeks may elapse, and then a decided and sudden retraction take place." Our limits prevent us following the author into an inquiry as to the reasons of these peculiarities named; we would therefore recommend reference to the book itself. The method of diagnosis between intra- and extra-capsular fracture, proposed by M. Rodet from the consideration of the direction of the force causing the lesion, will not hold when tested by experience, besides being open to error from want of knowledge, mistakes, &c.

After adverting to the fact that inversion of the foot may

occur, as an exception,—a rare one indeed, in intra-capsular fracture,—the author seeks for an explanation of this departure from the ordinary position—viz., eversion, in fractures of the neck of the femur. He concludes that inversion of the foot cannot be accounted for solely by reference to muscular action, but that it depends on the relative position of the broken ends of the bone; and, in every case he has examined, he states this to have been such, that the inferior was "placed in front of the superior fragment."

We cannot pursue the author further in his interesting and learned account of impacted extra-capsular fractures, of the anatomical characters of intra-capsular fractures, &c.; we will here only add, that he regards the long-mooted question as to the possibility of osseous union, in the case of fractures within the capsular ligament, as decided in the affirmative by the cases which have been put on record, of which, too, he adds a description. This first chapter on fractures of the neck of the femur, is also amply illustrated by cases which have fallen under the author's notice; and we may mention, that similar practical illustrations of his remarks are furnished to every other chapter. Another commendable feature of the work is the useful summary which is drawn up from what precedes, and placed at the end of each chapter, giving at one view the facts which are illustrated, and the results which have been arrived at.

The second chapter is occupied with an inquiry into the phenomena of chronic rheumatic arthritis, a disease producing symptoms very nearly resembling those of fracture of the neck of the thigh-bone, and which, therefore, have given rise to many mistakes.

Fractures of the forearm, in the vicinity of the wrist-joint, form the subject of the succeeding chapter, one which was introduced to the notice of the profession, by a communication, read at the last meeting of the Medico-Chirurgical Society, from Professor Fenger.

Then follow fractures in the vicinity of the shoulder-joint; then those of the clavicle; and after these have been well handled, we are brought to the consideration of dislocations of the bones of the foot; of congenital dislocations affecting various joints; and, lastly, dislocations of the lower jaw.

In perusing the chapters just named, the reader will gain much additional and valuable information, and a clearer insight into many particulars, which are omitted, or but lightly passed over, in other works.

We should have liked to have directed our reader's attention to many more points in the pathology of fractures and dislocations than we have done, points which would be of the greatest practical interest, and which are elaborately worked out, in the treatise under consideration. But as we are unable to do so, in the short space which can be devoted to reviews, in a periodical like THE LANCET, we must recommend each person to consult the work for himself, believing that he will find it a most valuable addition to his stock of surgical books, and a worthy accompaniment or supplement to the general treatise of Sir Astley Cooper, on Dislocations and Fractures.

We cannot conclude without speaking in praise of the perspicuous and flowing style in which the work is written, and in which it differs from very many of the books which now issue from the press. It is, moreover, amply illustrated by numerous engravings, and its typography does credit to Irish art.

## Foreign Department.

### ACADEMY OF MEDICINE.

*Ether in Difficult Parturition.*

ALTHOUGH, in the French capital, the inhalation of ether is not now, as a short time since it was, the all-absorbing theme, yet it still occupies a prominent place among the points brought under the notice of the learned academies, and among those published in the medical periodicals. As there is more difference of opinion respecting the utility and safety of the employment of ether in obstetrical than in ordinary medical practice, we subjoin an interesting case of its administration in parturition, read before the Royal Academy of Medicine. A lady, aged forty-three, who had had but one child, seventeen years previously, after a tedious and painful labour, was again taken in labour, which had gone on for fifty-four hours, when M. Chailly was called in. During that time, only one examination could be made on account of the excessive sensibility of the parts, and then the os uteri was found fully dilated, and the head at the brim of the pelvis. In the meantime, the contractions became so frequent and so energetic, that M. Poupon, who was in attendance, administered some laudanum.

The narcotic produced its effects so far as to put a stop to the morbid contractions; but the sensibility of the parts was raised to such a pitch, that the slightest touch caused the patient to scream with pain. The abdomen became, moreover, very tender; the pulse varying from 120 to 130; the tongue dry; much thirst; skin hot; and the poor woman could not forego moaning frequently. The uterus had fallen into a state of inactivity. When M. Chailly arrived, he had no idea of such exalted sensibility, until he attempted to make an examination, which, from the excessive pain excited, and the nervous movements, he found impossible. Still he knew, that to wait longer would be useless and injurious, and that, probably, with the spasmodic contraction of the parts and their exaggerated sensibility, there might be some obstacle to the progress of delivery, opposing the action of the strong and frequent contractions which had been present. It was then thought to be a case in which the inhalation of ether might be usefully and beneficially employed. Inhalation was accordingly practised at four P.M., and at the end of two minutes, the narcotism, which had lasted since the preceding night, went off, and in five minutes complete insensibility supervened. Then the patient could be touched without pain. The head was found engaged in the pelvic cavity, and a narrowing of the outlet was discovered, arising from a depression of the symphysis pubis. During these investigations, the patient was insensible; and taking advantage of this, the forceps were applied, the head disengaged, and the necessary turn having been given to it, the instrument was withdrawn, the expulsion being left to the natural pains, (the perinæum being relaxed,) which had reappeared since the operation was commenced. The child was soon born, slightly asphyxiated, but revived in a short time.

During the expulsion of the head, the woman aided the uterine contractions by her voluntary efforts, and gave vent to some cries. It was thought that she was not just then under the influence of the ether, although she affirmed, after the cries of her child had fully aroused her, that she neither felt nor had any recollection of anything that had passed.

The phenomena of this case are analogous to those which have been observed and reported by Baron Dubois:—the abdominal muscles acting with the uterine, although all the other voluntary muscles, like the former, were completely relaxed. Are we not to believe that this event occurs only during those moments when the woman is not wholly under the influence of the ether, and that the return of motion precedes that of sensation?

The patient recovered more rapidly than after her first accouchement, and the sensibility of the parts lasted but for three days.

### MEDICAL PERIODICALS—FRENCH.

*Ligature of the Subclavian.*

*L'Union Médicale* contains an account of the operation of tying the subclavian artery. It was the case of a gentleman who had accidentally been wounded near the axilla, by the button-shaped end of a foil. The wound was attended with copious hæmorrhage, which was attempted to be checked by compression, but which succeeded only imperfectly; and soon a tumour appeared in the axilla, with its base seated deeply, its apex corresponding to the cicatrix, and having the pulsating and expansive characters marking an aneurism. Externally, it was of the size of an egg, but its deeply-seated base was of much larger diameter; the skin over it was thinner than natural. After several consultations, it was determined to try galvano-puncture; but on the day on which this was to be put into execution, the tumour was found to have greatly increased in size, and to pulsate violently; further, a discharge of blood took place from the cicatrix, on removing the last portions of the bandage over it.

The galvano-puncture was postponed, and the ligature decided on, which M. Gensoul had all along advocated. Having previously performed the operation on the dead subject, both above and below the clavicle, M. Gensoul had assured himself, that by elevating the shoulder, and at the same time, moving it backwards, he could reach the subclavian artery beneath the clavicle, about half an inch from the insertion of the scalenus, i.e., at nearly the same point as is attained from above the clavicle; but, in the latter, the course of the case, after the operation, is not so satisfactory, on account of the difficulty there exists to the escape of the pus. Having decided on the steps of the operation, M. Gensoul made an incision through the skin, the arm being somewhat separated from the side, beginning at the clavicle, and extending to the axilla, to about the point where the fibres of the great pectoral, and those of the deltoid, come in apposition. As soon as this act was made, the swelling seemed to increase and to protrude itself; laying aside, therefore, his bistoury, director, and forceps, the operator determined to employ his forefinger to complete the operation, namely, by slowly displacing the muscular fibres, so as to reach the artery, and isolate it from the vein and nerves, which was effected in thirty-two minutes. In reaching the artery, M. Gensoul encountered a very large thoracic branch, which he pushed aside, in order to pass the ligature around the subclavian, above its origin. The ligature was a strong one, of silk, waxed; before completing the knot, it was made sure that no nervous filament was included in it, and that the pulsations of the artery beyond were suspended. The ligature was tied with a double knot; the pulsation in the tumour, the brachial and radial arteries, was stopped for the instant. The patient was then put to bed, every provision being made to maintain the warmth of the arm, and to favour the establishment of the collateral circulation.

The first eight days following the operation, the pulse ranged from 60 to 65; everything went on as well as could be wished; the skin was moist; the appetite good. On the tenth day, the patient was so imprudent as to make a very hearty meal, and on the visit in the evening, the pulse was found to be more frequent and hard, and had it not been that food was but very recently taken, M. Gensoul would have bled him. The next morning, the eleventh from the operation, hæmorrhage took place from the wound, but the blood was found not to be arterial, nor to escape by jerks, and it was concluded to come from the aneurismal sac, which had become filled by the collateral circulation. But without making certain of this opinion, pressure was made by the hand, with a sponge, on the artery against the first rib, to close the opening into the sac. The pressure of the hand was replaced and maintained by a pad, placed between the arm and the chest. Spare diet and total rest were enjoined; the pulse was soon reduced to 60; and the general health became excellent. On the twenty-first day after the operation, the tenth from the hæmorrhage, the bandages were removed; a copious discharge of pus showed itself; and the ligature was thrown off with it. The night following the separation of the ligature, a slight hæmorrhage occurred, when the compression was renewed: the bleeding was brought on by some violent movements of the arm, made during sleep, by the impression of a dream. Pressure was continued till the thirtieth day, after which, till the fortieth, it was employed only during the night.

It should be added, that on the twentieth day from the operation, a small opening presented itself beneath the axilla, and at first gave issue to some grumous blood; the opening evidently corresponded to that made by the blunted extremity of the foil, and passed into the aneurismal sac. On the twenty-fifth day dark pus replaced the grumous blood; on the thirtieth, pus and serum. The tumour lessened gradually; the quantity of pus also; and on the forty-third day ceased altogether. Now, sixty days from the application of the ligature, nothing but a hard knot can be felt, cicatrization being complete.

The wound made in the operation discharged healthy pus, and at the present time is almost entirely closed. The strength of the patient augments, and all his functions are healthy. The circulation goes on well in the arm operated on, and its warmth is kept up; it can be freely moved, and is rapidly gaining its strength.

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*Cancer of the Stomach and of the Peritonæum; with Intestinal Invagination.*

A tailor, aged fifty-two, had suffered from disordered digestion for one or two years. His appetite was irregular, digestion difficult, with occasional vomiting, and a constant sense of tightness and fulness across the stomach; emaciation, loss of strength, and slight jaundice; the epigastrium rather tumefied; a sensible thickening of the walls of the stomach, without any appreciable tumour.

On the morning of the 20th of April, the patient, after having drunk a cup of coffee with milk, was seized with colic, which rapidly increased in intensity; agitation ensued, with pallor of the countenance, pain in the right side of the belly, hiccough, and constipation. The next morning, there was observed on the right side of the belly, a little above the iliac fossa, a large soft swelling, yielding to the fingers. Vomiting was very soon succeeded by fæcal evacuations, liquid and offensive. For six days these symptoms increased in intensity; and even when they abated, death appeared ready to approach. On the 30th of April, the patient passed a tolerably copious stool, liquid, and of a yellow colour; floating in the midst of it was a portion of intestine, about one inch in length, and one-fifth of an inch in breadth. On the 2nd of May he again passed some portions of bowel; and three days subsequently, a complete cylinder of intestine, about two inches long, its tissue entire, and terminated at its two ends by an irregular and fringed border. From this period, the pains he suffered diminished in intensity, and the motions became more regular; nevertheless, they were constantly liquid, and still offered some morsels of bowel. On the 24th of May, there were some aggravation of his symptoms, which led to the belief that he would die; however, he revived again, and seemed to be convalescing. But the chronic affection of the stomach pursued its course, and he expired, in an extreme state of marasmus, in the course of the following month.

On a post-mortem examination, the peritonæum was found to contain about eight quarts of transparent serum; both its parietal and its visceral surface were studded with a great number of small tumours, rather flattened, about a third of an inch in diameter, and of a whitish colour. The ascending colon was fixed in the right iliac fossa by hard and dense areolar tissue, in which it was imbedded. It appeared as if it had perished, visibly diminished in volume, and had lost its natural figure. It was so compressed and constricted for an extent of about five inches, that a feather could hardly be passed through it. The intestinal walls were hard and thickened; the mucous membrane was irregular, fretted, and, as it were, shrivelled, without any trace of schirrous or cancerous tissue. The walls of the stomach were considerably thickened, the anterior wall being above an inch thick. Its tissue was lardaceous, and under the scalpel had a gristly feel; but the cardiac and pyloric orifices were free.

This interesting case offers three distinct stages: the first characterized by the symptoms of a schirrous affection of the stomach, dating its existence to two years; the second commencing with the appearance of symptoms manifesting an obstacle to the passage of fæcal matters through the bowels—continuing along with the excretion of portions of sphacelated intestine, and terminating in apparent convalescence, with the hope of which the patient for a time buoyed himself up; lastly, the third stage, marked by the advance of the schirrous disorganization of the stomach, and its extension to the peritonæum, lighting up inflammatory action in it, with consequent effusion. The case also shows how Nature brings about the discharge of invaginated intestine when dead. The case is moreover peculiar, inasmuch as the orifices of the stomach were free, for malignant disease more frequently and more severely manifests itself about them than about the parietes in general.

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*New mode of detecting the Adulteration of Starch.*

The extent to which the more expensive varieties of starch are adulterated by the more common is well known: to be able to detect such adulteration is therefore desirable. It is known that the microscope furnishes a means of detection, in most cases, at least, by reason of the different forms and size of starch granules of different plants, and also from the position of the hilum and the character of the striæ marking the surface. This is well illustrated in the work of Dr. Pereira. But the employment of the microscope for such a purpose is necessarily limited, few having the instrument at their command, and the observation necessary being tedious and minute. An easier method would therefore be advantageous, and such we have in the process recommended by M. Mayet, published in the *Journal de Pharmacie*, and quoted in other periodicals.

The agent he employs to distinguish between the several kinds of fecula, and to appreciate the proportions in which they exist when mixed, is caustic potash. The following is a summary of his experiments:—

It is known that the alkalies act on and dissolve starch with facility; but it has not been particularly noticed till the present time, that an alkaline solution, of a certain strength, has a different comparative action on each variety of starch. The solution M. Mayet has employed is composed of one part of lime to one-fourth its weight of potassa. He has used this alkaline compound, with the substance to be examined, in the subjoined proportions: water, 60; alkaline solution, 5; substance to examine, 5.

The following are the results obtained:—1. With potato starch: a very thick jelly, of an opaline transparency, solid at the end of half a minute. 2. With the starch of wheat: the mixture is not solid at the end of half an hour; but is, instead, milky, completely opaque, yet deposits no starch. 3. With arrowroot: the mixture is quite fluid, and the arrowroot is thrown down, although the mixture is repeatedly shaken; the supernatant liquid is quite transparent. 4. With the starch of haricot beans, (as the type of all other leguminosæ:) the mucilage is rather thick, of a greenish-yellow, and not transparent.

With these characters it is impossible to confound together the several varieties of fecula. M. Mayet has also applied them to discover the nature of several compounds of the different kinds of starch, and arrives at the following conclusions:—That the fecula of the potato may be distinguished from that of wheat, when the two are mixed in the proportion of one to ten; from that of arrowroot, when in the same proportion; and still more clearly when the proportion is as one to five.

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*"Journal de Toulouse."—A Substitute for the Vapour of Ether to annul Sensation during Operations.* By Dr. Dauriol.

At midsummer, when vegetation is at its height, solanum nigrum, hyoscyamus niger, cicuta minor, datura stramonium, lactuca virosa, are gathered, and a sponge is plunged in their juice freshly expressed. The sponge is then dried in the sun, the process of dipping and drying is repeated two or three times, and the sponge is then laid up in a dry place.

When the sponge is required for use, it is soaked for a short time in hot water; afterwards it is placed under the nose of the person to be operated upon, who is quickly plunged into sleep, more or less deep, according to the susceptibility of his nervous system. The operation may then be proceeded with without any fear that the patient has any sensation of pain. He is readily aroused from the stupor by a rag dipped in vinegar, and placed to his nose.

M. Dauriol records five cases in which he has successfully employed this means of bringing about insensibility during operations.

## British Medical Journals.

### ON THE ORIGIN AND PROGRESS OF DECAY IN THE TEETH.

A lecture on this subject, by M. Tomes, in the *Medical Gazette*, presents some observations which may be interesting to the general reader:

"He believes that the dentine from abnormal action loses its vitality, and with the loss of vitality the power of resisting chemical action, and that consequently the dead part is, under favouring circumstances, decomposed by the fluids of the mouth. Further, he conceives that the causes producing the abnormal action may have been applied locally to the tooth itself, or may have had a constitutional origin, and therefore have acted through the nerves or the circulating fluids.

"The physical changes which mark the progress of the disease are first observable on the periphery of the dentine, under the enamel, which latter is, over the affected spot, either itself slightly discoloured, or unusually opaque and white. The diseased dentine generally becomes changed in colour, and assumes a brown hue, more or less deep according to the rapidity with which the decay has advanced. The slower the process of decomposition the deeper will be the colour of the carious portion, and *vice versâ*. The decomposed condition advances gradually from the surface towards the centre of the tooth, invariably taking the course of the dental tubes; and as the various branches of these converge, in their passage inwards, to join the main tubes, which open on the surface of the pulp cavity, the diseased mass is consequently of conical form.

"After awhile, the surface of the dentine immediately under the enamel becomes softened by the loss of its earthy ingredients; the enamel itself, affected and no longer supported by the subjacent dentine, falls in, and a cavity is formed in the tooth, which increases in depth, following the course of the tubes, and at the same time extends laterally by the extension of the disease on the surface of the dentine, and from thence inwards. By a continuance of this destructive process an opening is formed into the pulp cavity, and eventually the whole of the crown of the tooth is destroyed. After the removal of the earthy constituents, the gelatine of the tooth is at first firm and elastic, like cartilage, but it soon softens by decomposition, becomes disintegrated, and is lost in the saliva: thus a cavity is formed in the tooth, which is occupied by the fluids of the mouth and small particles of food. The crown being destroyed, the disease is frequently arrested. The roots of the affected tooth having a higher degree of vitality than the more exposed crown are proof against the influence which lead to the destruction of the latter. You will meet with a few instances where the decay has been completely arrested after destroying only a portion of the crown. In these cases the surface of the so-formed cavity will be found of a dark-brown colour, but hard and highly polished, like the surface of eburnated bone."

### SUCCESSFUL EMPLOYMENT OF IODINE IN REMOVING SPARKS OF IRON FROM THE CORNEA.

"A small particle of steel struck the eye of a cutler while at work, and fixed itself in the thickness of the cornea, from which it was found impossible to remove it either by the forceps or needle. It soon excited inflammation of the cornea, and after eight days the eye was still red, painful, hot, and the patient complained of a pricking sensation on its being moved. The fragment of steel could be distinctly seen, still retaining its polish. As a strong magnet also failed to remove it, it was resolved to have recourse to a chemical solvent, but one which would not act deleteriously on the eye. A weak solution of iodine and iodide of potassium was therefore used as a collyrium, and its very first application sensibly deadened the lustre of the spark of steel. By its continued use the steel was rendered soluble, and was gradually removed, when the sight was restored. The treatment was therefore most successful, and seemed to be preferable to that formerly recommended—viz., the employment of a dilute acetic acid, which is apt to impair the vision."—*Ed. Medical and Surgical Journal, from Journal de Pharmacie.*

The suggestion is worthy of a trial, but seems to require confirmation by experience nearer home.

### ARMY MEDICAL STATISTICS.

The *British and Foreign Review* quotes the following observations in a review of "French Military Memoirs." They might afford some useful suggestions at the present moment, when the improved condition of the English soldier is so much an object of solicitude:—

"We know that the mortality of the army weighs particularly upon the young conscripts; that it is increased by the change of garrisons; that it is greater in some places, as in Paris, or in localities affected by epidemics, than in others; but medicine has scarcely contributed to these results; they almost all belong to the labours of the administrative department. And if we are asked what are the most common diseases, and in what proportion do they attack soldiers, according to their age, length of service, distribution, their former profession, and a thousand other circumstances, we can only give approximative data, which might very easily be rendered certain, if we collected observations of the diseases. What one man could not do, several, by their coöperation, might easily accomplish. Our profession does not admit of repose; and in the intervals of practice we ought to strive unceasingly to increase our knowledge, and to extend the sphere of our usefulness."

"In military medicine, especially," says M. Begin, "statistics ought, as regards the modes of recruiting, the race of men, their regimen, drill, clothing, dwellings, removal from one climate to another, to lead to precise results, which it would be impossible to procure with the same degree of certainty in any other way. Figures, as has been often remarked, are inflexible, and cannot speak falsely; but we must exert ourselves to collect them, and group them according to their analogies; we must require from them only legitimate conclusions, and must bear in mind that the greater the numbers the more surely will the errors arising from negligence, or individual accidents, be cancelled, and truth predominate in the general result."

THE LANCET.

LONDON, SATURDAY, MAY 22, 1847.

THE motion for the appointment of a SELECT COMMITTEE on the state of the medical profession was made in the House of Commons late on the night of Thursday last, the 13th inst., or rather, on the morning of Friday, for it was made after midnight. The motion was made in a tolerably full house, and was carried without opposition; it was drawn as follows:—

"That a Select Committee be appointed to inquire into the Registration of legally-qualified Practitioners in Medicine and Surgery; and into the state of the Laws and Charters relating to the practice of Medicine and Surgery in Great Britain and Ireland; and to report the Evidence, with their opinion thereon, to the House."

The conduct of the government on this subject is deserving of all praise; and the thanks and gratitude of the profession are especially due to Sir GEORGE GREY and Mr. MACAULAY. The last-named Minister has generously consented to serve on the Committee, where, from the liberality of his opinions and his profound ability, his services will prove invaluable.

The course of Medical Legislation is now advancing under the auspices of the Ministers of the Crown, in a manner which cannot fail to encourage and delight the legally-qualified practitioners of this country. The Evidence that will be taken before the Select Committee must bring matters to a crisis. It is there that the motives and interested objects of the selfish opponents of a just Bill can be effectually unmasked. No time can be lost, no labour ill-bestowed, which is devoted to the accomplishment of such an useful public duty. The Bill is an anti-quack measure, of a pungent character; and such it will be found by many odious impostors, should it be enacted into a law. We are delighted to observe that *The Provincial Medical and Surgical Journal* is in favour of the measure, as is also *The Dublin Medical Press;* and we doubt whether it will be opposed by any of the Universities or Colleges, except by the three licensing institutions in London. But in justice to the College of Physicians it ought to be stated, that the opposition of the governing body of that institution is founded on objections which have been urged in a moderate and respectful tone, and are therefore justly entitled to the consideration of the profession and of Parliament.

It will be seen by THE LANCET of this day, that the Faculty of Physicians and Surgeons of Glasgow has petitioned Parliament in favour of the measure; yet the Bill provides for uniformity of education, uniformity on the subjects of examination, uniformity in the amount of fees to be paid for letters-testimonial, and also in the conditions of Registration. The Scotch and Irish universities and colleges shrink not from such ordeals. The College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, pray that they may be subjected to equal laws. Yet the three licensing medical corporations of London quail and shrink from the conflict. The Council of the College of Surgeons have, indeed, just reason to dread the operation of a measure which shall prevent the intrusion of unqualified men into the ranks of the profession. It has just come to light, that only last year the Council of that Institution pretended to examine, and actually granted, the diploma of the College to an individual who had ceased to be a pastrycook only twelve months previously!

For the exposure of this transaction, the public are indebted to the exertions of the Somersetshire branch of the Provincial Medical and Surgical Association. Such is the manner in which the Council of the College of Surgeons of England enforce their own regulations for the education of the candidates who appear before them for examination! Such is the dark character of their own guilty conduct, that, having dismissed the culprit, they civilly request him to return his diploma; and with a degree of meanness without a parallel, they retain his money, correctly judging, probably, that they cannot add to the foulness of the coffers which they have so long used for their own private gain and advantage, to the incalculable injury of the profession. If the Medical Registration Bill had not encountered hostility from such a Council, no other proof would have been wanting to show that it must be a worthless measure.

We cannot refrain, on this occasion, from expressing a fervent hope that the system of petitioning Parliament will not be relaxed in consequence of the appointment of a Select Committee, but that it will be continued with the greatest assiduity and vigour until the great body of the profession shall succeed in obtaining for their protection a just legislative enactment—one that shall place them before the public as an honourable body of distinguished scientific men, and one that shall provide for the infliction of a summary punishment on all impostors who may dare to usurp their titles, or interfere with their just professional rights.

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THE more the principle of Registration is examined by the profession, the more valuable will it appear. But, plain and obvious as the matter seems, it requires some little attention to understand it fully, and to perceive all its important bearings. The vast majority of the profession are, undoubtedly, in its favour, not haltingly, nor with half opinions, but freely and energetically, and with a cordial unanimity, rarely if ever seen in medical politics. The few who array themselves against it are, indeed, an insignificant minority. And their arguments, also, are as remarkable as their numbers, whether we consider their paucity, their irrationality, or their want of moral force.

Its opponents hardly dare, indeed, to bring forward arguments, or the semblance of arguments, against the principle of registration, but they say the present Medical Bill is more than a Registration Bill, and they clamour for what they call a *simple* registration, a Bill which shall correctly register and enumerate the profession, and nothing more. Such a cry is mere clap-trap, a catchword, put forward with the hope of defeating any real measure for the registration of medical practitioners. These clamourers for a *simple* registration have in view a mere printed list of medical men, a bare catalogue, without any legal power whatever attached to it, such, for instance, as the lists of the Apothecaries' Society and the College of Surgeons would be, if they could be purged of the thousands of dead names which encumber them, and if any means could be devised for obtaining the correct addresses of all the living licentiates and members of the Hall and College. But of what use to

the profession would such a list be, or to the public, unless armed with legal powers; of what use, we ask, beyond a reference for correspondence, and for enterprising advertisers, who might wish to circularize the profession? It would be of no earthly use whatever, beyond such petty purposes as these. Simple indeed are all those supporters of a simple registration, whose simplicity is not outbalanced by their knavery!

What the profession needs is a real, legal, compulsory, and armed registration of all its members. One and the first requirement of such a registration is, that all educated professional men be placed together in one legal list, as legally-qualified medical practitioners. It is mere mockery and moonshine to register the profession, unless the fact of a man's name being on the register shall be taken as a legal guarantee of qualification, unless, in fact, it gives him a legal title to practise. This title need not over-ride any existing titles, but it must, if it be anything at all, be a real legal certificate of competency to practise. The other and the second requirement of an efficient and armed registration is, that some penalty should be provided against all unqualified and unregistered persons practising in any branch of medicine or surgery. Not a step can be taken in sound medical legislation unless this point be also included. To place educated medical men in a register, without conferring any power of enforcing a penalty against the unregistered, is to make the profession the jeer and laughing-stock of every quack and ignorant meddler in physic. It would be placing the profession in a pillory, for the gratification and insult of all the thousands of knaves who prey upon it, and batten upon the health and lives of the community.

Thus, then, *simple* registration is a folly—an absurd folly—and utterly useless to the profession. Medicine is sick at heart, and requires living defences, not a dry skeleton of names and addresses; she requires cordial tonics, and not rose-water or juleps. Medical registration is but a hollow phrase, unless it imply, as it ought, a legal right for all whom it embraces, and a penalty and punishment for all whom it rejects, but who may dare, notwithstanding, to practise in any department of medicine. Registration, Qualification, and Legal Prevention, are convertible terms; they must exist in combination, unless we are to fall back upon the present system of an average of one prosecution a year by the Society of Apothecaries, and no attempt whatever at restraining unqualified practice by any other body in the kingdom; and unless we are again to rest satisfied with the juggle which allows any knave to elude the law by assuming the title of physician or surgeon. Let any man be prosecuted by the Apothecaries' Society, and he can take refuge in the title of doctor or surgeon, and is quite safe if he but act with common cunning: in the present defenceless state of the profession, the titles M.D. and surgeon, which should be titles of honour, are a refuge and harbour to any ignorant or knavish quack who chooses to fly to them.

We think we have shown that *simple* registration, as it has been termed, is an absurd delusion and a snare, and that the profession can hope for no rest, no prosperity, until a real, efficient, and legal registration, armed, on the one side, by qualification for the educated, and, on the other, by penalty for the uneducated, is obtained from the legislature. Let every man examine the matter, think well upon it, and then decide according to the honest dictates of his udgment. The arguments in its favour are so strong and so convincing, that it only requires that the profession should study the subject to become unanimous in its support. To those who have already considered it, and to those convinced by the arguments in its favour, we would say, if you have not already petitioned, write your petition and send it forthwith. If you cannot petition for the whole Bill, petition for the principle of real legal registration; but beware of the emasculated registration which its authors have called the "simple." Every man whose convictions are in favour of the substantial registration of medical practitioners, and who does not write, sign, and forward a petition to Parliament in its favour, fails in his duty to himself, his duty to his profession, and his duty to society. The time is short—the boon is a great one—and not a day, not an hour, should be lost by those who have the energy and the will to perform the one duty before them—that of petitioning.

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The Council of the "National Institute" are pursuing their fate, proving, more openly and rapidly than we could have supposed possible, that they are only moved by the most selfish considerations, regardless alike of the honour, rights, and interests of the profession. The profession may go hang, so that the Council of the Institute but become the governing personages in a new College. Utopian dream! If there should be such a College, they would find themselves swept away as unfit to wield power or authority. Their past and present career is too plain for the profession to desire to trust them with the legal guidance and regulation of the general practitioners. This body, great, influential, and able, in spite of the malignant influences of Hall and College, would soon sink from their present position, if they could be given over hand and foot to the rule of the Hanover-square Council.

Look at the promises of these persons, and look at their performances. One professed object of the Institute was to oppose quackery. Have they moved a step in the matter, or thought of moving, except so far as to make the empty announcement of what they would do?—a mere flourish of trumpets for a circular or an advertisement when money was needed. They were to raise the status of the general practitioner by "a home," a library, a museum, and what not. Where is the performance, or sign of performance, of these things? Their great business has been to advertise for money, to receive the subscriptions of members cajoled by their swelling professions, and to pay for fresh begging advertisements, house-rent, and salaries. In this way have the subscriptions been drawn from the pockets of the general practitioners. Their part in the elevation of the profession has been limited to the distribution of coffee and cakes on one or two *soirée* nights, the delivery of got-up addresses by the President, the inveigling a few general practitioners from the country, and a childish exhibition of prints, pictures, autographs, and professional playthings, in the Hanover-square Concert-room.

And for all this, verily the Council have their reward. The members of the Institute are full of indignation at the way in which the Council has mendaciously opposed the separation of the profession from quacks and impostors by a system of registration. The Council know well, that an efficient registration once obtained, there would be no chance of getting the profession to listen to their silly schemes of

self-aggrandisement at the expense of the great body of general practitioners. Hence their fanatic opposition to the Registration Bill—an opposition which has at length opened the eyes of their members, and called forth that feeling of indignation expressed in the letters we published in our last, which we publish in the present number, and which we shall continue to publish.

"Quem Deus vult perdere prius dementat" is almost too old to be quoted; but the Council of the Institute is insane beyond all measure or calculation. They outrage the common sense of the profession in an unparalleled manner, in their recent advertisement. According to them, to obtain a system of registration "is highly objectionable, and would be "prejudicial to the public interests, and injurious to the "medical profession." These gentlemen, who professed such dislike to quackery, are aghast and horrified beyond measure at that clause of the Registration Bill which provides that the recognised authorities should have the power of expelling members who descend to the publication of obscene books and announcements. Every decent man in the profession is outraged by the want of power on the part of the governing bodies to stop such disgraceful practices, or to expel the offenders. The names of members of the Colleges may be seen in the most disgraceful advertisements; they may be proclaimed as proprietors of quack medicines, or may be met with even in the *cabinets d'aisance;* and yet, to give the authorities a power to prevent these things, is, in the distorted and interested vision of the Council of the Institute, to "confer an arbitrary power on the Colleges." We are ashamed to have to write such malicious and drivelling perversion of a plain and an obvious meaning in the Bill—a meaning and purpose of which an immense majority of the profession most cordially approve. Equally inane are the observations of the Council respecting the prevention of illegal practice. They complain of the abolition of the present checks on unlawful practice, as though any such efficient checks really existed at present; and they profess to be horror-stricken at any new and more simple mode of prevention than those which now incumber the statute-book. Let our readers peruse carefully the clause of the Medical Bill directed against irregular practice, and then take for what it is worth the following passage in the late advertisement of the Council of the Institute. They actually have the audacity to say of a Bill which provides for the *summary punishment of unqualified practitioners before magistrates,* "that it would give increased facilities for practising medicine to the chemists and druggists."

Never, in the worst time of the old irresponsible corporations, was a more audacious, drivelling, and false piece of twaddle than this advertisement, put into circulation. But we are glad it is exciting the proper feeling of disgust in the profession; and its authors, as we have said, are but fulfilling their doom.

We direct the special attention of our readers to the admirable petition of the Faculty of Physicians and Surgeons of Glasgow in favour of the Medical Bill. The Colleges of Scotland have come forward nobly in support of a measure which provides for equality of education, and which would force them to raise the curriculum of medical study. It is worth while to contrast this conduct with the illiberal bigotry of the Council of the National Institute, who have amiably laboured to frighten the English practitioner with bugaboo dreams of half-educated Scotch practitioners, emigrating in swarms to devour his substance after the passing of a Registration Bill. But the Council of the Institute may be answered, not only out of the mouths of others, but out of the sayings of their own. Last year the Council of this body, and their double at Apothecaries' Hall, objected to the Registration Bill, because it did not enforce equality of education. This year their infamous advertisement launches a tirade against the clause which provides for equal education, on the miserable plea that "it "would give the Secretary of State the most arbitrary power "over the profession:" their present humour seems indeed to be one of the most unbounded self-stultification. The profession may expect some rich disclosures before the parliamentary committee of inquiry just about to commence its labours.

In another page will be found an account of the first indictment for illegal practice by the Society of Apothecaries, and the result of the trial. It is the old story of the mountain in labour, followed by muscipular delivery. The Apothecaries Society consulted the law officers of the Crown; they obtained opinions decidedly in favour of their power to prosecute by indictment instead of civil action; they publicly advertised these opinions, and their resolute determination to act upon them; and then, after all this promise, parade, and preparation, and though the country swarms with quacks, at the end of six months they commence—and not till the example has been set them by a private individual—one solitary indictment, which is apparently compromised, or, at all events, conducted so feebly, that it falls without effect. And this is the way the Society, which professes to possess, *par excellence,* the power of defending the profession, performs its duty. From the mode in which the trial was conducted, we say, it is pretty evident that a compromise has been entered into, and that the penalty will not be enforced, provided Mr. Sweetnam presents himself within a given time at Apothecaries' Hall. The Hall people are very much given to temporising and compromising conduct. Even when they prosecute, they manage the matter in such a left-handed way, that the prosecution is detrimental to the interests of the profession. In the trial of the Coffinite quack at Bolton, there was no doubt about the ignorance and criminality of the accused party; the trial was pushed on with vigour, and the penalty strictly enforced. The proceeding was calculated to benefit the profession, to open the eyes of the public, and to act as a wholesome terror to quacks and quackery. But the official prosecution is weak and vapid to the last degree; in fact, it is no vindication whatever of the profession, and it must tend to confuse the public mind. There are the indictment and the verdict, it is true; but it is distinctly stated that there is no charge whatever of incompetency against the party prosecuted. Judge and counsel concur in a kind of complimentary by-play to the accused party, so that the public are led to suppose that legal and illegal, diplomatized or irregular practitioners, are all on a par as regards acquirements, and that such men as Mr. Sweetnam only offend in not being formal members or licentiates of the legal medical bodies. To the profession it looks as though the Apothecaries' Society were desirous of driving the trade in licences, and forcing illegal practitioners to purchase them, rather than of adequately defending the profession and the public, as it is their bounden

duty. The time is come when all illegal practice ought to be dealt with, when qualified men should be included by legal enactment within the pale of the profession, and when unqualified men should be rigorously excluded, and, if necessary, punished. But the Apothecaries' Society, if they wield the law against illegal practice at all, in the present state of the profession, should take care to direct it against undoubtedly ignorant and criminal quackery. Heaven knows, there are hordes of quacks unpunished, with whom they might fitly deal! Let them deal with the uneducated first, and then let them proceed to the half-educated, otherwise they excite the sympathies of the public *for* the prosecuted party, and *against* the legitimate members of the profession. It seems as though a fatuity lay about the authorities: if they remain torpid, the profession views them with contempt; if they make a move, it is done in such a crab-like, hesitating manner, that to give them respect, either for act or motive, is alike impossible. Cannot they try, for once, to do something acceptable, and test the new power of indictment against a good bevy of quacks of the obscene class, who, instead of deserving the compliments of counsel, may be publicly denounced as ignorant, vicious, and mischievous impostors?

## PUBLIC MEETING OF THE MEDICAL PRACTITIONERS OF LIVERPOOL.

A public meeting of the medical practitioners of Liverpool and its neighbourhood, called, by general advertisement, to take into consideration the propriety of petitioning Parliament in favour of Mr. Wakley's Medical Registration and Medical Law Amendment Bill, was held on the 18th inst., at the Medical Institution in that town. The meeting was very numerously attended. James Dawson, Esq., Fellow of the Royal College of Surgeons of England, consulting-surgeon of the Infirmary, in the chair.

The first resolution was proposed by Sir Arnold J. Knight, M.D., and seconded by Henry Stubbs, Esq., Fellow of the Royal College of Surgeons of England, and surgeon to the Northern Hospital:—

"That the present unsettled and unsatisfactory condition of the laws relating to the practice of medicine in Great Britain and Ireland imperatively demands the earnest consideration of the legislature."

The resolution was unanimously carried.

The second resolution was proposed by Samuel MacCulloch, Esq., M.R.C.S., consulting-surgeon to the Fever Hospital and Workhouse, and seconded by Thomas Inman, M.D., M.R.C.S. and L.S.A., late senior surgeon to the Fever Hospital and Workhouse, London:—

"That this Meeting regard with satisfaction the Bill which has been introduced into Parliament by Mr. Wakley, 'for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine.'"

The resolution was carried, with only three dissentients.

The third resolution was proposed by John Sutherland, M.D., senior physician to the Dispensaries, and seconded by Edward Parker, Esq., M.R.C.S. & L.S.A.:—

"That a petition embodying the foregoing resolutions be signed by the chairman on behalf of the meeting, and that it be forwarded to Lord Sandon for presentation in the House of Commons."

The resolution was unanimously carried.

The fourth resolution was proposed by Henry S. Taylor, Esq., member of the Royal College of Surgeons, and seconded by William M'Kee, L.R.C.S. Edin., and L.S.A.:—

"That it is the opinion of this Meeting, that the thanks of the medical profession are due to Thomas Wakley, Esq., M.P., for the zeal and energy he has displayed in the cause of medical reform; and that the secretary be requested to write to the honourable gentleman, tendering to him the thanks of the medical practitioners of Liverpool, and at the same time urging upon him not to relax in his efforts to obtain the passing of the Medical Registration Bill."

The resolution was unanimously carried.

## SELECTIONS FROM THE PETITIONS

IN FAVOUR OF THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL, AND AGAINST THE CONDUCT OF THE CORPORATIONS IN OPPOSING THE MEASURE.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition* of Frederick Smith Garlick, residing at No. 5, Cheapside, Halifax, member of the Royal College of Surgeons of England, showeth,—

That your petitioner views with interest the proceedings of your honourable House in relation to the Bill for the Registration of the legally-qualified Practitioners, and for Amending the law relating to the Practice of Medicine in Great Britain and Ireland, and your petitioner most earnestly and fervently prays that the said Bill may, without delay, be enacted into a law. Your petitioner deeply regrets that this Bill should have encountered the opposition of the presidents and councils of the London Medical Corporations, though, at the same time, he is aware that these bodies have ever shown an unwillingness to ameliorate, or in any way to improve, the condition of their suffering brethren, and, being irresponsible, have ever turned a deaf ear to their suppliant voice. Your petitioner, therefore, earnestly intreats your honourable House to render the profession to which he has the honour to belong that aid which is altogether withheld by the Corporations before mentioned, and to grant the appointment of a Select Committee to investigate the subjects of "Medical Registration and the state of the law relating to the Practice of Medicine and Surgery" in this country.

And your petitioner, as in duty bound, will ever pray.

Frederick Smith Garlick.

* This is the second petition from Mr. Garlick; and so active is this gentleman in the cause, that even this, his second petition, was written before the motion for the Select Committee was carried in the House of Commons on the night of Thursday, the 13th inst.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Michael K. O'Shea, Member of the Royal College of Surgeons of England, and member of the National Institute of Medicine, Surgery, and Midwifery, residing at 17, Mount-street, Lambeth, showeth,—

That the interests of the great body of members of the College of Surgeons are not truly represented by the Council of said College. That the said Council (an irresponsible few) have monopolized to themselves any advantage to be derived from being attached to the Institution. That they have not only neglected to protect their members, but by not enforcing the by-laws of said College have done a positive injury to the usefulness of the profession, the advance of science, and the public health. That under the existing disorder of affairs, the diploma of the College is in numerous instances a mere cloak for the practice of obscenity, fraud, and quackery, thus giving encouragement to immorality, spreading disease, and causing death. That from certain documents lately issued by said Council, they admit a knowledge of these awful consequences of their neglect. That with such proofs of their total abandonment of the profession, their opposition to the Registration measure, now before your honourable House, cannot be viewed other than as adverse to the interests of the members of the College. That the more ignorant and degraded the body of the profession may be, the greater the pecuniary advantages arising to the Council. That these allegations apply to all the corporations which have petitioned against the Registration Bill. And your petitioner therefore prays your honourable House to interfere and not permit such opposition to stop the progress of a Bill well calculated to remove such evils.

And your petitioner, as in duty bound, will ever pray.

Michael Keating O'Shea.

*To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.*

The humble petition of Robert Allen Kidley, of the city of Hereford, surgeon, showeth—

That your petitioner views with interest the proceedings of your honourable House in relation to the "Bill for the Registration of qualified Medical Practitioners, and for Amending the law relating to the Practice of Medicine in Great Britain and Ireland;" and is decidedly of opinion that the passing of the said Bill would prove of great advantage to the medical profession, and still more so to the public, as neither the Medical Corporations of London nor the other British Colleges possess adequate power, nor take steps to attain it, for the protection of their members, so that the rights of their members and the health of the public are alike sacrificed to the nefarious practices of multitudes of pretenders to the healing art. Your petitioner therefore, in common with a very large number of the profession, is greatly astonished to hear that some of the British Colleges have even petitioned against the Bill. Your petitioner confidently looks to your honourable House for protection, and fervently hopes that a Select Committee may be appointed to investigate the subjects of Medical Registration and the state of the law relating to the Practice of Medicine and Surgery in this country.

And your petitioner, as in duty bound, will ever pray.

ROBERT ALLEN KIDLEY.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Richard Savage Penkivil, residing at Sampford Peverel, Tiverton, Member of the Royal College of Surgeons of England, showeth,—

That your petitioner views with great regret the opposing course taken by the governing corporations to the Medical Registration Bill and Medical Law Amendment Bill, now before your honourable House. That it is the opinion of your humble petitioner that the said Colleges &c. are endeavouring to hold to themselves, as heretofore, an usurping and monopolizing power for their own selfish and exclusive interests, without regarding the best interests of the profession or public. That the above corporations are seeking to perpetuate a corrupt system of management, which recent events have made so manifest. That your petitioner considers the provisions of the Medical Registration Bill so just and equitable, securing to all members of the profession equal rights and privileges, that your petitioner fervently hopes the said Bill will without delay be passed into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

RICHARD S. PENKIVIL.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Alexander M'Gregor, residing at South Hetton, Durham, Member of the Royal College of Surgeons of Edinburgh, showeth,—

That your petitioner views with interest the proceedings of your honourable House, in relation to the Bill "for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," and your petitioner most earnestly and fervently prays that the said Bill may without delay be enacted into a law. Your petitioner had been a member of the National Institute of Medicine and Surgery up to the day of the declaration of the *Council* of the Institute, to oppose the Medical Bill, by which act the said Council have betrayed the trust committed to their care, and your petitioner (in common with numerous other members of the Institute) has caused his name to be removed from the list of that body.

And your petitioner, as in duty bound, will ever pray.

ALEXANDER M'GREGOR.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of William Edward Coyte Bishop, Licentiate of the Society of Apothecaries, London, and *late* Member of the National Institute of Medicine and Surgery, showeth,—

That your petitioner is decidedly of opinion that the enactment of the Medical Registration and Medical Law Amendment Bill, now before your honourable House, would prove of much advantage to the members of the medical profession, and of still greater benefit to the public; and your petitioner therefore anxiously hopes that the said Bill may be passed into a law in this present session of Parliament.

Your petitioner begs leave to state, that the Council of the "National Institute of Medicine and Surgery," by their opposition to the main principles of this Bill, have grossly deceived their constituents, and that your petitioner, together with five other members of the Institute, in this neighbourhood, have caused their names to be erased from the list of that institution.

And your petitioner, as in duty bound, will ever pray,

WILLIAM EDWARD COYTE BISHOP, Easington, Durham.

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## PETITION OF THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.*

The petition of the Faculty of Physicians and Surgeons of Glasgow, humbly showeth,—

That your petitioners have observed with much satisfaction that a Bill is now before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland."

They have carefully considered the provisions of the said Bill, and are of opinion, that it is calculated to prove of advantage to the medical profession, by securing a uniform system of education for students in medicine, and by protecting the regularly educated medical man in the discharge of his professional duties.

Moreover, they believe that it would be of great general utility, by shielding the public from the pretensions of unqualified persons.

Your petitioners therefore earnestly hope that your honourable House will pass the said Bill into a law.

And your petitioners will ever pray.

Signed in name and by appointment of the Faculty, and sealed with the Corporation Seal thereof, by authority of a Meeting held the tenth day of May, 1847.

GEORGE WATSON, President.

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## PETITION FROM STUDENTS OF MEDICINE IN FAVOUR OF THE MEDICAL BILL.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned, being students for the medical profession, residing in the city of Bath and its immediate vicinity, showeth,—

That in a Bill before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," provision is made for the registration of qualified medical practitioners, and also for securing an uniform system of education for students in medicine, and for the examination of candidates for diplomas and licences to practice medicine throughout Great Britain and Ireland; and that, believing such provisions to be highly just, and fully expedient on public grounds, in preventing, to a very great extent, the practice of quackery, which is so injurious to the profession at large; and deeming, also, that the repeal of that part of the Act 55th George III., cap. 194, which enacts that "no person shall be admitted to any examination for any certificate to practise as an apothecary, unless he shall have served an apprenticeship of not less than five years to an apothecary," would be highly beneficial to the interests of the profession, your petitioners sincerely and anxiously hope that the said Bill may be passed into a law during the present session of Parliament, and as speedily as the forms of your honourable House may permit.

And your petitioners, as in duty bound, will ever pray.

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| J. K. SPENDER. | G. D. FREEMAN. | J. H. CRISP. |
| G. BARNARD. | H. DESPLAN. | H. LAWRENCE. |
| H. BENGOUGH. | R. B. PEARSE. | S. LANG. |
| E. MAISH. | J. SMITH. | |

## CENTRAL CRIMINAL COURT, Thursday, May 13th.

(*Before Mr. Baron* Alderson.)

Michael Sweetnam was indicted for a misdemeanor, in having unlawfully practised as an apothecary, without having undergone the required examination, and obtained a licence from the Apothecaries' Company.

Mr. Clarkson appeared for the prosecution, and Mr. Ballantine and Mr. Huddlestone for the defence.

The defendant, who surrendered, pleaded guilty to the indictment.

Mr. Ballantine said that he felt he had no answer to make to the charge, on the part of the defendant, and he could only inform the Court that there was no imputation upon his moral conduct, or of unskilfulness; but still he had no doubt infringed the law, and the Apothecaries' Company were perfectly justified in adopting the present prosecution. With these remarks, he must leave the defendant in the hands of the Court.

Mr. Baron Alderson said, he believed this was the first prosecution of the kind.

Mr. Clarkson said it was; but he thought it right that it should be publicly known, that it was the intention of the Apothecaries' Company to prosecute in future in every case; as they were determined to put an end to the system of unauthorized and unqualified persons acting as apothecaries, as such a proceeding was calculated to do great injury to the public.

Mr. Baron Alderson said the offence, no doubt, amounted to a misdemeanor, but, as this was the first prosecution of the kind, the justice of the case would probably be met by the defendant entering into recognizances to appear and receive judgment if he should be required to do so; and if he refrained from carrying on his calling, or obtained a legal license to enable him to do so, he would probably hear no more of the matter.

Mr. Ballantine said, that the defendant was anxious he should state that he had pursued a regular course of study for the profession in which he had been engaged, and he would have taken out a licence, but that circumstances had prevented him from doing so. He would now, however, immediately take the necessary steps to pass the required examination, and obtain a licence.

The Court then ordered the defendant to enter into his own recognizance in £100, and find two sureties of £50 each, to appear and receive the judgment of the Court, if he should be required to do so.

# Operations Without Pain.

## ST. GEORGE'S HOSPITAL.

On April 29th, Mr. Cutler amputated the thigh of a young woman aged nineteen, and somewhat hysterical, for diseased knee-joint. An artificial atmosphere, consisting of one part oxygen to three of air, was passed by Dr. Snow over the ether in the inhaler, which was kept at a temperature of about 67°, the intention being to supply the amount of oxygen displaced by the vapour. Before she had inhaled a minute, she was excited, and sobbed in an hysterical manner, and began to throw her arms about. The process was discontinued a minute and three-quarters from its commencement, and in a minute or two she was persuaded to open her mouth and begin to inhale again without the oxygen; she became insensible in three minutes, with less excitement than before, and her limb was removed without pain.

On the same day, Mr. Tatum amputated the thigh of a girl aged fifteen; the ether was quite successful in preventing the pain.

On May 6th, Mr. Keate amputated the thigh of a man aged twenty-six, for disease of the knee-joint, and Dr. Snow administered the ether, using Mr. Sibson's face-piece, mentioned above, which answered very well. The operation began when he had inhaled four minutes and a half; it caused no pain, and the breathing being stertorous, the ether was left off, and in a minute or two it became natural; the face-piece was applied again for two or three minutes, with the vapour more diluted, and was again left off. He recovered his faculties completely before all the arteries were tied; but as he was beginning to complain of pain, he had the ether a third time, with the instant effect of rendering him again insensible.

These three cases, as well as the seven reported from this hospital last week, are going on well.

## UNIVERSITY COLLEGE HOSPITAL.

May 3.—Two operations were performed by Mr. Liston, and the vapour of ether was administered by Dr. Snow. The first was the operation of lithotomy on a man who had come from Port Philip to be relieved of the stone. The operation was commenced four minutes and a half after he began to inhale, and did not cause the least sign of pain. The stone, which was round, rough, and apparently of the mulberry variety, and about an inch in diameter, was soon extracted, and it was necessary to tie an artery, a circumstance which Mr. Liston said afterwards he did not remember to have occurred to him for the last twenty years. The patient inhaled during part of the operation the vapour more diluted with air than it had been before; he was rather excited for a minute or two during his recovery after the operation, but was soon quite collected. Fifteen drachms of ether were used in this case, and Dr. Snow had a fresh mouthpiece to his apparatus, which he said was invented by Mr. Sibson, of the Nottingham General Hospital. It was made of metal and covered with silk, in the form of a partial mask, and admitted of respiration both by the mouth and nostrils, the border of it contained pliable sheet lead, which could be moulded to the peculiarities of the features, and retained the form given to it.

The next operation was for the removal of a large encysted tumour of the scalp in a woman aged 72. The tumour was in a sloughy state. The operation began when she had inhaled for five minutes, and caused no sign of pain; the patient quietly regained her consciousness in a few minutes. She inhaled an ounce of ether.

Mr. Liston said that he had at one time doubts about the utility of the ether, but he had lately performed several operations in private, in which the ether had been given by Dr. Snow with perfect success, and he was inclined to modify his opinion. Dr. Snow managed the ether better than he had previously seen it given.

# Correspondence.

### FATAL CASE OF FLOODING, IN WHICH THE PLACENTA WAS TAKEN AWAY BEFORE THE CHILD.

*To the Editor of* The Lancet.

It has been my impression, for some time past, that fatal results must have repeatedly followed the extraction of the placenta before the child, but that such results were criminally concealed from the profession, It has for some months been my confident expectation that a Coroner's inquest would be the means by which the truth would be divulged. This, however, has not been required to confirm my suspicion, for a practitioner of candour and veracity, who hastily, and without reflection, had adopted the lately promulgated unsound views respecting the treatment of unavoidable uterine hæmorrhage, has met with a case that terminated fatally, and in which there was every reason to believe that the result would have been widely different had the established rules of practice not been abandoned or violated in the case.

The patient—in an advanced state of pregnancy, I am informed—was seized with flooding, which went on several days. The os uteri was in a state to allow the hand to be introduced, and the operation of turning readily performed, but the accoucheur thought it a favourable case for peeling off the after-birth, which he did with his hand passed through the os uteri, and without any great difficulty. No hæmorrhage followed; and she thought all was going on well, when the nurse requested him to observe how the patient stared. He immediately passed up his hand into the uterus and brought down the feet, but the patient was dead before the head of the child could be extracted. The case occurred near Lisson-grove, about ten days ago, and a Coroner's inquest was not held; but if the above statement be incorrect, the practitioner interested will have no difficulty in recognising the case, and will, I trust, deem it to be equally due to himself and the profession to publish an authentic account of its details.—I am, Sir, &c.

May, 1847. Auditor.

### THE AGE OF MANUALS.

*To the Editor of* The Lancet.

Sir,—I do not know whether your correspondent who signs himself "A Friend to the Medical Pupil" is an enemy in disguise, but I am sure he is no "friend" in reality. He places himself in a very dubious position who undertakes to defend super-

ficial attainments. The medical pupil and the medical profession will scarcely be raised, the former in public estimation, the latter in social rank, by following the Manual system of education advocated by this "friend," whom I willingly leave to his vulgarity and folly, whilst I again appeal to those who have the power, and urge them to select such works on which to examine our students as are worthy of our profession; such works as those of Harvey and of Bell; such works as those of Müller and of Louis.

I certainly think that all our students ought to know the Latin and the French languages well, however they may be enamoured of their "native tongue," and I would examine them in Celsus and some French medical classic. I think, too, that they should know enough of Greek to understand the etymology of the terms which they will have to pronounce every day of their lives: and I will add my conviction, that if they do so, they will take a higher standing in society, and occupy a better position amongst the gentry and clergy of the county in which it may be their lot to practise, than if they be ignorant and illiterate. They will then, also, insure their individual success, and raise and grace their profession.

Let our students themselves weigh this well, and consider whether any advantage can accrue from the superficial knowledge conveyed by the writers of Manuals. Let them well weigh the style of their "friend," the admirer of these writings. Let them ask themselves whether that style be dignified or gentlemanly. "A Looker-On" gravely and seriously, and conscientiously, means what he says. Can this be imagined of the "friend"? I leave this question to all whom it may concern.

I, at least, should like to see our students something like those of Oxford and Cambridge, taking, on entering upon practice, the rank of scholars and gentlemen. They ought to be, in natural and medical sciences, what the clergy are in the classics. But in order to compass this, they must do as the clergy do, read the classics of the profession. Was any clergyman ever content with reading a Delectus or Analecta?

I am glad to find that my former note has excited some attention, and I will still hope to see our present trumpery medical books replaced by our medical classics, and encouragement given to original observers and authors.

The information contained in the letter of Justitia is indeed most melancholy.—I am, Sir, your obedient servant,

London, May, 1847. A Looker-On.

## DISCOVERY OF THE APPLICATION OF ETHER TO SURGICAL OPERATIONS.

*To the Editor of* The Lancet.

Sir,—As your remarks, under the head of "Correspondence," in "The Lancet" of May 8th, are calculated to do great injury to the interests and rights of Dr. Morton and Dr. Jackson, will you do me the favour to publish the following brief reply:—

"The real question seems to be—Did Mr. Horace Wells perform any operation upon a patient under the influence of sulphuric ether prior to Dr. Morton? This has yet to be answered?"

This question must be answered by Mr. Wells, and Mr. Wells must, when he answers, prove, not merely an operation, but a successful operation, before he can advance any claim to meritorious discovery; and if successful, he must satisfactorily account for his not making the important discovery public. Moreover, before he can interfere in the slightest degree with the merit of Dr. Morton and Dr. Jackson, who did make public the powers of ether, he must show that they were indebted to him for the suggestion. This Mr. Wells does not pretend, and they expressly deny; so that whatever may have been Mr. Wells's private experiments, Dr. Morton and Dr. Jackson must continue to be considered original discoverers, until some evidence is produced to the contrary.

"That the entire subject of preventing pain in surgical operations had been occupying Mr. Horace Wells's mind, and that he had lectured publicly in Boston on the subject, is pretty well proved."

It had occupied Mr. Wells's mind, (so also it had occupied Dr. Collyer's mind.) This is admitted by Dr. Morton and Dr. Jackson; but they deny that the fact of the subject having occupied Mr. Wells's mind, and of his having lectured upon it, entitle Mr. Wells to the merit of discoveries made by them. There may be merit in seeking, but the reward is to him who finds. Mr. Wells sought the means of preventing pain in surgical operations—Dr. Morton and Dr. Jackson found them. Mr. Wells imagined, and still imagines, nitrous oxide gas to furnish the means—Dr. Morton and Dr. Jackson make no claim to the discovery of any such powers in nitrous oxide gas, and desire that the honour of it should be shared by Mr. Wells and Sir Humphry Davy.

"That in the account of their proceedings, Dr. Jackson and Dr. Morton should have made no mention of Mr. Wells is most extraordinary, and must tend to create a powerful prejudice against both the names of Dr. Jackson and Dr. Morton."

It was entirely unnecessary for Dr. Morton and Dr. Jackson to make mention of Mr. Wells; for it must be remembered that Mr. Wells tried his experiments with nitrous oxide gas, and publicly lectured upon it in Boston, the place of residence of Dr. Morton and Dr. Jackson; and that, consequently, all the processes, proceedings, and opinions of Mr. Wells upon the subject were as well known to the whole medical profession of Boston as they were to Dr. Morton and Dr. Jackson themselves. It would have been extraordinary if they had made mention of Mr. Wells, agreeing as they did with the universal opinion in Boston, that Mr. Wells's ideas upon the subject were useless and impracticable.

So soon as Dr. Morton had ascertained and perfected the process of employing the vapour of ether to prevent pain in surgical operations, he wrote to Mr. Wells upon the subject; and I here subjoin a copy of Mr. Wells's reply:—

Dr. Morton: "Hartford, (Conn.,) Oct. 20th, 1846.

"Dear Sir,—Your letter, dated yesterday, is just received, and I hasten to answer it, for fear you will adopt a method, in disposing of your rights, which will defeat your object. Before you make any arrangements whatever, I wish to see you. I think I will be in Boston the first of next week—probably Monday night. If the operation of administering the gas is not attended with too much trouble, and will produce the effect you state, it will, undoubtedly, be a fortune to you, provided it is rightly managed.—Yours, in haste,

"H. Wells."

The admissions of this letter, taken in connexion with what has heretofore been published in The Lancet of March 13th, are conclusive and fatal to the pretensions of Mr. Horace Wells.—I am, Sir, your obedient servant,

Duke-street, St. James's, May, 1847. James A. Dorr.

## THE MEDICAL REGISTRATION BILL.

Dear Sir,—The profession ought to thank you as one man for your "Medical Bill."

This day I forward two petitions to the House of Commons, for presentation at your earliest convenience. I had intended to send them to the Hon. H. Liddell, M.P. for Durham county, but thought better of it, because we were both members of the "National Institute," and think with you, that the "Council" has betrayed its trust, and that its advertisement is a mass of "misrepresentation and falsehood." I have this day written to Geo. Ross, Esq., Secretary, to erase my name from the list of members of the National Institute, as also the names of Alex. Macgregor, M.R.C.S. Edin., and Mr. Muller, M.D. and M.R.C.S. Edin.; and I have promised Mr. Ross to send him three other secessions in a few days, and have told him that all these gentlemen joined the Institute, and paid their money, in consequence of my representations as to the object of the Association; but as the Council has changed its tactics without consulting its constituents, I have only to beg my friends' pardon for wheedling them into a claptrap association, the object of which it appears I have misunderstood.—I am, Sir, together with my other friends, "late members of the National Institute," yours, very much obliged,

Durham, May, 1847. Wm. Bishop.

P.S.—You are at liberty to make any use you please of this communication.

## MEDICAL REGISTRATION BILL.

PETITIONS IN FAVOUR.

Owing to an error of the printer, the petitions from the following gentlemen were enumerated in the last Lancet, as *against* instead of *in favour* of the Bill:—

James Espier, Falkirk, Stirlingshire; William Favell, 105, Norfolk-street, Sheffield; Thomas Wood Foster, Ecclesfield, near Sheffield; Robert Roper, 85, WestBar, Sheffield; James Walker, 16, Union-street, Sheffield; Henry Thomas, 79, Norfolk-street, Sheffield; Arthur Gaved, St. Mabyn, Cornwall; John Deakin, Howard-street, Sheffield; E. D. L. Gillott, 264, Glossop-road, Sheffield.

# House of Commons,

TUESDAY, MAY 14, 1847.

## REGISTRATION OF MEDICAL PRACTITIONERS.

Mr. WAKLEY rose to move that the subjects of the registration of legally-qualified practitioners in medicine, and the state of the laws relating to the practice of medicine in Great Britain and Ireland, be referred for consideration to a select committee, who should report the evidence, with their opinions thereon, to the House. At that late hour of the night he would not detain the House by entering into the subject, beyond stating that the qualified members of the profession were desirous that a law should be passed which might enable them to be distinguished from quacks and impostors. There were at present so many laws in existence with reference to the profession, and so many powers were exercised by the various colleges, that it was most desirable that a law should be enacted for the purpose of registering duly qualified medical practitioners; but the subject was involved in so many difficulties that it had not been found possible to lay down any rule or plan which should govern the House with reference to such enactment. It had, however, been suggested, and he believed the suggestion met with the concurrence of her Majesty's ministers, that the governing bodies connected with the profession should be brought together before a committee of that House, that they should have an opportunity of expressing their views, and of stating their objections to the plan of registration which had been proposed; and it was exceedingly desirable, both for the profession and for the public, that some measure founded upon the information obtained by the committee should be adopted. He believed that the inquiry would occupy but a short time, for the corporations and the medical practitioners generally had already formed their opinions on the subject; they would merely have to state those opinions before the committee; and he hoped that, as the result of the opinions thus expressed, some well-devised measure might be adopted which would be satisfactory alike to the profession and to the public. (Hear, hear.)

Sir G. GREY observed, that although he did not think the objections which had been urged against many parts of the Bill of the hon. member for Finsbury ought to prevail, he was convinced that if that measure had been pressed now, any chance of satisfactory legislation on the subject during the present session would have been hopeless. He considered that the hon. gentleman was taking the more judicious course in asking for the appointment of a committee, before whom the various conflicting opinions which existed on this question might be expressed; and he (Sir G. Grey) believed that such an inquiry would tend to lead to satisfactory results. He was willing to accede to the motion, on the understanding that the hon. member for Finsbury would not proceed with his Bill until after the committee had made a report.

Mr. WAKLEY stated, that he had postponed the second reading of his Bill until Monday fortnight. He did not expect that the committee would bring their inquiry to a close by that period, but he trusted that by industrious application they would conclude their labours in sufficient time to enable him to proceed with his Bill during the present session of Parliament.

Mr. SPOONER might mention that he had to-day received a petition, signed by most of the respectable medical practitioners of Birmingham, expressing a hope that there would be no delay in proceeding with the Bill.

The motion was then agreed to.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions received for Presentation by Mr. Wakley, M.P.:—*

Faculty of Physicians and Surgeons of Glasgow; James Stevens, Great Queen-street, Lincoln's Inn-fields; Frederick Cheesman, St. Thomas-street, Borough; Thomas Harrison, Broad-street, Halifax; William Long, Hartington; Henry James Paine, Cardiff; M. K. O'Shea, Mount-street, Lambeth; S. T. Smyth, Gorleston, Suffolk; W. S. Gill, W. G. Gill, Pentonville; R. S. Myers, Wooton Wawen, Warwickshire; R. S. Penkivil, Sampford Peverel, Devon; Medical Students of Bath, (eleven signatures;) William Pearse, St. Tudye, Cornwall; F. H. Shute, M.D., Wellington-road, St. John's-wood; Medical Practitioners of Pilkington, Lancashire, (two signatures;) Daniel de la Cherois Gourley, Madeley, Salop; J. W. Field, Wilderness-row, Goswell-street; Mungo Park, Oldstreet, St. Luke's; P. L. Burchell, Kingsland-road, Shoreditch; R. Haines, M.B., North-buildings, Finsbury-circus; Henry Shaw, Bishopsgate-Without; David Thomas, Shoreditch; William Ashcombe, Gracechurch-street; John Felix Johnson, Doughty-street; John Shoa, Great Charlotte-street, Blackfriars-road; Christopher Adcock, Chalcraft-terrace, Lambeth; Thomas Carey, St. George's Hospital; George Wood, Bridge-street, Southwark; Richard Prior, Marlborough-place, Walworth; J. G. K. Burt, Lacey-terrace, Walworth; R. M. Williams; Francis George Moore, York-row, Kennington; Thomas Buck; H. S. Searle, Queen's-row, Kennington; J. H. Baylis, Charles-place, Kennington; J. Russell, St. Alban's-terrace, Lambeth; William Wood, Bridge-street, Southwark; J. W. Curtis, Pavement, Finsbury; G. L. Shine, Aldersgate-street; W. Williams, Kingsland-lane; Edmund Dale, M.D., Holborn-hill; W. Edwards, London-road; R. D. Walker, Wellington-street North, Strand; W. Vesalius Pettigrew, Chester-street, Grosvenor-place; Richard Staning, Burton-street, Eaton-square; M. Teevan, Chesham-street, Belgrave-square; James Harding, Kingsland-road; W. Johnston, Bramby, near Leeds; Alexander M'Gregor, South Hetton, Durham; W. E. Coyte Bishop, Easington, Durham; Jonathan Haigh Branfort, M.D., Brentwood; — Lewis, Goudhurst, Kent; Edward Parker, Kirkdale, Lancashire; Thomas Chalmers, Everton, Lancashire; Thomas Chalmers, jun., Everton; Jonathan Greenwood, Kirkdale; Mr. Lionel W. Moore, Debenham, Suffolk; James St. John Gage Parsons, Bristol; Burton G. Haygarth, M.D.; Robert Acton Ramsay, M.D., Fleetwood; Fife Fowler, M.B., Aboyne, Aberdeenshire.—The above petitions were presented on Thursday, May 20th.

*Petitions presented by other Members of Parliament.*

May 13th.—John George Sebire; Adam Bell; Alfred Smith; William Braithwaite; W. H. Gardner; John Greeves; Richard Dalby Pawson; Obadiah Brooke, jun.; Fitzwilliam Horton; Daniel T. Roy; Thomas Lewen Marsden; John Allanson; George Pyemont Smith; Samuel Heald; James Ward; James Close; William Petty Ruddock; Ralph Parsons Beardshaw; Henry Chorley; William Hay; John Septimus Alderson; William Edwards; Thomas Land; George Edmundson Bearpark; Thomas Bridgin Teale; Charles Chadwick; Edwin Forster; Evan Evans; John Broadbent; Joseph Prince Garlick; George Reynolds Scolfield; William Stead Taylor; Samuel Staniland; Robert Craven; Charles Wilson Scholefield; Robert Askwith; Samuel Smith; William Reader Cass; Joseph Teale; William Clayton; Samuel Radcliffe.

May 14th.—Charles Mott; Richard Wilding; Birmingham; Tamworth; George Henderson; Edinburgh; W. Chalmers; Frederick F. Rose; James Gregory; Edward James Shearman; Robert Boyd; Edward Berney; W. Sutherland; John Nicholson; Charles Leshmar; William H. Booth; William Axe; Charles W. Jenner; Henry Willan; William Beddoes; and Charles Holcombe.

May 15th.—From Hugh Statham; Robert R. Clay, Birmingham; C. M. Rigg; John Jones; Henry Edward Beck; William Mark Powell; Joseph Johnson; Joseph Smith; William Legge; Charles M'Dermott; and William Squire.

May 18th.—Frederick Milne; Henry John Barrett; Samuel J. Burch; Neville Wood, M.D.; Thomas Beale; William Wheatley; James Smith Ayerst; Robert Archibald; and Frederick William Fogarty.

# Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted Members of the College on Friday, the 7th inst.—viz., Messrs. Sebastian Malassez, Dublin; Joseph Rushforth, Westbourne-place, Hyde-park; George Davis, Dawley, Salop; Thomas Littleton, Saltash, Cornwall; John Prowse, South Petherton, Somersetshire; David Hope, Greenwich; Henry Hart, Stanway, Essex; Richard Capron, Tiverton, Devon; and George Milburn, North Shields, Northumberland.—On the 14th instant, Messrs. Arthur Newstead Holmes, Selway, Yorkshire; Benjamin Button, Hopton, Suffolk; Frederick Gardner, Islington; William John Anderson, Brompton; Francis Cornelius Webb, Stonehouse, Devon; John Milner, Harrowgate; William Copeman, Cottishall, Norfolk; John Lloyd, Corwen, North Wales; James Miller Shain, Perth, Scotland; and William Ellis, Belfast.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination, and received certificates to practise, on Thursday, May 13th, 1847:—William Thomas Gaye, Minehead, Somerset; Joseph Delves, Tonbridge Wells, Kent; James Lewis Holloway, Charlbury, Oxford; Richard Dechamp

Ball, Plymouth; Joseph Williams, Williton, Somerset; William Watts, junior, Nottingham; Benjamin Daniel, Kingston-upon-Hull; Thomas Robinson, Wellingboro', Northampton; Thomas Bridgwater, Glasbury, Breconshire.

Expulsion from the College of Surgeons.—The case of a Mr. James Dore Blake, who, it is alleged, obtained the diploma of the Royal College of Surgeons by surreptitious means, has occupied the attention of the President and Council for some time past, it having been brought before them by the Taunton and Somerset Branch of the Provincial Medical and Surgical Association, who state that Mr. Blake, "until May, 1845, and for a period of about thirteen years previously, was a retail pastry-cook and confectioner in that town, has lately obtained the diploma of the College of Surgeons, after a period of only one year of alleged study, and at a comparatively trifling outlay of money;" concluding by calling on the President and Council to prosecute such inquiries into the testimonials and certificates produced by Mr. Blake, as shall place the matter in a position satisfactory to all concerned, in upholding the honour and dignity of the College of Surgeons. The Council having accordingly investigated the case, and taken the opinion of their legal advisers, have come to the following resolution, which has just been transmitted to Dr. Woodforde, the President of the Branch Association—viz., "At an extraordinary meeting of the Council of the Royal College of Surgeons of England, Tuesday, the 27th of April, resolved, 'That it appears to the Council that Mr. James Dore Blake obtained his examination and letters testimonial by false statements and imposition; and the Council does therefore recall such letters testimonial, and hereby declares the same to be void.' Resolved, 'That Mr. Blake be requested to return the diploma granted to him, he having ceased to be a member of this College.'"

Edmund Belfour, Secretary.

London Hospital.—The distribution of Prizes by the Governors of the Hospital and Lecturers of the School, at the conclusion of the winter session, took place on Tuesday afternoon. *Award:* two gold medals, for zeal and humanity in attendance on the patients; in the medical wards, to S. Sprigge; in the surgical wards, to W. F. Vidal. *Anatomy:* two dresserships, to P. W. Govett, and F. E. Goldsmith. *Practice of Medicine:* gold medals, G. C. Day, J. Rygate; silver medal and books, E. Haycock, C. W. Latham; hon. certifis., T. N. Brushfield, and J. Cooper. *Chemistry:* senior, gold medal, T. N. Brushfield; hon. certifis., A. H. Stocker, and F. W. P. Jago; junior, silver medal, S. Reynolds; hon. certifi., E. Foot. *Materia Medica:* gold medal, F. W. P. Jago; hon. certifi., C. Harper.

Painless Surgical Operations.—It has been announced that a Committee is in progress of formation "to award some suitable recompence" to the discoverers of the newly-found remedy for the prevention of pain, and to take into consideration the propriety of appealing to the public.

Obituary.—We announce, with feelings of painful regret, the death of Mr. J. P. Potter, Demonstrator of Anatomy in University College, and Assistant-surgeon in University College Hospital. Full particulars of this melancholy event will be published in the next Lancet.—On the 4th instant, died, at the age of eighty-six, Mr. John Read, the inventor of the stomach-pump. His decease demands a passing word on the importance of the invention which he gave to the world. Many men less benefactors to their fellow-creatures have received from them high honours and rewards. The stomach-pump may seem a humble, but it is not the less an important, aid to the medical practitioner, and a means of good to the human race. The stomach-pump is, indeed, the right hand of toxicology, and has very frequently rescued the suicide, or the victim from attempts at poisoning, from impending death. It seems extraordinary that such a simple and beautiful invention should have been the production of a man who has toiled with the present generation. We can hardly conceive of the time when the medical man, called to a case of poisoning, and finding it impossible to produce emesis, or to neutralize the poison, had nothing further to do than to stand by and witness the death of his patient. Yet this, even Sir Astley Cooper, in bearing honourable testimony to the merit of Mr. Read, confessed himself to have done in the early part of his career. Mr. Read was born and lived long in a humble station of life. He had devoted himself from natural inclinations to the study of hydraulics; and the invention of the stomach-pump arose out of the illness of a fellow-servant, (he was then in the service of Dr. Marriot, a clergyman in Kent,) in which the medical man in attendance lamented the want of some means of injecting fluid into the stomach and bowels. He speedily produced an apparatus, which, with very slight alteration, is the stomach-pump of the present day. Mr. John Read was distinguished during his long life by many other useful mechanical improvements in medical, veterinary, and agricultural implements; but for the principal production of his genius, his name will ever deserve a place in the history of mechanical improvements in our art.—At Paris, on the 12th inst., M. Lisfranc. This distinguished member of the profession was the senior surgeon of the Hopital de la Pitié, a member of the Royal Academy of Medicine, and an officer of the Legion of Honour: he was well known by his "Clinique Chirurgical de l'Hopital de la Pitié."

Testimonial to Dr. John Taylor.—Finding it impossible to insert the whole of the proceedings relative to the testimonial presented to this excellent and laborious physician, we will merely state that the testimonial was accompanied by an address of the most gratifying character, signed by eighty-eight students, all under Dr. Taylor, and many of whom have achieved good reputations. The service of plate which formed the testimonial consisted of a very elegant tea-pot, coffee-pot, cream-jug, and sugar-basin, with a richly-chased salver, bearing the following inscription:—"Presented, with the accompanying Service of Plate, to John Taylor, M.D., late Professor of Clinical Medicine in University College, London, and Physician to University College Hospital, by the former and present Students of the College, in testimony of their high estimation of his character as a man, of his zeal and learning as a Professor, and of his distinguished abilities as a Physician.—March, 1847." The answer of Dr. Taylor, transmitted to Mr. Burford Norman, the Secretary of the Testimonial Committee, breathes the purest and most upright feeling both in a moral and professional point of view. We wish him every success in the new sphere of action to which he has been called; indeed, it is gratifying to know that he has already succeeded to the extent of his wishes, and his many friends and admirers will be glad to learn that renovated health has followed upon his removal from London.

The Medical Registration Bill.—This Bill is now fairly before the government, the legislature, and the profession; and whatever objections to it may exist as to details, there can be none fairly urged as to its leading principles. We in Ireland should therefore do what we can to get it into committee. We shall probably have to suggest amendments, but we would make great sacrifices to see it pass into law. Over and over again have we warned our brethren in the provinces, that the great evil to which they are subjected is the inundation of our profession by imperfectly educated persons; and this evil, we can assure them, continues in full operation. At the very moment we write, men are obtaining surgical diplomas on an education of twelve months; and as to collegiate discipline, or anything calculated to enforce attendances on lectures or hospitals, there is nothing of the kind. This the Bill now before parliament will, if passed into law, correct, and therefore do we advise our readers to aid in promoting its enactment. (*Dublin Medical Press*, May 12.)—The *Provincial Medical and Surgical Journal* also has a leading article highly in favour of the measure, which, if space permitted, we should be glad to extract. The Provincial Medical and Surgical Association, and the branch associations, are well known to be in favour of an efficient registration of the profession.

Bristol Medical School.—After the examination, held at the above school, at the close of the winter session, 1846-7, Henry Clark, Esq., having delivered a suitable address, presented the prizes and certificates of honour, with appropriate remarks, to the following gentlemen:—Third year: prize, Mr. John B. Challicombe; no certificates awarded. Second year: prize, Mr. Crosby Leonard; certificates, Mr. Robert W. Ellis, Mr. Nathaniel Crisp, Mr. Charles J. Ridge. First year: prize, Mr. Edward Horace Swete; no certificates awarded.

Anniversary Dinner.—At the recent anniversary dinner of the officers of St. Bartholomew's Hospital, Dr. Paris congratulated the assembly on the opposition of the Government to the Medical Bill. The report of the candid and straightforward speech of Sir George Grey, and the consent of Government to the appointment of a committee, is an answer to the premature congratulation of the president of the College of Physicians.

## CORRESPONDENTS.

*A Subscriber to The Lancet* had better apply to the Secretary of the Society of Apothecaries. If they were to admit him to an examination, under the circumstances stated, his licence, according to the provisions of the 55th George III., would be invalid.

*A Young Student.*—It is likely that rules on the subject, for the guidance of young practitioners, will be published at an early period, by a surgeon of considerable experience.

The communication of a *Surgeon of Thirty years' standing*, shall be published next week.

A report of a case of strangulated congenital hernia has been forwarded to us, in which is the name of Mr. Sinclair, of Halstead; but the writer of the report has accidentally omitted to append his own name and address.

*C. N.* (Birmingham,) had better apply to the Secretaries of the Institutions he has mentioned. We believe that such certificates would not be received.

The directions forwarded to us by Mr. Nisbet, surgeon, at Egremont, Liverpool, for the recovery of persons apparently drowned, have been received, and are under consideration.

*An Old Practitioner.*—Without doubt, a five-years' apprenticeship, as required by the Apothecaries' Act, is an evil of gigantic proportions. But we much question whether it is possible for a student in medicine to pass two years of his life, say from the age of seventeen or eighteen to twenty, with greater advantage, than with a gentleman engaged in the general practice of his profession. Articles of pupilage for such a period are likely to become common, should the apprenticeship clause of the Apothecaries' Act be repealed. £150 or £200 paid by a parent or guardian, as a premium to a general practitioner, for instruction to a pupil during such a period, could not be more advantageously expended.

*Detector* is quite right in principle. We admit the justice of his remarks, and before we had read them, we had determined on modifying the clause in question. Certainly the power proposed to be given to such bodies, as they are now constituted, ought not to exist without appeal, control, or check. Against the infamous, notorious quacks, such a power might not be improperly exercised, even by the present governing bodies; but doubtful cases might occur in which the exercise of such a power might prove most wicked and tyrannical.

We have forwarded the note of *A Subscriber* to Mr. Bennett, Surgeon of the St. Giles' Infirmary, the substance of whose reply shall be stated to our correspondent in an early number of THE LANCET.

Numerous correspondents, in many parts of the kingdom, have suggested that the Medical Registration Committee, now sitting in the metropolis, should recommend that county or district committees should be formed throughout the kingdom. The suggestion is a good one, and we should be delighted to find that it was carried out into active operation. The Registration Committee of the metropolis has worked admirably, and has been productive of the best effects. With great prudence, that Committee has strictly confined itself to the business for which it was appointed—that of promoting petitions in favour of the Registration Bill.—Is *Detector* satisfied with this acknowledgment?

*Mr. Burchell* is thanked for his kind letter. The clause of the Bill which relates to chemists and druggists is, *ipsissima verba*, the twenty-eighth clause of the Apothecaries' Act. If that clause could be safely introduced into the Act of 1815, and cannot with safety be introduced into an Act of Parliament *now*, what, we may ask, has been the conduct of the Apothecaries' Society with respect to the enforcement of the penalties of their statute? Anything more condemnatory of the conduct of that body could not be mentioned. But it is illegal for chemists and druggists to practise medicine, both in and out of their shops, and all the respectable members of that class of tradesmen desire to put an end to it. Two or three of the clauses of the Medical Registration Bill—if, fortunately for the profession, it should be enacted into a law—will aid those gentlemen in accomplishing their laudable object. We abhor quackery in all its forms, and one of the most mischievous and destructive to the public, and degrading and injurious to the members of the medical profession, is that practised by a considerable number of law-breaking chemists and druggists.

*Diploma*, (Somerset.)—The impudent impostor is entitled to recover his charges for his "surgery and surgical dressings;" and licentiates of the Hall, not possessing the diploma of the College, are also entitled, in the present state of the law, to charge for surgery. The whole case may be stated thus:—A person wholly destitute of medical education or qualification can recover at law charges made for the practice of surgery, such as bone-setting, reduction of dislocations, bandaging, dressing wounds, applications to the eyes, &c. If he be a licentiate of the Apothecaries' Society, he can also recover for similar proceedings. But if he hold a diploma from any of the Colleges of Surgeons, he is liable to a penalty of 20*l.*, or to be indicted for a misdemeanor if he should practise as an apothecary! Did anything more monstrous ever exist in a civilized country?

*A Young Hand.*—1. The extra licence confers a legal right to practise in the country, but whether or not it qualifies the holder to become a candidate for the office of physician to an hospital will depend upon the by-laws or regulations of the hospital. The expense is about 25*l.* sterling.

2. There is no express statutory provision on the subject. In the Medical Registration Bill there is a clause by which it is proposed to confer that power.

3. The circumstances are so various, and the charges in different neighbourhoods are so unequal, that we cannot give a satisfactory reply to this question.

4. When such a Bill is submitted to the consideration of a jury in a court of law, they have the power of returning a verdict for a less amount than that claimed, or of rejecting the amount altogether. As a rule, it may be stated that medical practitioners are losers by suing their patients for the recovery of debts in courts of law.

5. Yes; two things may be done,—obtain fees at the time, or don't attend such monsters.

*Mr. A. Gaved* will see that the error to which he refers has been rectified in the present number of THE LANCET.

*A Student.*—The application of our correspondent should be addressed to the Council of the University of London.

*A Liverpool Surgeon.*—The practitioners of Liverpool are adopting the best mode of getting rid of such an impostor as our correspondent describes, by promoting the success of the anti-quack Bill now in Parliament. The Liverpool medical practitioners are sufficiently numerous, wealthy, and powerful, to publish and support a newspaper of their own; or, assuredly, by bestowing all their patronage upon one of the existing journals, published in that important town, they might greatly diminish the quackish tendencies of the publications which are now upholding the absurd pretensions of an impudent adventurer.

*Dr. Rees'* essay shall receive insertion as speedily as practicable.

*Edward B.*—Apply to a surgeon, and submit to a proper examination.

Amongst a great number of petitions last week offered to the notice of the House of Commons, in favour of the Medical Registration Bill, were twelve presented by Mr. Hawes, M.P. for Lambeth, at one time the chosen champion of the keepers of Gallipot Lodge.

The brief report of ether-vapour cases, forwarded to us by *Mr. Litchfield*, of Twickenham, shall be published.

*Mr. Gillott* will observe, in this week's LANCET, that the error to which he has referred has been corrected. It was stated that several petitions had been forwarded against the Bill, which, in reality, were presented in its favour. Unfortunately, Mr. Gillott's was of the number. It is to be hoped that the presentation of petitions in favour of the measure will be continued even while the Select Committee is sitting. In all of them, the conduct of the London corporations in opposing the Bill should be condemned, particularly that of the Council of the College of Surgeons, and of the Master and Wardens of the Society of Apothecaries, as also the general conduct of those bodies with respect to the members of the profession. It ought in justice to be stated, that the opposition of the Censors of the College of Physicians of London is of a very qualified character; and apparently the difficulties with the governing body of that institution admit of an easy adjustment.

*Mr. W. B. Pickering*, (Hyde, Cheshire,) M.R.C.S. and L.A.C., has forwarded a petition in favour of the Medical Registration Bill, to be presented to the House of Commons by Mr. Egerton, M.P.

*A Licentiate of the Apothecaries' Society* inquires whether the Society are likely to proceed by indictment against the pestiferous gang of obscene quacks who prey upon the public and the profession without the shadow of qualification; and condemns them in the strongest terms for choosing such game as Mr. Sweetnam, while those vagabonds are untouched.

*A. M. H.*—We will consider the matter; but A. M. H. should in confidence furnish us with his name.

*Mr. Seth Gill.*—The communication shall be published shortly in our pages.

*Mr. J. T. Burton.*—Apprenticeship is not actually necessary for the College of Surgeons; but candidates are required to produce satisfactory proofs of having been engaged for *five* years in the acquisition of medical knowledge.

*Inquirer.*—We are only delayed in publishing the monster article detailing the unprofessional practices of certain medical men, and the outrageous conduct of the unqualified quacks, by the immense number of documents which have accumulated under our hands. We could at any time fill a number of THE LANCET with them, without note or comment of our own.

The letter of *Mr. Field* shall be published in the next number.

*Mr. Evans.*—We will attend to the wishes of our correspondent.

We have received communications respecting the letter complaining of the want of an English medical practitioner at Seville, and requesting us to place the writers in communication with our correspondent. Unfortunately we are unable to do so, as the letter was anonymous, but the facts of the matter could be readily ascertained by application to the office of the Peninsular and Oriental Steam Navigation Company.

We are requested to state that Mr. John Deakin, of Sheffield, and Dr. Favell, Messrs. Thomas Wood Foster, Robert Roper, James Walker, Henry Thomas, all of Sheffield, petitioned IN FAVOUR of the Medical Bill, and not against it, as stated in THE LANCET of the 15th inst. We are most happy in correcting this error of the press, and of placing these gentlemen among the good men and true, favourable to the amelioration of the profession.

A vast number of valuable communications have been received, which the great pressure on our space this week precludes from further notice at present, but they shall all receive due attention.

Communications have been received from—Mr. J. M. Davis, (Liverpool,) with a copy of the *Liverpool Times*; Dr. John Thomson, (Edinburgh;) Mr. Parker, (Kirkdale;) Mr. Maxwell; Mr. G. A. Gaved, (a petitioner in favour of the Medical Registration Bill;) a Retiring Member of the National Institute; Mr. Wood, (Edinburgh;) Dr. French, (Liverpool;) Mr. H. S. Taylor, (Liverpool;) Mr. Best, (Dublin;) Amor Justitiæ; Mr. Gore, (Worthing;) Dr. Crabb, (Poole;) Mr. Harrison, (Halifax;) Scrutator; Mr. Kidley, (Hereford;) Mr. M'Clerry, (Dublin;) Dr. Rees; Mr. Couchman; Mr. Adams, (London Hospital;) Ed. H. Viner; Dr. Robert Lee; Dr. Ormerod; Mr. Weatherfield; A Non-professional Reader; Dr. Leese, (Norwood;) An Original Subscriber; A Pupil; Auditor; A Looker-on; Mr. B. W. Brown, (Wymeswold, Leicestershire;) Mr. Seth Gill; Mr. Alexander Argus; Dr. Machin, (Leeds;) Mr. Whitson, (Camden-town;) Mr. J. S. Burton; Mr. P. R. Allen, (Belper;) A. M. H.; Hope. We have received *Woolmer's Exeter and Plymouth Gazette*; the *Glasgow Argus*; the *Somerset County Herald*; *Wilts and Gloucester Standard*; *Liverpool Standard*; *Maitland Mercury*; *Emery's Journal*, (Demerara;) *Willmer and Smith's European Times*; *Eddowes' Journal*; &c.

# A Lecture
ON THE
# INHALATION OF VAPOUR OF ETHER IN SURGICAL OPERATIONS.

*Delivered at the United Service Institution, and addressed to the Medical Members of the Institution, on May 12th, 1847.*

BY JOHN SNOW, M.D.,
LECTURER ON FORENSIC MEDICINE.

IF a medical man had been asked, this time last year, whether it were possible to perform a severe surgical operation without the patient's feeling or showing any sign of pain, he would have answered in the affirmative. Such occurrences have taken place in profound insensibility arising from injuries of the head. In a state of imminent suffocation, from inflammation of the windpipe, that tube has been cut open in the throat without the patient being sensible of what was done; and operations might be performed in the deep insensibility of apoplexy and of epilepsy, without the sufferers feeling them. But if any one had been asked last year, whether it would be safe and practicable to induce such a state of insensibility as would prevent the most serious surgical operations being felt, and that without any ill consequences, he would, I think, undoubtedly have considered it an impossibility. Sir Humphry Davy, indeed, nearly fifty years ago, expressed an opinion that nitrous oxide gas might probably be used to prevent pain during surgical operations, but the laughing gas, as it is called, continued to be inhaled in small quantities for amusement only, and the suggestion of Davy was unattended to, at least till recently; for it appears that it was in some measure by following out the researches of Sir Humphry Davy, that Dr. Jackson was led to the recent brilliant, important, and most valuable discovery.

The inhalation of ether for the prevention of pain during surgical operations, was, as all are aware, introduced by Drs. Jackson and Morton, of Boston, U.S., at the end of last year. Another medical man, indeed, in America, is claiming the merit of the discovery, but a little time, no doubt, will suffice to decide to whom the merit is due, or how it should be apportioned. The only way in which I can exhibit the influence of ether on the present occasion, is on animals; they show the effects of it, however, in a very striking manner, and will illustrate what I have to say afterwards.

The ether I pour into this jar is sufficient to make as much vapour as will one-third fill the jar; it is already converted into vapour, and the jar contains a mixture of two-thirds air, and one-third vapour of ether. I have a thrush which I shall put in, just sliding the plate-glass which covers it enough to admit the bird, which will be very quickly insensible. The vapour of ether acts in a very uniform manner on the various classes of animals. The difference in the time they take to become affected and to recover, depends on the difference in the activity of the respiratory and circulating functions. Birds enjoy these functions in the highest perfection, and they are most quickly brought under the influence of ether; they breathe more air in proportion to their size than other animals, and, consequently, inhale the vapour more quickly. This thrush was only in the vapour for about a minute, and it is dead. It had ceased to breathe before I took it out of the jar. It is a result I did not intend, and it has arisen from my going on with the lecture, and looking at my notes, instead of directing my whole attention to the animal. This accident shows the power of the agent, but it does not follow that there is any danger in giving the vapour to a patient; for of course the medical man directs the whole of his attention to what he is doing; he understands his own species better than a bird, and can feel the pulse, and make many observations which I could not on the bird, even if I had attended to it. Besides, the vapour acts much less rapidly on human beings and on quadrupeds than on birds. The large jar in which I am placing this guinea-pig is occupied with an atmosphere of one-half vapour of ether, and the remainder air. It will be quite insensible in two or three minutes—voluntary motion has ceased, and there is no visible movement in it except that of respiration. If I take it out now, I shall probably be able to prick it without causing it to move. That is the case. It now, however, moves its foot on being pricked; it is quickly recovering its sensibility in the air. I shall put it in the jar for a minute longer—it is now deeply insensible, but will recover completely in five or ten minutes.

I shall pour some ether into this dish placed over the water in which you see these gold fishes; I enclose the whole in a bell-glass, and as the ether evaporates, the vapour will be absorbed by the water, and the fishes will breathe it by their gills. They will become insensible towards the end of the lecture, will turn on the side, and exhibit no motion except a slow movement of the gills, and on being put into fresh water they will gradually recover. Quadrupeds of warm blood are affected much less quickly than birds, by vapour of the same strength, reptiles still less quickly, and fishes, which get the air they breathe only at second-hand through the water, are much longer in coming under the influence of ether, and, also, in recovering from its effects.

The same relation of the effects of the inhalation of ether to the breathing, and circulation of the blood, holds good in various individuals of the human species, as well as in different classes of animals. In children, the breathing and circulation of the blood are more rapid than in adults, and children and youths are put sooner and more easily under the influence of ether than persons of the middle period of life, and these again sooner than old people, in whom the respiration and circulation are slow. Children under fifteen I have generally found to become sufficiently insensible for an operation to be commenced on them in two minutes after commencing to breathe vapour of ether, mixed with an equal volume of air; grown-up persons in the middle period of life in three to four minutes, with vapour of the same strength, although there have been exceptions, some of them becoming insensible in two minutes. Elderly people are usually five or six minutes.

The apparatus at first used in America and in this country for the inhalation of ether were glass vessels, and generally contained sponges. They were not provided with any means of regulating the proportions of vapour of ether and of air, and they had a worse fault—that of being cooled by the evaporation of the ether taking place within. The air was cooled in passing through, and took up less and less vapour as the process went on, and sometimes when the patient was on the point of becoming insensible, no further effect was produced, or when seemingly insensible, he was roused up by the surgeon's knife. An opinion began to be entertained, that there were some persons, especially hard drinkers, who could not be rendered insensible by ether; but I believe that no sentient being is proof against its effects, and I no more mistrust the power of the ether than the surgeon mistrusts that of his knife. Several patients to whom I have administered vapour of ether have been habitual hard drinkers, and I have not remarked that there was any difficulty with them. One man who had his forearm amputated by Mr. Cæsar Hawkins, at St. George's Hospital, had been in the habit of drinking a pint of rum before breakfast, yet the operation was commenced in four minutes after he began to inhale, without his showing any signs of feeling it, or remembering anything of it afterwards.

Ether possesses, in an eminent degree, the property of becoming converted into vapour. When in contact with the air, its vapour mixes with, and expands it. The quantity of vapour that will thus mix with the air, increasing with the temperature in a certain geometrical ratio,—the same ratio which the elastic force of the vapour of ether bears to the temperature. The boiling point of the ether most suitable for inhaling is 100°, and this table shows the quantity of such ether that 100 cubic inches of air will take up when saturated with it at various temperatures at a mean barometric pressure of thirty inches:—

| Temp. Fahr. | Cubic inches of vapour. | Minims of Ether. |
|---|---|---|
| 30° | 26 | 28 |
| 35° | 31 | 34 |
| 40° | 37 | 40 |
| 45° | 43 | 47 |
| 50° | 52 | 57 |
| 55° | 62 | 68 |
| 60° | 76 | 84 |
| 65° | 93 | 102 |
| 70° | 115 | 126 |
| 75° | 147 | 161 |
| 80° | 200 | 220 |
| 85° | 284 | 312 |
| 90° | 476 | 523 |

Thus, at 30°, 100 cubic inches of air take up 26 cubic inches of vapour, and become 126 cubic inches; at about 67° they take up 100, and are expanded to 200 cubic inches; above this temperature, the quantity of vapour increases with enormous rapidity, till, at 100°, it excludes the air entirely. The same quantity of air was introduced into each of these graduated tubes, and into this some ether was passed up, and it has expanded the air to about twice its bulk. As I drop a little ether

on the muslin which covers the tube, the diminution of heat produced by its evaporation causes the vapour within to be condensed, and the liquid rises till now the air occupies but little more than its original space; but by grasping the tube with my hand, the ether is again converted into vapour, and the space within increases as rapidly as it diminished, showing how readily air becomes saturated with vapour of ether.

By taking advantage of this law, of the quantity of ether-vapour that will mix with air at different temperatures, we are enabled to regulate the proportion of vapour and of air that a person breathes. In order to do this, it is only necessary to bring the air and ether sufficiently in contact, and to regulate their temperature. To do this, I took advantage of the capacity for heat that there is in water, and of the power of conducting it possessed by the metals. By making the inhaler of metal, and placing it in water, the ether it contains, and the air passing through it, are kept of the temperature of the water, which can be regulated by the thermometer. Two or three pints of water supply the heat necessary to the evaporation of an ounce or two of ether, without being much lowered in temperature. The water in which I place the apparatus does not differ much in temperature from the patients' room. In winter I added a little hot water to the cold, but since the weather became mild, that is not always required. The temperature I nearly always employ is between 60° and 70°, and consequently the air and vapour are about in equal quantity. I think it preferable that the air should exceed the vapour, rather than the reverse, and any temperature not lower than 60° I believe to be sufficient. Care should be taken not to bring hot, or even warm, water in contact with an ether inhaler, otherwise the patient will be prevented from obtaining any air with the vapour. Placing the apparatus in a quantity of water prevents the cooling of it by the evaporation of the ether within, and maintains the process steady and equable throughout.*

In order that the inhaler should not stand in the way of the surgeon and his assistants, who want all the room they can get, it is necessary to have an elastic tube between the inhaler and the patient's mouth, and it is of great importance that the tube should be of sufficient capacity. The tube I first used was half an inch in internal diameter, that being the widest to be met with, and wider than those still used with many inhalers: but I found reason to suspect it was not wide enough, and I tried it by breathing through it myself without any ether, and found that I got out of breath in three minutes. The friction of the air against the interior of a tube causes considerable resistance; to obviate this it becomes necessary to have the tube much wider than the windpipe. The elastic tube I always use for the adult is three-quarters of an inch in internal diameter, and by it the patient can fill and empty his chest as rapidly as he likes, without labour. The other apertures, through which the air and vapour have to pass, are not less than five-eighths of an inch in diameter. The spherical valves are of cedar wood, and are therefore very light and easily moved. It is of great importance to take care that nothing of suffocation is blended with the exhibition of ether. Asphyxia, it is true, produces insensibility to pain, as I have ascertained by experiments on animals, but the insensibility of a state of suffocation is painful to produce, is of short duration before it ends either in recovery or death, and is attended with great danger, not only present but subsequent. Partial suffocation is often followed by illness, of which a person may expire in a day or two, but I believe that no such result need be apprehended from ether, if the patient has sufficient air with it. If the animals I have placed in ether vapour have not ceased to breathe before they were withdrawn from it, they have always completely recovered, and been as well as before, however nearly dying they might be when taken out, except, indeed, a bird which was put into oxygen gas, and did not recover.

It is necessary to the success of the process that the mouth and nostrils be carefully closed against the admission of air, except that which comes charged with vapour of ether from the apparatus; for if the air can gain admittance by any shorter method, it does so, and we cannot tell how much vapour the patient is inhaling. An intelligent patient can begin, it is true, by breathing voluntarily just as we wish him, but he loses his voluntary power before he is sufficiently insensible to bear an operation without being roused. I have used different kinds of mouth-pieces, and have only lately got one which fulfils its intention completely. It has been invented and sent to me by Mr. Sibson, of the Nottingham General Hospital. It encloses the mouth and nostrils both, fitting over the bony bridge of the nose, and permitting respiration to go on by the nostrils or mouth, as the patient's wish or instinct leads. This I consider a great desideratum, for the nostrils are the natural channel of the breath, and closing them during inhalation causes apparent uneasiness and struggling in some persons. This face-piece contains flexible sheet-lead in its border, and can be moulded to the peculiarities of any kind of features, and retains the form into which it is moulded. I have used it several times, and have found it to answer completely.

I let the patient begin by inhaling only air, and then turn the two-way tap a little at each inspiration, till the etherized air is admitted, to the exclusion of the other. This prevents the coughing which the sudden access of the vapour occasions in some persons. The air passages rapidly get a tolerance of the vapour, when admitted gradually. I usually get the tap quite turned in a quarter of a minute. I find that consciousness and the power of voluntary motion are soon lost, generally in the first minute, and for some time before a surgical operation could be commenced without causing pain, and awaking the patient. I am aware that different accounts have been given from this, of the effect of ether, and the effect may be different when the vapour is of a different strength, and given in a different manner, but I have stated what I have always observed, from vapour diluted with an equal quantity, or rather more, of air. As the patient gets under the influence of ether, the limbs become relaxed, and drop down, if not supported, but the eyelids still retain their sensibility, and close again on being opened by the finger, but in a little time they cease to do so, or close feebly; the breathing becomes deep, regular, and, as it were, mechanical; and the eyes generally turn upwards, as in sleep. When these phenomena take place, an operation may be commenced, without fear of its causing cries or struggles, or being felt by the patient. I do not always wait for the whole of the above symptoms to show themselves, but take into account, also, the length of time the patient has been inhaling, and the depth and number of inspirations; and I may remark, that I have not once been mistaken, with respect to the time when the operation might be commenced, without causing pain; consequently, an observant medical man will have no difficulty on this point. As soon as the operation is begun, I reduce the strength of the vapour very much, by turning the two-way tap to a certain extent. From what I have observed, I believe that from five to ten per cent. of vapour in the air will keep up insensibility when it is once produced. So I turn the tap till the strength of the vapour is reduced to about twenty per cent., and let the patient breathe this diluted vapour and external air by turns, for a quarter or half a minute at a time, being guided all the time by the signs of returning sensibility, or of deeper insensibility, exhibited by the patient. This I consider preferable to making the patient breathe continuously from the apparatus. Towards the conclusion of the operation, the inhalation should be altogether discontinued. The administration of ether should never be delegated to a non-medical person; consequently, if the operator has no medical assistant, as might happen in a small brig or schooner, which carries but one medical man, he must give the ether to the patient himself, having first got everything ready for the operation, and placed his patient in a position for it. Whilst giving the ether, he must direct his whole attention to it, and when the patient is made insensible, he will have to discontinue the ether, and transfer his attention entirely to the operation. When a person is rendered quite insensible by ether, he will usually remain totally incapable of feeling pain for three minutes, and sensation continues much blunted for some time longer. Now, a great number of surgical operations do not last longer than three minutes, and the most painful part of those that do last longer, is generally over within that time, so that, under these circumstances, the pain would generally be in a great measure prevented. In operations on the mouth, the ether has always to be discontinued before they are commenced, yet the insensibility usually continues till they are completed: this was the case in an operation for hare-lip, in a little girl, to whom I gave the vapour of ether lately.

The pulse is generally accelerated during the inhalation of ether, often becoming very frequent; sometimes, however, it is but little altered. The pupil of the eye, in the earlier cases, frequently became dilated; but I have not observed this since I used the wide tubes, and I am therefore inclined to think that it depended on deficiency of air. There is sometimes struggling as the ether begins to take effect; but

* For a description and an engraving of Dr. Snow's apparatus, see THE LANCET, Jan. 30. In that exhibited at the lecture, there was a two-way tap, and one or two alterations since made.

this, when it does occur, passes off as the patient becomes totally insensible. During recovery, consciousness and ability to answer questions often returns before the sensibility to pain; and the patient will remark, perhaps, that he did not feel the operation, at the time that it is still going on, if he does not see it.

Common rectified sulphuric ether is unsuited for being inhaled, as it contains alcohol, which would irritate the air-passages. To prepare it for being inhaled, the spirit has therefore to be washed out, by shaking it with water. When so prepared, it has a specific gravity of .720, that of distilled water being 1.000, and it boils at 100° at the usual pressure of the atmosphere. In this state it contains about one-tenth of its volume of water. This water can be separated by carbonate of potash, or by distilling it from quick lime, when its boiling point and specific gravity would be still further diminished; but I consider that it is more suitable for inhalation whilst it contains the water; since, if the air be dry, as it always is in frosty weather, and frequently also, under other circumstances, it will become saturated with aqueous vapour, from the water contained in the ether, as it passes over it, and will thereby be rendered less irritating to the lungs. For tropical climates, also, it is undesirable to diminish further the boiling point of the ether, as it will be sufficiently difficult to preserve it, even when it boils at 100°.

I have found the vapour of ether to succeed completely in preventing the pain in every instance in which I have administered it, and there have been no ill consequences of any kind attributable to the ether. On the contrary, the patients have generally recovered extremely well. The only disagreeable effects of any kind attributable to the ether, have been a little sickness or headach, and this only in a very few cases, although I have given the ether for a great number of operations in private practice, in addition to twenty-eight operations, most of them serious ones, in St. George's Hospital.

The pain endured by the bleeding sailor or soldier, wounded in fighting the battles of his country, is deeply deplored by every feeling mind; and a discovery which can prevent so much of it, as depends on the operations necessary to save his life, must be hailed as a great blessing, if it were for his sake alone; for the pain of a surgical operation is greater than that of the wound itself. Whilst the latter is instantaneous, and its approach unknown, the approach of an operation is seen, and its cuts are necessarily deliberate; and though ever so expeditiously performed, it seems of immense duration to the patient. The blessing would be great of merely preventing this pain, but I am firmly convinced that the exhibition of ether will be attended with the still greater advantage of saving many lives. A great part of the danger of an operation consists in the pain of it, which gives a shock to the system from which it is sometimes unable to recover. If an operation is performed during or immediately after an action, the wounded man suffers two shocks together—that of his wound and that of the operation, which although, singly, his frame might sustain, united, perhaps it cannot. If, on the other hand, a secondary operation, as it is called, has to be performed some time afterwards in the hospital, he is rendered nervous and more susceptible of pain by his illness and suffering. His wonted courage has perhaps been lost with his bodily strength; for the most courageous become often like children in illness, and the operation is looked forward to with dread, and the depression which he suffers from it is great. I believe that ether will give the surgeon a greater choice in selecting between cases for immediate and subsequent operation, for dread of the knife helps to cause and keep up the faintness and collapse, which often prevent the surgeon from operating at once. The ether and its apparatus will not add anything to the necessary baggage, for it will stand in the stead of a much greater weight of brandy. Before the operation, the knowledge of it will supply the cordial of hope. During the operation it will prevent faintness, which arises more from pain than loss of blood, which is seldom great. It usually acts, also, as a stimulant in itself; and I do not remember to have seen wine or brandy given in the operating theatre of St. George's Hospital more than once since January.

This opinion, that ether will save life, as well as prevent pain, is founded on experience; so far, at least, as experience has hitherto extended. Ether has been given in thirty-nine surgical operations at St. George's Hospital, nearly all serious ones; yet only two of the patients died; the remainder either left the hospital well, or are progressing favourably towards recovery; although, besides the two that died, there were one or two others, concerning whom, at the time of the operation, but little hope was entertained of their recovery, the operation being undertaken to give them a slight prospect of cure, without it there being none. I have had the advantage of giving the ether in those of the operations, since the latter part of January, which have been performed at the usual hour for operations, amounting to twenty-eight in number; and I will enumerate such of these as resemble the operations most frequent in the army and navy. Amputations are very numerous in the United Service. Of these there have been twelve—eight of the thigh, two of the leg, and two of the forearm. The two deaths which I mentioned were after amputation of the thigh; they took place some days after the operations. The patients were extremely weak and emaciated at the time they were performed; and I may observe, that two out of eight is below the usual number of deaths after this operation. Operations for necrosis somewhat resemble several undertaken for the removal of bullets and other extraneous bodies. Of these there have been four in the hospital, and the patients did extremely well.

Feigned diseases are a source of great anxiety to medical men, more especially to those of the United Service. It is humiliating to the medical officer, and a loss to the country, for him to be deceived by a man who is only pretending illness; yet to charge with feigning a man who is really ill would be a much more serious error; and the difficulties of distinguishing between real and pretended disease are sometimes very great. Lameness and deformities are diseases that are often feigned. Ether has solved the difficulty in which the medical men were placed in two such instances on the Continent. In one instance a man was suspected to pretend a deformity with projection of the spine. He was put under the influence of ether: his muscles became relaxed, and the deformity disappeared. In the other instance the man was suspected to feign stiffness of the hip-joint; but being rendered insensible, and his limbs quite relaxed, the joint was found to be anchylosed, and of course as immovable as before.

It has been stated in the medical journals, and I have frequently heard it in conversation, that oxygen gas is useful, and is sometimes required, to resuscitate persons under the influence of ether. Now, the trouble and care to be taken in the making of a gas are so great, that if oxygen, or any other gas, were required to remove the effects of ether, this agent would be effectually excluded from the field of battle, and indeed from practice altogether; except, perhaps, amongst the affluent, and the patients of large public institutions; but nothing of the kind is required. I always find that the patients recover their consciousness, and indeed all their faculties, spontaneously, and without delay. I do not find that any means of resuscitation are required; and if they were, I feel convinced that oxygen would not be the agent to remove the real effects of ether. In the beginning of February, I found that oxygen did not counteract the effects of ether on animals. In order to ascertain whether the effects of vapour of ether were due to its excluding, by the space it occupies, part of the oxygen of the air, I supplied, artificially, the oxygen displaced—and even placed animals in oxygen gas, mixed with vapour—and I found that etherization took place quite as rapidly.* I was somewhat surprised, therefore, to find it stated, in March, that oxygen gas was an antidote to ether; and I undertook fresh experiments, and found, that making animals breathe oxygen, after they had been rendered insensible by ether, did not restore them any sooner; that, indeed, they were often longer in recovering; and that one bird, very much under the influence of the vapour, died in the oxygen—an occurrence I never found to take place in the open air. Dr. Gull has arrived at the same result with respect to oxygen given after ether.

I may very properly be asked, how it is that oxygen is reported to have actually been found of service in restoring patients from the effects of ether. I can only explain it by suggesting that such patients are under the influence of asphyxia rather than of ether, since, for a state of partial suffocation, oxygen is an antidote. Inhaling for a length of time, in the way practised with ether, without being allowed any external air, is perfectly new, and the calibre of tubes required for easy respiration in this way is greater than was supposed. But many of the ether inhalers offer such difficulties to the passage of air, by narrow tubes, valves, and orifices, and by obstruction from sponges or ether, that a person could not be made to breathe merely air through them, in the absence of ether, without being put in danger of suffocation in a few minutes.

A great deal that is very interesting might be said with respect to the way in which the vapour of ether probably

* See THE LANCET, Feb. 27th.

produces insensibility. But I thought it better to confine my remarks chiefly to practical points connected with the administration of it, in order that I might impart, as well as I should be able, to the medical officers of the United Service who might be present, all that I have been able to learn from the experience I have had on the subject; and in so doing, I trust that I have acted in accordance with the wish of the Council.

## Hospital Reports.

### ST. GEORGE'S HOSPITAL.

REPORTS OF SURGICAL CASES.

STRANGULATED HERNIA; REDUCTION; SYMPTOMS NOT RELIEVED; REDUCTION "EN MASSE"? DEATH; INTERNAL STRANGULATION.

S. R——, aged thirty-five, was brought, April 25th, into the hospital moribund, and admitted under Mr. Tatum. Vomiting and constipation had existed for several days, and there was great pain over the whole of the abdomen, which was much distended. On examination, a small hernia was detected in the right inguinal region. It was flaccid, and was reduced easily, and without the slightest pain, leaving the rings and canal free. There was no pulse at the wrist, and the extremities were quite cold. Brandy and restoratives were administered; but he died shortly after his admission.

From the history of this patient, which was subsequently obtained, it appeared that on the evening of the 21st he had called at the house of a medical man, complaining of sickness and general pain over the abdomen. The pain was, however, not very great, and not increased on pressure. These symptoms were accompanied by constipation of four days' standing, and vomiting, of a dark-green colour, had been present two days. On examining the groins, a hernia was found in the right one. The tumour, of the size of a small orange, was rather tense, and painful when handled. Upon being questioned, the patient attached but very little importance to the tumour, which, he said, had existed for many years without giving him much inconvenience; he had always been able to reduce it, and had never worn a truss. The surgeon reduced the hernia without much difficulty, and then found that the canal and rings were free. Some calomel and a black draught were ordered, and the patient was told to call on the following morning, when he was promised a letter for a truss; but he never made his appearance again until the morning of the 25th, when he crawled into the surgery in a state of extreme depression, and stated that he had taken the medicine which had been given him, but that his symptoms had not been relieved. There was no hernia in the groin at the time, but the abdomen was much distended and painful. He was at once sent to the hospital.

The body, which was examined twenty-four hours after death, externally presented nothing remarkable. In the cavity of the peritonæum, there was a small quantity of serum, tinged with blood and bile. Marks of slight peritonitis existed over the greater part of the abdomen, the convolutions of the intestines being glued to each other, wherever they were in contact, by some slender bands of recently effused lymph. The increase of vascularity was but slightly marked, either in these parts or in the omentum. In the right iliac fossa, and lying close to the internal ring, was a convolution of small intestine, of a very dark-brown colour, and so twisted upon itself, that the passage for the fæces was completely stopped. The whole of this convolution was united to the neighbouring parts by bands of recently effused lymph, which were easily destroyed. After unravelling this portion of intestine, the peritonæum lining the right iliac fossa was found very much thickened and opaque, from inflammatory effusion of long standing. There were also several strong bands, which served to bind firmly to this spot about four inches of the small intestine immediately connected with the cæcum. The portion of gut thus bound down was very much contracted, but without any increase of vascularity in its coats, and it was continuous with that convolution of intestine, twisted upon itself, under which it was lying. In one part the thickened peritonæum, lining the right iliac fossa, formed a thick cord, which was gradually lost on the surface of the hernial sac passing through the internal ring. The dark-coloured portion of intestine, twisted upon itself, measured about five inches in length. Its coats were very much thickened, and of a dark colour throughout, from effusion of blood in and between them; and the mucous membrane, of a dark-green colour, was pulpy, and in a state of incipient mortification. In the part of the mesentery corresponding to this portion of intestine were also several large patches of effused blood. The convolutions of intestine above the twisted portion were very much distended, and slightly inflamed. No other morbid appearances were observed. The hernial sac, which was traced through the rings and canal, was quite empty, and adherent to the front part of the cord in the scrotum; the neck of the sac was thickened and contracted.

STRANGULATED HERNIA; REDUCTION; SYMPTOMS NOT RELIEVED; REDUCTION "EN MASSE;" REPROTRUSION OF HERNIA IN THE EFFORTS OF VOMITING; OPERATION; RECOVERY.

W. H——, aged fifty-six, was admitted into the hospital, under the late Mr. Walker, with symptoms of strangulated hernia, and he gave the following history:—He had been subject to hernia for several years; seven days before his admission the gut came down, and he was not able to reduce it. On the day of its descent he was seized with severe pain in the abdomen, which was shortly afterwards followed by sickness, and there had been no motions since that day. He was seen by a surgeon, who, after some little trouble, succeeded in reducing the hernia; but without any relief to his symptoms, which had gone on increasing in severity. At the time of his admission he complained of great pain and tenderness over the whole of the abdomen, and in the inguinal region; his countenance was very anxious; his hands and feet cold; the pulse hard and frequent; the tongue dry and coated; and the vomit was stercoraceous. After a careful examination of the right inguinal region, a small portion, apparently of gut, was discovered in the canal. He was put into a warm bath, and with very little exertion the tumour in the canal was reduced; but this afforded him no relief, the symptoms of strangulation being still as severe as ever. A question then arose as to the probability of the sac having been reduced with the hernia, and by its neck keeping up the strangulation of the gut. Fortunately, however, during the efforts of vomiting, the tumour suddenly reappeared in the canal, and Mr. Walker proceeded at once to operate. After laying bare the external ring, the sac was easily reached: it was laid open, and in it was found a knuckle of small intestine, of a very dark colour. The stricture was situated at the neck of the sac, and after its division the gut was easily returned. The bowels acted within half an hour after the operation, and the next day all pain about the abdomen had ceased. This patient did remarkably well, and he was discharged from the hospital on the seventeenth day after the operation.

These two cases afford a good example of some of the difficulties which may arise, even after the reduction of a hernia. The reduction of a hernia, with its sac, is, comparatively speaking, an accident of rare occurrence; so rare, that some of our first authorities on the subject of hernia state that they had never met with such a case. Of late years, however, the attention of surgeons having been more directed towards this point, it appears that this accident is not so rare as was at first supposed. M. J. Cloquet's experiments on the dead subject show, that under certain circumstances the reduction of a hernial sac may be effected without any great difficulty; and Ledran, La Faye, Arnaud Scarpa, Sanson, Sir C. Bell, and recently, Mr. Luke, have published cases in which this reduction was effected, more or less completely, during life. Six cases of this kind occurred in Dupuytren's own practice, and five have fallen under the immediate notice of Mr. Luke. In some of these cases the hernia was of recent date, but in others it was of long standing; and in most, the reduction was effected without great force having been made use of. In a practical point of view, the cases of a reduction *en masse* may be divided into two classes: in one class, the hernia has not been completely reduced, and has sometimes been made to reappear during the efforts of vomiting, coughing, &c.; in the second class, the tumour has been completely reduced, and has been found doubled up behind the internal ring, between the wall of the abdomen and its investing peritonæum. The difficulties which may arise in the first class of cases are generally not very great. Most commonly there is some local indication sufficiently well marked to guide the surgeon; and in the operation the reduced sac can be reached without any great trouble; but in the second class, local indications may be but slightly marked, or altogether wanting; and not only have the external ring and canal been laid open, but the internal ring has been freely divided before the tumour could be reached, and the patient's life saved.

Cases of hernia sometimes occur, in which, from various circumstances, there is every reason to believe that a reduction

*en masse* has taken place; the further history shows, however, that no such accident had occurred, and that the symptoms were dependent upon some other cause. Such was M. Sanson's case, in which an operation was decided upon for the relief of symptoms of strangulation which had existed thirteen days. On further examination of the abdomen, however, a large and firm mass was found, on the left side, descending into the pelvis; this proved to be an accumulation of hardened fæces, which was got rid of by remedies, and the patient was relieved. In the first case mentioned in this report, all circumstances also led to the supposition of a reduction *en masse*, but, after death, the symptoms were proved to have depended upon internal strangulation. A comparison of the two cases admitted into St. George's Hospital, will show how exactly alike they both were in their principal features; in both a hernia had been reduced, and the symptoms of strangulation continued, and in both, at the admission of the patient into the hospital, a small portion of gut was felt in the canal and easily reduced, and this, too, without any relief. In the second case, the hernia, fortunately, soon made its reappearance, and the patient was successfully operated upon. In the first, had not the patient been moribund, an operation of exploration in the situation of the hernia might have been performed, by which an empty hernial sac would have been found in the scrotum. And here arises a question of great practical importance. Having found that a reduction *en masse* had not taken place, ought a surgeon to carry his exploration still further? Most surgeons of the present day would, no doubt, answer in the affirmative. The possibility of the symptoms being kept up by a part of the hernial tumour only having been reduced, a small portion being still nipped by the internal ring, so small as not to be recognised by the usual means of investigation, must be borne in mind, and so, too, must be those cases, analogous in a practical point of view, to a reduction *en masse*, which sometimes occur in hernia of the congenital kind, in which the neck of the sac, and the neighbouring peritonæum have become detached from the abdominal wall, and partly pushed through the internal ring, the body and fundus of the sac remaining firmly adherent. Sabatier met with a case of this kind, and so did Sir C. Bell.

With a set of symptoms, such as was observed in Case 1, a surgeon having found the hernial sac empty and not displaced, would still, I think, be fully warranted in pushing his exploring operation as far as the internal ring, in order to ascertain that it was quite free, and that no obstruction existed in its neighbourhood, but, with the present state of our knowledge, it is doubtful whether he ought to proceed any further.

## Original Papers.

# THE LAW OF THE MORPHOLOGY OR METAMORPHOSIS OF THE TEXTURES OF THE HUMAN BODY.

(*Fourth Series of Experimental Researches.*)

By WILLIAM ADDISON, M.D., F.R.S., Malvern.

(*Continued from page* 302.)

### IX.—SCROFULA.

Scrofula is the term used to designate a particular state or condition of the living body, rendered apparent by the phenomena of its nutrition and diseases. The term, whatever may have been its origin, seems, like many others in medical science, to have been handed down, with reference to the human structure, for convenience' sake, rather than for any other reason. Writers upon the subject of scrofula, for the most part, reiterate one after another certain external appearances in the general contour of the person—in the eyes, lips, nose, countenance, or complexion, by which they say those individuals who are scrofulous may be distinguished from others who are not so. But we shall hereafter show that no satisfactory practical distinctions can be safely made upon such grounds, the constitutional disposition not declaring itself until the qualities of the textures, and their capacity of withstanding injurious influences, have been tested and declared by some irritating or disturbing cause, giving rise to an unusual local increase of nutritive matter; when the form of the morphology or metamorphosis—the conformable or unconformable type of the changes—pronounces the constitutional diathesis.

If there be one fact better established than others in respect of scrofula and scrofulous diseases, it is their hereditary character, the offspring exhibiting bodily and mental powers, and forms of disease similar and analogous to those which have been known to exist previously in one or both parents. This transmission of structural or constitutional qualities, from parent to child, is one of those remarkable facts in living bodies which the recent rapid advances of physiological science will tend to elucidate. To say that children inherit the dispositions and diseases of their parents, and to rest content with the barren assertion, is to leave to conjecture questions of the highest interest to medical and moral science. If the lineaments of the face, the colour of the eyes and hair, the tones of the voice, an ear for music, and mental aptitude, be handed down from father to son, they must be so by a wonderful consentaneous harmony of organization—an almost incredible conformability in the morphology of nutrition; and if the physiology—if the constitution, temperament, and mind, be so similar, then, however little we may be able to explain the fact, it follows almost necessarily that the pathology and diseases will prove so too; not scrofulous diseases exclusively, but all others also.

"The most certain evidence of the existence of a scrofulous disease," observes a recent medical writer, "is afforded by the production of a soft, brittle, unorganized matter, resembling curd or new cheese, which is found mixed with the contents of abscesses, or deposited in rounded masses, of different degrees of firmness, and varying in bulk from the size of a millet seed to that of a hen's egg; sometimes it is enclosed in cysts, and occasionally it is diffused, as if by infiltration, through the natural texture of the part. To the rounded masses of this substance the name of tubercle has been assigned, and the substance itself has been named tuberculous matter."*

### X.—SEAT AND NATURE OF TUBERCLES IN THE LUNGS.

Tubercular consumption and phthisis are terms used to designate that species of disease which consists in the filling up of the air-cells of the lungs, and the destruction of their vascular walls, by a soft, brittle, white matter, named tubercle, or tuberculous matter. The best and most recent pathologists have differed in their statements and opinions regarding the seat and nature of tubercles in the lungs, nor are they agreed as to the changes they undergo. Laennec describes them as small, firm bodies, which gradually enlarge, then soften, and by degrees become converted into a liquid mass. Andral differs somewhat from Laennec: he says, that tubercles soften, not from any spontaneous changes in themselves, but from an admixture of purulent matter poured out from the living texture immediately surrounding them. Dr. Carswell states that tubercles originate from morbid changes in the blood, and that their most frequent seat is the surface of the mucous membranes; this author believing, in common with many others, that the membrane of the air-cells of the lungs is a mucous membrane. Dr. C. J. B. Williams states that "lymph, pus, and tubercle, pass by imperceptible gradations into each other;" and in this opinion I concur, in so far as that pus may pass into tubercle or mucus by the rupture of its cells, or into a mixture of tuberculous and mucous matter; but the reverse never occurs.

Tubercles exist in the lungs more frequently than is generally imagined. Of the numerous apparently healthy lungs which I have examined in the course of my researches, I have found them in about one-third. In their early state, they escape notice, unless searched for with a lens in very thin sections, gently extended upon a dark back-ground. In order to make out correctly the primary situation of a tubercle, the examination should be made in the lungs of young persons who have died of other diseases; for in those who die of consumption, so many changes have taken place, and the several textures of the lungs have been so altered, that it is impossible to find tubercles in that early condition in which alone their situation, in or upon the membrane of the air-cells, can be determined.

I have repeatedly examined with the microscope the material deposited in the air-cells of the lungs in *pneumonia*, and compared its characters and appearance with that forming a tubercle, without being able to detect any more essential or constant difference between them than exists between recently excreted and old pus. The same class of objects—incoherent colourless cells, molecules, and granular matter, appears to constitute the material in both cases—and in both cases, also, the material takes primarily the shape of the air-cells in which it is seated. In the material forming the consolidation resulting from inflammation, incoherent cellular forms predominate, as they do in recent pus; whereas in tuberculous matter, granular masses and molecules greatly predominate, as is also

* Dr. Cumin, in "Cyclopædia of Practical Medicine," vol. iii. p. 701. Art. Scrofula.

the case in old pus. And were we to imagine the fluid element of old pus removed or absorbed, the remaining solid matter would be, in my opinion, tuberculous matter; the colourless elements of blood, pus, and tubercle, passing into each other.*

In pneumonia, the consolidating material is, as it were, suddenly thrown out over a wide extent of lung. All the blood-vessels are loaded with colourless elements. The blood itself, when withdrawn, assumes a buffy coat, and the texture, from the various blendings of the red colour of the blood with the white colour of the new material separated from it, assumes various hues between dark red and whitish yellow.

In phthisis, on the other hand, the consolidating material is deposited at distant points, in a much slower manner; and I have seen sections of the lung display an appearance precisely analogous, and indeed very similar, to that of the face in small pox, and this in a patient who did not die of consumption.

My researches have been in like manner extended to the characters and appearances presented under the microscope by the material taken from pimples, boils, and all kinds of eruptions on the skin; and in all these instances, incoherent colourless cells, granular matter, and molecules, have been found in the greatest abundance. Moreover,—and it is a fact of much importance,—the same objects have been detected, not only in the fixed textures surrounding the morbid matter, but likewise in blood taken from the vessels administering to their nutrition. And it would appear, that when any texture becomes involved in a hurtful or destructive inflammation, or in a tuberculous or scrofulous disease, its structural elements, whatever may be their normal qualities or characters, become more and more uniform, and at length corpuscular, the corpuscles being apparently identical with those circulating in the blood.

It has been said that tubercles arise from "an error of nutrition," which is perfectly true, but no practical advantage is derived from the use of a few words which are applicable alike to all diseases.

### XI.—STRUCTURAL CHANGES PRODUCED BY SCROFULOUS DISEASE.

Case 1.—A woman, aged thirty-four years, died of scrofulous disease of the bones, and consumption. The body was examined a few hours after death. Four sinuous canals with external outlets, discharging mucus, lymph, and clotted pus, existed on the right shoulder, leading down to diseased bone, and other textures, at the joint. Another sinus passed through the breast-bone into the fibrous or areolar texture beneath it, entering the anterior *mediastinum*. The internal surfaces of all these sinuses were excreting, incoherent, cellular forms, and when closely examined with a lens, were found red and vascular, covered with muco-purulent matter, mixed with clots and white flakes. The clots and white flakes examined with the microscope were found to be incoherent, cellular, or corpuscular textures.

On opening the chest, the sinus passing through the breast-bone was found traversing, by various channels, the areolar texture of the anterior mediastinum, which was extensively changed in character and appearance; it was much thickened, much more red and vascular, and the new anormal vessels and textures had evidently been the source whence the muco-purulent matter, the flakes, and clots, had been discharged, and to which the external opening of the sinus had given vent. The new and thickened textures, and the coats of the new vessels, were examined with a high magnifying power, (750;) they were softer and more brittle than the normal fibrous texture, and multitudes of incoherent cells were found upon them, and distributed among the remaining fibres of the structure.

The lungs externally were of a deep purplish slate colour, their volume was less than natural, and they adhered firmly to the walls of the chest. On pressing them between the fingers and thumb, numerous hard bodies were felt in their interior, and on making sections, tubercles and cavities containing pus were found disseminated through them. The tubercles were in some places hard, in others soft, and in others they appeared to have degenerated into a completely fluid pus. The cavities in many places had several sinuous communications with each other, the sinuses or channels running through a hardened and consolidated texture totally different from anything resembling the healthy parenchyma of the lung, and here and there air-tubes opened into the interior of the cavities. The textures forming the walls of the cavities bore no resemblance to the normal textures, and when the muco-purulent matter was removed from their free surface, they were seen with a lens to be traversed by numerous long varicose and tortuous red vessels, totally different in distribution and arrangement from any of the vessels of the normal textures. Similar strange vessels were also seen running along the borders of the texture contiguous to, and bounding the outline of, the tubercles. The coats of many of the smaller vessels, and the textures upon which they were distributed, were examined with the microscope, and found composed, for the most part, of incoherent colourless cells, mingled with granular matter and molecules.

Fig. 3.—A capillary vessel in the fibrous or areolar texture, (normal.)

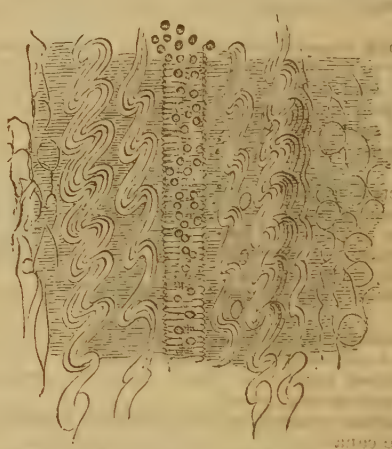

Fig. 4.—A larger vessel in the areolar texture, (normal.)

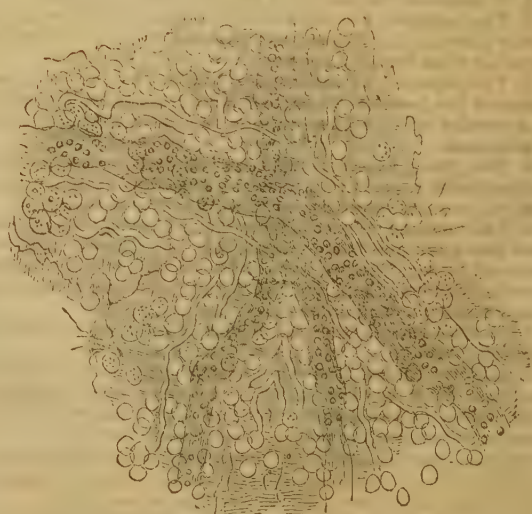

Fig. 5.—Vessels excreting pus and mucus, from a scrofulous sinus in the areolar texture of *anterior mediastinum* Case 1.

* By the term *old pus*, the reader will understand that I mean *matter* which has been a long time excreted, and in which, the corpuscles or cells having broken down, there remains a thick, more or less fluid material, composed of granular forms and molecules.

The textures were not tough, coherent, and elastic, but soft, and very brittle; and it was only here and there that the waved and tortuous filaments, copiously found in all the minute vessels traversing the areolar texture of the healthy lung, could be discovered.

*(To be continued.)*

## ON INTESTINAL OBSTRUCTIONS.

By EDWARDS CRISP, M.R.C.S.E.

*(Read before the Physical Society of Guy's Hospital, March 6th, 1847.)*

It is scarcely necessary to premise that the subject I have selected for my paper would, if fully investigated, occupy a far longer time than the rules of this Society would permit; and as I am especially desirous of hearing the opinions of the more experienced members as to the propriety of cutting into the abdomen in certain forms of intestinal obstruction, I shall content myself with a brief allusion to the various causes which may lead to constipation and obstruction of the bowels, and then pass on to the more immediate objects of the communication.

The causes which may give rise to constipation or intestinal obstruction may be either nervous or mechanical. Amongst the former may be enumerated, apoplexy, and other conditions of the brain and nervous system, which appear, in a great measure, to paralyze the muscular fibres of the intestines. The same effect may be produced by lead and other deleterious substances introduced into the system. Spasm and irregular contraction of the muscular fibres may also occasion obstruction. The above causes, although often very obstinate, may be generally overcome by appropriate treatment.

The second class of causes—namely, the mechanical, are more likely to occasion permanent obstruction of the canal, and hence, lead to fatal consequences. These obstructions may be again conveniently divided into those occurring within the tube, and those produced by pressure from without. Amongst the former, the following are the most frequent:—

1. Impacted scybalæ.
2. Extraneous bodies introduced by the mouth or anus.
3. Biliary or intestinal calculi.
4. Malignant or simple ulceration, producing thickening and contraction of the tube.
5. Contraction and thickening of the canal without ulceration.
6. Intussusception or invagination of a portion of the intestines, so as to render the canal impervious.
7. Scirrhous thickening and malignant growths of the mucous or submucous tissues.
8. Congenital contraction and occlusion occurring at all parts of the canal.
9. Fibrous tumours of the muscular or submucous tissues.

The causes acting from without are—

1. Tumours of various kinds pressing upon the bowel.
2. The escape of the intestine or omentum from its proper cavity through the abdominal parietes and other parts, constituting what is called hernia.
3. The presence of adventitious bands, which so begirt and constrict the bowel as to produce strangulation, or the passage of a portion of intestine through the mesentery, mesocolon, or omentum.
4. The gluing together of the convolutions of the intestines by coagulable lymph, (the result of acute and chronic inflammation,) so as to interfere with their peristaltic motion.
5. The twisting of the intestine in a patient who recently died under my care from a large umbilical hernia, (and who was seen by Mr. Cock.) The cause of obstruction appeared to be a twisted state of the bowel, and not, as we supposed, from ordinary strangulation.
6. Abscess occurring in the walls of the intestine, or in the adjoining parts.

I shall now allude to a few cases of constipation and obstruction which have come under my own observation, and then proceed to canvass the various arguments which have been urged against the performance of gastrotomy.

Case 1.—In January, 1836, I was requested to see a boy, six years of age, who had been subject to obstinate constipation, at intervals, from his birth. The bowels, when I saw him, had not been relieved for ten or twelve days; there was sickness, but no tenderness or distention of the abdomen. I ordered an enema; but the nurse, in attempting to administer it, found the entrance of the pipe obstructed by a hard substance. On examination, this was found to consist of hardened fæces, having a cretaceous appearance. These were removed with some difficulty by means of the handle of a small spoon, and the child quickly recovered.

I mention this case for the purpose of showing the importance of examining the rectum before the administration of active purgatives by the mouth.

Case 2.—In 1840, I was called to a maidservant who was subject to frequent attacks of constipation. The bowels on this occasion had not been relieved for fourteen days. She had pain and distention of the abdomen, with frequent sickness; the pulse was quick, and the countenance rather anxious, but the symptoms were not very urgent. Various means were tried to evacuate the bowels,—sulphate of magnesia, croton oil, and purgative enemata,—but they all failed. I then ordered a teaspoonful of new yeast to be given every hour, and after taking two or three doses she had a copious evacuation, and quickly recovered.

The following is a good example of the effects of congenital obstruction of the ilium. Death in cases of this kind has seldom occurred so soon after birth, many children having lived from seven to ten days.

Case 3.—July 20th, 1834. I attended Mrs. A—— with her sixth child. The labour was short, and the child at birth appeared perfectly healthy; but after a few hours it began to vomit a dark-coloured fluid. This continued at intervals for about twenty-four hours, when the infant died. The bowels were not relieved.

*Examination, twenty hours after death.*—The small intestines much distended with air; the peritonæal coat congested; the rectum and colon not larger than a common-sized goose-quill; the mucous lining covered with a white pulpy matter; the ilium, at about half an inch from the cæcum, terminated in a perfect *cul-de-sac*, beyond which the intestine was impervious to the extent of half an inch. No morbid change was observed in any other part.

Case 4.—June 14th, 1843, I was requested to visit Mrs. C——, aged fifty-one. She has been under the care of another practitioner for some time, but he has now ceased to attend her; she has suffered for several months from pain in the right side of the abdomen, with occasional sickness, which she attributes to a blow received in falling from a cart; the bowels have not been relieved for fourteen days; the stomach rejects every kind of food and drink; the fluid vomited deposits a slate-coloured sediment. She died on the 17th, apparently worn out by constant vomiting. The abdomen was not generally distended or tender upon pressure, until a few hours before death, except in the right side, where there was slight fulness and tenderness. I tried purgatives by the mouth, and used enemata, and threw up the rectum about four quarts of gruel, hoping by this means to remove the obstruction; the symptoms slightly improved after this, and a large quantity of fæculent matter passed, but the sickness never left her.

*Examination, twenty hours after death.*—The abdomen much distended; a small quantity of fluid in the peritonæum; the intestines congested and distended with flatus. At the lower part of the ilium, total obstruction of the bowel existed, from a hard, scirrhous-like contraction of small extent; the bowel above this contraction was much distended with gas and fæculent matter, and fluid poured into the upper part of the bowel did not pass this contraction.

The contraction in this instance was probably produced by the fall, and I believe that it was not malignant. From the quantity of fluid thrown into the rectum, and from the slight fulness and tenderness on the right side, the seat of obstruction was tolerably evident. If I should hereafter meet with a like case, I shall feel myself justified in making an incision into the abdomen, and endeavouring to remove the cause of obstruction. If recovery had taken place, an artificial anus must have been the consequence of the operation; a sequel much to be dreaded, but still, I think, in all cases, far preferable to the death of the patient.

Case 5.—Feb. 12th, 1834.—Nine P.M., I was called to Mr. W——, aged sixty-three, who was labouring under symptoms of strangulated hernia, which had existed since twelve o'clock at noon. He had suffered from congenital hernia till he was three or four years of age, and during the last five year, he has been subject to a large scrotal hernia in the right side for which he has worn a truss, but has always returned the contents of the swelling without difficulty. The tumour is now very large, rather painful on pressure; countenance anxious; pulse small, quick, and sharp; frequent vomiting of a bilious fluid. I tried the taxis, but without success; bled

him, and gave tartarized antimony. When he became faint I again tried the taxis, and succeeded in reducing the hernia after making gentle pressure for four or five minutes; he expressed himself much relieved, and I left him, supposing the stricture was removed. His wife came to me at nine o'clock the following morning, and stated, that soon after my departure, the pain and vomiting had returned and continued all the night. I visited him directly and found him suffering from great pain and tenderness of the abdomen; pulse about 70, small, and rather feeble; frequent vomiting; bowels not relieved since yesterday morning; slight puffiness about the inguinal canal. I requested two medical friends to see the case with me, and we agreed that the symptoms might arise from peritonæal inflammation, and that it would be desirable to endeavour to act upon the bowels by means of glysters and sulphate of magnesia. I saw him again at four P.M.: no evacuation from the bowels, and the symptoms more urgent than in the morning. I proposed operating, but he said that "he would rather die than be cut." His wife called again at eight P.M., and said that he had made up his mind to submit to the operation. I saw him soon afterwards, with two medical gentlemen residing in the neighbourhood, but we did not consider him in a fit state for the operation, the pulse being scarcely perceptible, and the patient evidently moribund. He died three hours afterwards.

*Post-mortem examination, sixteen hours after death.*—The right testicle drawn up to the external abdominal ring. On making an incision over the inguinal canal, and cutting into the sac, a quantity of bloody serum escaped; a small portion of intestine, of a dark chocolate appearance protruded, but could readily be returned into the abdomen. The finger could also be introduced into the cavity, and no stricture was felt. On exposing the intestines, about two feet of the ilium was found in a high state of inflammation, and tightly begirt by a membraneous band situated about an inch above the internal abdominal ring, and connected with the upper part of the tunica vaginalis.

I took the parts to Guy's Hospital, where they were to have been carefully dissected, and deposited in the museum; but I have never since been able to ascertain what became of them.

Cases like the one just described are, I believe, of very rare occurrence. This man had been the subject of congenital hernia, an adventitious band had formed at the commencement of the tunica vaginalis, which was ultimately the cause of death. In all probability, if I had operated upon this patient, I should not have found the constricted part of the bowel; for I did not observe, until after death, that the testicle was drawn up to the abdominal ring. If a similar case were to occur to me, the experience afforded by this example would enable me, by drawing down the testicle, readily to find the seat of stricture.

Case 6.—Sept. 14th, 1846.—Nine A.M.: I was asked by Mr. Skegg, of St. Martin's-lane, to see, with him, Mr. K.'s infant, aged seven months. The following is the history of the case:—Mr. Skegg was first called to the child (who had been tolerably healthy from its birth) on the 11th, and found it suffering from confined bowels, with slight sickness and straining. These symptoms led Mr. Skegg to fear that the case might be one of invagination of the bowel. The child is now in the undermentioned condition:—Countenance rather anxious, skin cool, pulse 120, occasional vomiting of bilious matter, the abdomen natural in appearance, and not tender on pressure. There is a frequent effort to strain, but the bowels have not been relieved since Friday, Sept. 11th. A small quantity of bloody mucus has passed per anum; this opening is very patulous, and on introducing the finger, a round elastic body can be felt about two inches above the anus, it is in the centre of the bowel, and the finger can be passed round it, and no attachment can be felt. There is a central aperture which admits the finger, but its length cannot be ascertained by this means; but on introducing a gum-elastic tube, it appears to terminate in a blind extremity five or six inches from the anus. Mild aperients have been given by the mouth and rectum; the bowel has been distended with gruel, and at my suggestion, the nozzle of the bellows was introduced per anum, and air forced in, for the purpose of dislodging, if possible, the obstructing body. A gum-elastic tube was also tried for the same purpose. A small dose of Battley's solution was given every five or six hours.—Eight P.M.: Bowels not relieved, and the child in the same state as in the morning. The breast milk is retained, and there is no tenderness or swelling in the abdomen. The tumour rather lower down than in the morning. Some difference of opinion exists as to the nature of the obstruction; but I have come to the conclusion, that if the case were entirely under my care, and the consent of the parents could be obtained, I should not hesitate to cut into the abdomen and search for the obstructed part, and if the intestine (as I believe) should be found to be invaginated, I would endeavour, by drawing it out, to restore it to its natural condition. This operation, however, is thought by the gentlemen in attendance not to be justifiable. Continue the medicine.

15th.—Nine A.M.: The child has been rather restless during the night, but in other respects is much the same as yesterday; skin cool; pulse 120; tongue clean and moist; abdomen natural; vomiting less than yesterday; countenance improved; frequent straining, but no evacuation. The nurse thinks that wind has passed per anum. The swelling is now about half an inch from the verge of the anus, and presents a dark shining appearance. On examination, the signs first described are observed.—Nine P.M.: The countenance rather pallid; pulse 140, and weak; but in other respects he is in the same state as in the morning; the napkin is now coloured with a greenish-white fluid; but probably this is only a secretion from the mucous membrane. A teaspoonful of castor oil to be given every four or five hours, and the opiate to be discontinued.

16th.—Eight A.M.: Soon after we left last evening, the child became very restless, and cried and screamed frequently. The abdomen became hot and tumid, whilst other parts of the body were cool. Still, the child continued to take the breast, and also drank half a pint of beef-tea, both of which it retained on its stomach, as well as three teaspoonfuls of castor oil. The countenance is now anxious; abdomen tympanitic and hot; the swelling in the rectum less tense, but excessively hot, probably ten degrees higher than the surface; the pulse very feeble and quick; no evacuation from the bowels. Previous to this period, no inflammatory symptoms were present.

The child died two hours after I saw him, although I had no reason to suppose that his death would take place so soon, as he played with a bunch of keys which were given him, put them to his mouth, and his general appearance was not that of approaching dissolution.

*Examination, twenty-two hours after death; Messrs. Pritchett, Crisp, and F. Crisp, present.*—The body in an advanced stage of decomposition, considering the period of dissolution; the face dark-coloured and swollen; the abdomen tympanitic; the integuments discoloured. On opening the abdomen, the peritonæal covering of the small intestines was seen in a congested state, but no lymph was effused; there was about an ounce of serum in the peritonæal cavity. The descending portion of the colon was of a natural colour. About midway between the last rib and the crest of the ilium, its surface presented a puckered appearance: this was found to arise from invagination of the cæcum, and a portion of the ascending colon, in the transverse and descending part. The invaginated portion was readily withdrawn, and no appearance of inflammation existed at this part. The extremity, however, of the intestine invaginated was of a dark chocolate colour; the vessels on its surface were distended with blood; brain not examined. The preparation No. 1 is the ileum and colon of this patient.

The result of the post-mortem examination has not induced me to alter my opinion as to the propriety of opening the abdomen in this case. If an incision had been made in the mesial line, the invaginated intestine could, I think, have been found, and might have been easily drawn out. The slight constitutional disturbance, the absence of inflammation until a late period, and the continuance of life for so long a time, are all, I think, features of great practical interest.

About ten years since, I stated at the London Medical Society my belief that abdominal sections would be more frequently practised, and that, even in many cases of obstructions of the bowels, patients would not be allowed to die without giving them the only chance of saving life. A part of my prognostication has been already verified; and I have no doubt, that in certain forms of intestinal obstruction, gastrotomy will hereafter be generally resorted to. I wish it to be understood that I do not advocate the performance of this operation in all cases of intestinal obstruction; nor would I in any case use the knife until every plan likely to remove the obstruction had had a fair trial. And here I cannot help adverting to the importance of the practitioner himself superintending the administration of enemata—the most likely means, when properly used, of removing the obstructing cause. The patient should, if possible, be put into a warm bath, and a gum-elastic tube introduced into the colon, (according to Dr. O'Bierne's plan,) and as much gruel thrown up as the intestines will contain. The plan of giving croton oil and other drastic purgatives at the commencement of the attack cannot

I think, be too highly censured; and it is probable that many lives have been lost by this treatment.

The use of quicksilver is another practice which has, I believe, been in several cases attended with a bad result. Some instances of recovery have occurred after its administration, but it is questionable whether the cures should be attributed to the mercury. The accompanying preparation is the pyloric end of the stomach of a woman who had suffered for some time from scirrhus of the pylorus: obstinate constipation and sickness occurred; and a quack (in the absence of the medical attendant) gave an ounce of quicksilver. She died seven days afterwards.

I examined the body, and found a considerable quantity of quicksilver at the pyloric extremity of the stomach; the pyloric orifice much thickened and contracted; the mucous membrane of a dark appearance—much softened, and some of the quicksilver imbedded in it; the remaining portion of the lining membrane rather soft, but otherwise healthy.

The injection of air into the anus, in a few instances of ileus, appears to have had a happy result. Two successful cases have recently been published. I shall now state the arguments which have been advanced against the performance of gastrotomy, giving, at the same time, the reasons which may, I think, be urged in its favour.

*Objection* 1.—The want of success which has attended the operation up to the present time.

If the recorded cases are carefully examined, the success attending this operation will, I believe, be found to be greater than is generally supposed; especially when it is recollected that many of the subjects have been nearly moribund at the time the knife was used.

M. Littre,* in 1720, was the first to recommend the operation of opening the intestine in the iliac region; but it was not attended with success until 1793, when Duret operated upon an infant for imperforate anus, thirty hours after birth.

In a table of twenty-four cases of this operation given by Mr. Teale, in the *Cyclopœdia of Practical Surgery*, it is stated that eight of the operations were successful; eighteen of the patients were infants who had an imperforate condition of the anus or rectum. I might adduce numerous examples in addition to those quoted by Mr. Teale.

M. Monod,† at the Hôpital Cochin, (1838,) operated upon a woman who had obstinate constipation, with a tumour in the ilio cæcal region. The ilium was found distended with fæces; an opening was made with scissors; a large quantity of fæcal matter escaped, which afforded great relief. This discharge continued through the wound until the third day, when death took place. The cause of obstruction was found to be a contraction of the cæcum, which would scarcely admit the point of a catheter. Dupuytren once performed a similar operation, but the patient died.

Mr. Pring,‡ in 1819, in a case of carcinoma of the upper part of the rectum, opened the colon, and the patient, a woman, sixty-four years of age, lived sixteen months. There had been total retention of the fæces for twelve days before the operation.

Dr. Markland,§ of Blackbourn, performed this operation successfully, in a man forty-four years of age, who had obstinate constipation, which was supposed to arise from the invagination of the lower portion of the colon. An incision, four inches in length, was made into the left iliac region; another opening was made into the colon, the sides of which were fastened to the external wound by means of sutures. Five or six quarts of liquid fæces were discharged; the man recovered, and was able to return to his employment; but he had artificial anus. In this, and in the first case, the patients gained flesh.

Mr. Freer,‖ of Birmingham, operated in the same manner in a case of obstructed rectum. The patient died on the ninth day: no examination of the body could be obtained.

Dr. Wilson¶ operated upon a negro, twenty years of age, who had laboured for seventeen days under bilious colic and stercoraceous vomiting. An incision, five inches in extent, was made along the linea alba: the bowels being protruded through the wound, that portion involved in the stricture came into view. The bowel was grasped above and below the obstruction, and after several efforts of considerable force the stricture gave way. The strangulated intestine was dark, livid, and approaching to gangrene. The patient's recovery was rapid and entire.

I know of only two very recent cases in which gastrotomy has been performed in this country. One of these has lately been brought before the Medico-Chirurgical Society by Dr. Golding Bird. The patient died nine hours after the operation. Mr. Hilton* (the operator in this case) "regarded the direct results of the operation as very satisfactory, and, in a surgical aspect, successful."

The other case occurred at the King's College Hospital some time since, and the following notes are kindly furnished by Mr. Smith, late house-surgeon to the hospital.

A. B. had been subject to constipation and pain in the bowels, and had had five or six severe attacks; the first when about seven years of age, each attack increasing in severity. At the present time there is constipation, (which has existed for several days,) sickness, pain about the umbilicus, fever, and constitutional disturbance, with great prostration of strength; there is also tenderness and fulness on the lower part of the right side of the abdomen. Enemata, inflations of air, and purgatives, with opium, were tried; but with no good effect. Mr. Fergusson was asked by the physician in attendance to make an incision over the cæcum; this he declined doing, preferring the direction of the linea alba. Another surgeon operated in the first-mentioned place, and punctured the swollen intestine with temporary relief; the patient died seven hours after the operation. The obstruction was found to be a thick, membraneous band, stretched across from just below the umbilicus, over a portion of the ilium, constricting, and completely encircling the gut. Mr. Fergusson thinks, that "had the finger been passed into the peritonæal cavity of the linea alba, the stricture must have been detected, and in all probability the operation would have been successful."

The operation of opening the colon through the loins, without wounding the peritonæum, as practised by Amussat, has been even more successful, as regards its immediate effects, than the abdominal section. Several of Amussat's operations terminated favourably, and in all, great relief was experienced.

In 1843, Mr. Evans,† of Derby, in a case of stricture of the colon, opened this intestine, according to Amussat's method. The patient recovered, but died three months after, of another disease, (diabetis and peritonitis.)

Mr. Teale,‡ of Leeds, operated in the same manner, under nearly similar circumstances, with great relief to the patient, but death occurred from bronchitis, on the sixth day after the operation.

*Objection* 2.—The danger of peritonæal inflammation.

The cases are now so numerous in which large abdominal sections have been successfully made; and others, in which patients have recovered from extensive wounds of the abdomen, that I think this objection can have but little weight.

The late Mr. King,§ of Saxmundham, cut into the abdomen of a female, for the purpose of removing a supposed ovarian tumour. No tumour was found, the wound quickly united, and the patient had not an untoward symptom.

Dr. Bruce,‖ of Jamaica, was called to a negress, aged sixty-two, whose abdominal parietes had been torn by the horn of an ox, an hour before his arrival. Almost all the intestines, and part of the omentum, lay by her side, covered with cane trash, sand, cinders, &c. Wine was given, and the intestines were washed, and returned into the abdomen; the wound secured, and forty drops of laudanum administered. The healing process went on very kindly; she recovered rapidly; and in ten days was sent home. She died six weeks after her removal, from fever.

Dr. Worthington¶ was called to a man who had rupture of the abdominal parietes, to the extent of eight inches, from falling against the tail of a cart. About fifteen inches of the colon, and thirty of the small intestine, protruded; the man speedily recovered.

I could, if necessary, adduce numerous examples of recovery from extensive injuries of the peritonæum.

*Objection* 3.—That recoveries have sometimes taken place under the most unpromising circumstances; that even in intussusception, the invaginated intestine has passed per anum, and the patient has done well; and in other cases of constipation, which have continued for a long time, and but little hope has been entertained of the patient's recovery, the obstruction has suddenly been removed.

* Mem. de l'Acad. des Sciences, 1820. † Archiv. Gen. deMed., Aug. 1838.
‡ Med. and Phys. Jour., vol. xlv.
§ Edin. Med. & Surg. Journal, 1825, p. 27. ‖ Med. & Phys. Journal, 1845.
¶ Transylvania Jour. of Med., 1836; and Dublin Jour., vol. x.

* The Lancet, Feb. 1847. † Dublin Journal, vol. xxvii.
‡ Provincial Medical and Surgical Journal, 1842.
§ The Lancet, 1839, vol. i. p. 70. ‖ Jamaica Physical Journal, 1835.
¶ Philadelphia Medical Examiner and Dublin Journal, vol. xxvii.

The above objection must hold good to a certain extent, and I feel that it is one of the most powerful which can be urged against the operation. Several cases of ileus are on record, where portions of towel, from five to twenty inches in length, have passed per anum, the patients afterwards recovering. A case of strangulated femoral hernia has lately been seen by my friend, Mr. Martin, of Haverhill, Suffolk. No operation was performed, the tumour burst, the fæces passed by the wound, but this healed in nine weeks, and the man was able to resume his labour.

A case of a similar kind has come to my knowledge, and several have been related by Dupuytren and others. Although spontaneous recoveries occasionally take place in strangulated hernia, I apprehend that no surgeon would be deterred from the performance of the operation on this account. I have known eleven unsuccessful operations for hernia to occur in succession, in one of the London hospitals, and I doubt whether the operation in question would ever be attended with so unfavourable a result.

*Objection* 4.—That it is generally difficult to ascertain the seat of the obstruction, as well as the nature of the obstructing cause.

This is another argument which is entitled to great weight, but still I think, that if the early history of the case be attended to, and the past symptoms carefully investigated, a clue will generally be afforded, both as to the situation of the obstruction, and its probable cause.

Thus, in constipation arising from scybala in the intestines, from spasms or from flatulence, the symptoms are not generally so urgent, the countenance is less anxious, and stercoraceous vomiting is seldom present. The pain is also more diffused, and of a spasmodic character.

When an adventitious band, or an internal hernia, is the cause of the obstruction, the past symptoms will be more severe, and will generally indicate that one or more attacks of acute or sub-acute inflammation have existed. The tenderness, if present, will be more circumscribed, and if the abdomen be carefully examined and percussed, a fulness over a particular spot will mostly be discovered.

If the obstruction be produced by contraction of the bowel, from simple or malignant ulceration, the patient will have experienced pain for some time, and will probably be able to point out the situation of the constricted part.

As regards the seat of obstruction, this may, to a certain extent, be ascertained by the quantity of fluid which may be thrown into the rectum. In Case 4, I injected four quarts of gruel, and hence inferred that the obstruction was in the small intestines. This test was, I believe, first suggested by Amussat.

*Objection* 5.—The difficulty of ascertaining the existence or peritonæal inflammation, and (if present) its extent.

In the greater number of recorded cases, general peritonitis has not occurred until a late period; and in some instances, it appears to have been absent. The tenderness and distention of the abdomen will, I think, in most instances, enable the practitioner to form an accurate opinion.

*Objection* 6.—That when the abdomen is cut into, the obstructed bowel may not be found.

I believe that if an incision, five or six inches in length, be made in the line of the linea alba, higher or lower, according to the supposed seat of stricture, the obstructed intestine will generally be discovered. In some cases, after the incision into the peritonæum, the abdominal muscles have been thrown into violent action, and the intestines protruded. It will be a question, which subsequent experience only can determine, whether the use of ether may not prevent this occurrence, and thereby greatly facilitate the performance of the operation.

If a loop of the bowel be constricted by an adventitious band, its colour and distended condition will be a tolerable guide. If the band nearly encircles the intestine, or there is occlusion from other causes, the bowel will be generally distended with air or fæces, above the obstruction. I am, however, compelled to admit, that no general rule can be applicable to all cases, and that the surgeon must be prepared to meet with difficulty and disappointment. From a careful investigation of a number of recorded cases of intestinal obstructions, I have come to the conclusion, that the operation of gastrotomy, if early performed, and if a proper discrimination be made in the selection of the cases, is likely to be attended, in many instances, with a favourable result.

Walworth, April, 1847.

## Selections from Correspondence.

*The Position in the Use of the Speculum.*

Dr. Haygarth, of Hamilton, South Canada, recommends, that instead of placing the patient on a couch, prior to passing the speculum, two chairs be placed against a table, a side of each chair to the side of the table, the two chairs facing each other, a few inches apart. The patient is requested to kneel upon the chairs, a knee upon each, and to lean forwards on the table. Dr. Haygarth considers, that the convenience of access thus obtained is greater, for all purposes, than that obtained by the usual arrangement; while the examination may be so conducted, that nothing be exposed, other than is included in the circuit of the instrument.

*A New Arrangement of the Bloodvessels.*

Mr. Jackson, who has repeatedly advanced new views respecting the circulation, and the use of the spleen, as an adjunct to the liver, has forwarded a communication, entitled, "A New Arrangement of the Bloodvessels," of which the following is an abstract:—

FIRST, OR HEPATIC VASCULAR SYSTEM.

1. *Hepatic afferent vessel.*—The spleen—that is, its venous portion, and the splenic and portal vein, and its ramifications in the liver.

2. *Hepatic capillaries.*—The minute bloodvessels intermediate between the terminal branches of the hepatic afferent vessel and the primary roots of the hepatic efferent vessels.

3. *Hepatic efferent vessels.*—The hepatic veins.

SECOND, OR PULMONIC VASCULAR SYSTEM.

1. *Pulmonic afferent vessel.*—The right auricle and ventricle, and the pulmonary artery and its ramifications.

2. *Pulmonic capillaries.*—The minute bloodvessels intermediate between the terminal branches of the pulmonic afferent vessel, and the primary roots of the pulmonic efferent vessels.

3. *Pulmonic efferent vessels.*—The pulmonary veins.

THIRD, OR SYSTEMIC VASCULAR SYSTEM.

1. *Systemic afferent vessel.*—The left auricle and ventricle, and the aorta and its ramifications.

2. *Systemic capillaries.*—The minute bloodvessels intermediate (1) between the terminal branches of the splenic artery and the primary roots of the hepatic afferent vessel, and (2) between the terminal branches of the hepatic artery and the terminal branches of the hepatic afferent vessel, and (3) between the terminal branches of the systemic afferent vessel generally and the primary roots of the systemic efferent vessels.

3. *Systemic efferent vessels.*—(1,) The gastro-intestinal (or mesenteric) veins, which terminate in the middle of the trunk of the hepatic afferent vessel, and (2) the superior and inferior venæ cavæ and the coronary vein.

The hepatic afferent vessel consists of a spleen and vein; the pulmonic afferent vessel consists of a heart and artery; and the systemic afferent vessel also consists of a heart and artery.

The pulmonic afferent vessel causes a constant and rapid motion of the blood through the pulmonic capillaries; and the systemic afferent vessel causes a constant and rapid motion of the blood through the systemic capillaries, and the hepatic afferent vessel propels the blood through the hepatic capillaries with an intermittent and slow motion. Mr. Jackson therefore regards the heart and spleen, and artery and vein, as anatomical antitheses. The use of the splenic artery he conceives to be, solely to form the capillary system, whence spring the splenic veins, of which the spleen itself is principally composed, and the tortuous length of the artery is explained, because it is not the blood that is wanted, but the bloodvessel; the tortuosity of the artery has the effect of minimising the quantity of blood that passes through it.

Embracing further, in the consideration of this subject, the physiology of digestion, he holds that "the fluids drank and the solids eaten are both imbibed—the former rapidly and the latter slowly, and not until they have become fluidified—by the gastro-intestinal capillaries; that they then pass through the gastro-intestinal veins into the hepatic afferent vessel; and that this vessel, being contractile as well as distensible throughout,—i. e., in its roots, trunk, and branches,—propels them with an intermittent and a slow motion through the hepatic capillaries. He therefore considers that the materials of which the blood is formed, or rather the blood itself, passes first through the hepatic system; secondly, through the pulmonic

system; and thirdly, through the systemic system. From the systemic system a small portion finds its way back again into the hepatic afferent vessel—i. e., into its extreme roots by the splenic artery, into its extreme branches by the hepatic artery, and into the middle of its trunk by the gastro-intestinal or mesenteric veins; but by far the larger portion passes by the superior and inferior cavæ again into the pulmonic afferent vessel, and so through the pulmonic and systemic systems alternately, and for an indefinite number of times; that is, until its component particles are either deposited in some tissue, or eliminated in some secretion.

*Case of Hysteria.*

Dr. Baillie, of Arequipa, Peru, has transmitted, at great length, the details of a case of hysteria occurring in a girl, fifteen years of age, of the sanguineous temperament. The cause of the disease appears to have been, first, great excitement at a party at which she was present, where she attracted considerable attention, and drank freely; and secondly, a severe scolding she received soon afterwards from her mother. It commenced with the usual hysterical fits, of great strength and frequency, which, having assumed a periodical tendency, were treated by sulphate of quinine. This was followed by hiccough, which at first was so gradual that it did not excite any alarm, until it became the prominent symptom of the disease, and resisted every attempt to subdue it, although ether and laudanum were exhibited in doses so large as to require remedies to counteract their poisonous effects. The influence of a violent fright was next tried, with but partial success; the hiccough returned in a few days. When the patient was first seen by Dr. Baillie, the disease had existed fourteen months, and for the last seven had ceased only during sleep. It was so loud that it could be heard at the distance of two hundred yards in the open air, and was much quicker than ordinary singultus. The symptoms had been greatly aggravated by a seton placed in the scrobiculus cordis; and the girl was pale and reduced, without appetite, but a strong desire for acids, which she was continually taking. On going to bed, also, at nine P.M., she invariably had a peculiar hysteric attack, which commenced with loss of sense and motion, soon followed by a convulsive effort of the respiratory muscles, in which all the dorsal muscles seemed to sympathize, as she was often raised so that her body formed quite an arch. This again was succeeded by a short inspiration, followed by a long sonorous expiration, forming a peculiar complaining tone, interrupted only by short occasional inspirations. The fit was generally succeeded by hiccough, which gradually gave way to sleep; it usually recurred in the morning. The disease made progress, and became so severe as to have assumed an epileptiform character; it then disappeared for a short time, and the patient went into the country, where, in the course of a month, a relapse took place, and the symptoms gradually resumed their former intensity. After a time, as some improvement was manifested, she was sent to the sea-coast, where she remained three months with some advantage, the severity of the disease being mitigated, but the complaint not altogether removed. Sea-bathing was apparently of but little benefit.

Dr. Baillie has met with other cases similar to this, but none of equal obstinacy. The hysterical attack, in one instance, came on so punctually at a fixed hour, that the striking of the clock seemed to be the signal for its commencement. It began with a most severe pain in the nail of the left thumb, which gradually extended itself upwards, increasing in acuteness, till nervous syncope was produced, the pulse not being much affected. She generally lay in this state three hours, with occasional nervous or convulsive twitchings and trembling on one side. After the stated period of duration, hiccough was the signal of a return to consciousness, and to suffering. On one of these recoveries, while in a state resembling delirium, it was painful to hear her labour under the delusion of her own death, describe its severe agonies, congratulate herself on her escape from her dreadful sufferings, and describe the melancholy pleasure she felt in being buried with a dear friend, who had really died some days previously.

*Dislocation of the Humerus backwards, beneath the Spine of the Scapula.*

Mr. Owen Fox, of Broughton, Stockbridge, Hants, having recently met with a case of this rare dislocation, forwards the particulars. The patient, a clergyman, strong and thick-set, met with the accident by being thrown out of his gig. When seen by Mr. Fox, the arm appeared shortened, and the elbow inclined inwards upon the thorax, towards the opposite side; the projecting head of the humerus was seen, and felt backwards on the scapula, beneath its spine; the rotundity of the shoulder was not so much diminished as in cases of displacement into the axilla, but the glenoid cavity was easily perceptible. The arm could be raised, and carried further inwards, but it was impossible to carry the elbow outwards and backwards. Attempts at reduction were made by means of steady extension, but failed in overcoming the resistance of the muscles. Mr. Fox then had recourse to the inhalation of ether: the patient was brought under its influence in three minutes, and the reduction was easily effected. The pulse was quickened by the ether, and perspiration, with slight headach, induced; but the effects were so transient, that the patient was able to perform service, and preach a sermon, in the evening.

Dislocation of the humerus backwards or outwards, as it is termed by the continental surgeons, is very rarely met with, and some surgeons have denied its occurrence—Bell among the number. Desault, according to S. Cooper, never saw a case; Boyer only one; Liston but one; and Sir A. Cooper mentions only two.

[Dupuytren observes,* "in the production of dislocation outwards and backwards, the weight of the body would be received upon the elbow, but the arm would probably be at the time carried forcibly forwards and upwards. Displacement in this direction is, however, extremely rare, and probably impossible, unless there coëxist an abnormal disposition of the glenoid cavity; as, for instance, when it has an inclination backwards, and is considerably elongated. In this dislocation, the arm, but slightly separated from the chest, is directed forwards and inwards, the shoulder is simply flattened at its anterior part, and the head of the humerus forms a prominence below the spine of the scapula, towards the outer side of the anterior angle of this bone."]

*Inhalation of Ether.*

Mr. Hewett, surgeon-dentist, of Tavistock-place, states, as the result of his experience with ether used in the form of inhalation, to prevent pain during surgical operations, that when the small vessels of the eye, which are usually transparent, become turgid with red blood, the full effect of the ether has been produced, and it may be dangerous to carry the inhalation any further. During the process of inhaling, the eye should be examined from time to time with a magnifying glass.

*Denman's Ether in Midwifery.*

A correspondent, under the signature of "Hope," draws attention to an extract which he makes from Denman's works, condemning interference with the progress of labour. "Hope" quaintly describes Denman's directions as *his ether*, and expresses his belief that, if they were attended to, the use of sulphuric ether in midwifery would be abandoned.

"It has been thought equally incumbent upon the practitioner to promote the power and effect of *true* pain, as it was to quiet that which was false. This opinion is, perhaps, more universally popular than any throughout medicine, and having infected the minds of practitioners, it has been as injurious as general. From this source may be traced the opinion of the necessity, and the abominable custom of giving assistance, as it is called, by dilating the internal and external parts artificially—of giving hot and cordial nourishment during labour, even in plethoric habits and feverish dispositions, by which the nature of the principle which should actuate the uterus is changed, the pains are rendered disorderly and imperfect, and the foundation of future mischief and difficulties laid. Hence also was derived the doctrine of the necessity of patients helping themselves, as it is called, by urging, with all the voluntary force they are able to exert, beyond the dictates of nature; as if labour was a trick to be learned, and not a regular process of the constitution. Women should be informed that the best state of mind they can be in at the time of labour, is that of submission to the necessities of their situation; that those who are most patient actually suffer the least; that if they are resigned to their pains, it is impossible for them to do wrong; and that attention is far more frequently required to prevent hurry than to forward a labour. In everything which relates to the act of parturition, Nature, not disturbed by disease, and unmolested by interruption, is fully competent to accomplish her own purpose; she may be truly said to disdain and to abhor assistance. Instead, therefore, of despairing, and thinking they are abandoned in the hour of their dis-

* On the Injuries and Diseases of Bones, translated by Le Gros Clark for the Sydenham Society, 1847.

tress, all women should believe, and find comfort in the reflection, that they are, at those times, under the peculiar care of Providence, and that their safety in childbirth is ensured by more numerous and powerful resources than under any other circumstances, though to appearance less dangerous."

[In these directions we fully coincide. There can be no doubt, that by obtaining the confidence and faith of the patient, the accoucheur may greatly diminish the pains of parturition. The emotion of hope is decidedly antagonistic to physical pain.]

*Case of Strangulated Inguinal Hernia in the Female.*

Mr. Brown, of Wymewold, Leicestershire, describes the case of an old lady, seventy-one years of age, ruptured on the left side for more than six years. She laboured also under procidentia uteri of some standing. About ten weeks prior to this illness, Mr. Brown attended her for constipation of the bowels, which was relieved in a few hours by some active purgatives. The second attack set in with severe pain in the stomach, constipation, and vomiting of bilious matter—the hernia, which was irreducible, being soft and yielding. The treatment consisted in the exhibition of purgatives by the mouth and in enema, and of medicines calculated to allay the sickness, but without ultimate benefit. On the sixth day, the vomiting had become feculent, the abdomen was tympanitic, and the hernial tumour was exceedingly tense, and somewhat discoloured. Hiccough also had supervened. The operation was then resorted to. It is thus described by Mr. Brown:—

"I commenced an incision at least an inch and a half beyond the ring, and extended it to the base of the tumour, which was nearly twice the size of a cricket-ball. This laid bare the fatty tissue and several fasciæ. A large vessel was seen to cross the neck of the tumour, which, being divided, bled somewhat smartly. The fasciæ being divided exposed the hernial sac, which exhibited considerable vascularity, and was of a dark-brown colour. As the hernia had existed so long, I anticipated there would be plenty of adhesions, and some difficulty in destroying them. I therefore did not think it prudent to divide the sac in its whole length, nor would it have been wise to have unnecessarily extended the incision over so large a portion of serous surface. A small opening was made immediately below the ring; but I could neither introduce the director, nor my finger-nail beneath the stricture, intending, as I have invariably done in an operation of this kind, to have divided the stricture directly upwards; so extensive and firm were the adhesions, that every attempt here was fruitless. The only alternative I had left was carefully to dissect and divide the stricture from without. So numerous, however, were the membranous bands crossing and intersecting each other,—duplicatures having been formed between the protruded bowel and omentum,—and so strongly were they all glued together, that whilst one of these remained undivided and undetached, the strangulation was not relieved, nor could the contents of the sac be returned. The intestine, which contained some indurated fæces, had become entangled with the omentum. The latter very firmly embraced the former, and a portion of the former had become doubled up over the latter, and was closely adherent to it. They were separated and placed aright, the adhesive bands were carefully detached, and I readily succeeded in returning the protrusion into the cavity of the abdomen." The bowels were freely acted on soon after the operation, and the patient was convalescent on the sixteenth day.

*Health of Towns' Bill.*

Argus draws attention to the 25th clause of this Bill, by which the appointment of officers of health is confined to members of the medical profession—either "a physician or surgeon of skill and experience." He appears to be of opinion, that under this clause general practitioners will be excluded from competing for this office; and suggests, therefore, that instead of the words, "a physician or surgeon of skill and experience," there be inserted, "qualified practitioner," or, "duly licensed to practise as a medical man."

[That the appointment of officer of health should be thrown open to all qualified members of the profession must be at once conceded; we trust that the patronage of Government, in this instance, will be accorded to merit and efficiency. Argus' suggestion, that these appointments should be given to aged medical practitioners, as a sort of honourable retirement, is perfectly indefensible, and savours greatly of a job. The duties will be laborious, if they are honestly performed, and will require the constant attention of a well-educated man, in the prime of life and vigour.]

*Medical Reform.*

Fides calls anxiously on his medical brethren, by the *vis a tergo* pressure, to force the Government speedily to pass measures to protect the interests of medicine, and to shield the public from the depredations of wholesale murderers. As a large instalment of the needed measure of medical reform, he accepts the Medical Registration Bill, which he urges should be supported by petitions signed by medical men and the clergy, and advises that minor differences of opinion respecting its merits and defects should be smoothed over, as it is a step, and a long one, in the right direction, which will not need to be retraced.

*English Chirurgical Competency.*

Aliquis remarks, that twenty-one men belonging to the College of Surgeons are considered to be competent to govern the men of the College and themselves also, whilst the commonalty are regarded as incompetent, and not to be trusted to govern themselves. He might have added—nor even to enjoy a representative government.

*The Apothecaries' Licence not available in Canada.*

Dr. Haygarth, of Hamilton, Ontario, informs us that the licence granted by the Society of Apothecaries in London, will not entitle its possessor to practise his profession in the British territory of the Canadas.

## Reviews.

*Facts which prove the Immediate Necessity of Sanitary Reform.* By J. C. Hall, M.D., &c. Second Edition: Longman and Co., pp. 60.

*On the Sanitary Condition of Newcastle-on-Tyne, and the Means necessary for its Improvement.* By G. Robinson, M.D., &c. Newcastle: Richardson. London: Longman and Co. 1847. Pp. 58.

We place these two pamphlets together, since they have reference to one and the same subject—viz., Sanitary Reform, and since our space will not allow us to notice them separately.

Sanitary Reform was one of the objects to which her Majesty, in the opening speech of the present session, stated the attention of government would be directed, and hence it has assumed the character of a national question, as one important to the national welfare. Coming before them in this light, yet the generality of the public, although they may entertain a persuasion that some legislative enactments are necessary to promote the public health, and may consider that it must be a matter of some moment to attract the attention of government, have withal little idea of the urgent necessity of immediate measures to lessen the sickness and mortality, especially of that valuable part of the community—the operatives, who suffer most from the want of such sanitary regulations. The willingness and readiness of the ministry to bring about Sanitary Reform is evinced by the introduction of the "Bill for Improving the Health of Towns in England," which would work much good; but which unfortunately, it appears, will have to stand over till the next session of parliament, on account of the pressing state of public affairs. In the meantime, therefore, many new and valuable suggestions may be offered to government, and the public in general may be stirred up to a just appreciation of the importance of the subject.

Any enactment imposing sanitary regulations will undoubtedly meet with much opposition, especially in some of its details: some will cry out for the liberty of the subject; others, perceiving that the removal of a nuisance will affect their pockets, will raise a loud wail on behalf of their interests; but, nevertheless, the broad principle must be adhered to—viz., to sacrifice private interest to public good.

Wherefore, we hold it to be good, in any reasonable way, to lay before the legislature, and the people at large, the prominent facts which call for sanitary laws, and to enforce on them their immediate necessity. Such are the objects of the two pamphlets under notice, and both of which well fulfil them. By each, similar facts are brought forward to demon-

strate the ill effects of impure air, defective sewerage, of overwork, inadequate supply of water, &c., not only on the health, but also on the morality, of the nation; and also that all these things, which in themselves imply want and misery, nevertheless cost the community an immense annual sum of money—more, in fact, than would be required to remedy the want and the misery. We have facts, also, which prove, that although the remediable evils which exist sweep away so large a proportion of the poorer inhabitants of this country, yet none, who would, can value them as a means of keeping under excessive population; for poverty, ignorance, and filth, which go hand in hand with those evils, seem to serve as a hotbed for the propagation of children; and not only, under such circumstances, is the production of offspring rapid, but individuals are produced who, from their feebleness or deformity, are of no benefit to the community, but, on the contrary, a charge—an expense to it.

It is useless for us to make any extracts from these, which are but pamphlets, and procurable by every one for himself; and every one should make himself acquainted with the existing evils, in order that he may investigate them, and discover their best remedy. Both pamphlets are well written, and well suit their end: that of Dr. Hall's is pervaded by a more flowery style; that of Dr. Robinson's is the reprint of a lecture which he delivered before a philosophical institution in Newcastle, and consequently abounds with many local references.

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*The Construction and Government of Lunatic Asylums and Hospitals for the Insane.* By J. Conolly, M.D., &c. With Plans. London: Churchill, 1847. pp. 183.

The greater part of this book appeared in the pages of The Lancet, above a year back, in the form of lectures, as the author states, "Supplementary to a Clinical Course on the Symptoms and Treatment of the various forms of Insanity;" the substance and value of which are consequently known and appreciated by all our readers; hence it is necessary for us, here, to do little more than notice the present treatise, and not to pretend to give any analysis of it.

We think we are right in saying that this treatise on the construction and government of lunatic asylums is, at least, the only one having any pretensions to giving a correct and recent account of such matters; and this character of the work was to have been anticipated, since its author is one intimately acquainted with and devoted to the subject. That there should be many egregious blunders made in the construction and management of asylums is to be expected, when we remember the great ignorance that prevails respecting the proper treatment of lunatics, both amongst the profession and the public, and also the great predilection there exists among all public bodies, or boards, against any outlay, the object of which is not exactly cognizable by them, in the building of these and other institutions, the funds for which are to be derived from the public purse. It seems, indeed, from Dr. Conolly's book, that the commissioners, whose business it is to superintend the construction of asylums, are biassed by erroneous notions in several respects, and are too much swayed in their recommendations by notions of economy; but many of which cherished notions are apparent only, involving ultimately greater expenses. Hence we would recommend the commissioners in lunacy, architects, the public at large, and the medical profession, to make themselves acquainted with the facts and views brought forward in the work under notice. It is right that medical men should know something of such matters, for to them the public will often appeal as to the utility or necessity of any plan proposed for accommodation of the insane, or for the amelioration of their condition; and on their opinion will ground their decision as to its adoption or rejection. Now a wrong opinion, expressed under such circumstances, may entail on this pitiable class of human beings—lunatics—the most disastrous and lasting evils. Moreover, ordinary practitioners occasionally have insane patients for a time in their charge; how useful would they then find some general rules of management to be to them, and to the madman's friends? Instruction to qualify them for all the above particulars they will find in this treatise on the construction and government of asylums, and imparted in a manner which will recommend the subject to them. All who read it will clearly perceive how important is attention to every external circumstance and object which can fall under the cognizance of the insane, in their treatment; and the truth of this extends to what would be mostly regarded as trivial matters.

The work is illustrated by several plans for the construction of asylums, and by a view of one now erecting at Kingston, in Jamaica.

An Appendix is added, which contains many particulars interesting to the profession. Among these, an account of the successful attempt which has been made at the Bicêtre, at Paris, to improve the condition of, and to instruct, idiots; and also one respecting the abolition of personal coercion, concerning which there is still much difference of opinion.

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*The Cyclopædia of Anatomy and Physiology.* Edited by R. B. Todd, M.D., F.R.S., &c. Part xxviii. pp. 119. London: April, 1847. Sherwood and Co.

We have here another long-promised part of this slowly-appearing, yet valuable Cyclopædia. Its value, however, is diminished, on account of the many years over which its publication has extended, the earlier parts becoming, in some particulars, rather antiquated, so that a second edition of them might well be issued. The irregular and tardy appearance of the work, which has become proverbial, must have also interfered with its success; and the hope of surviving its completion is despaired of by many. We learn, from an advertisement appended to the present part, that three volumes are now completed—the number in which the Cyclopædia was to have been got up; but that the editor finds it necessary to make another volume with those portions which yet remain to be published.

The next Part "will be published in June," says the advertisement; but if it makes its appearance by that time, it will serve as an era in the annals of the publication of the Cyclopædia of Physiology.

Another evil resulting from this work being so very slowly brought into existence is, that some of its contributors may pass off the stage of life before they have the opportunity of benefiting the world by their labours; indeed, several eminent men, whose names graced the earliest lists of contributors, have gone to their rest, and men who might have added to the value of its pages by their researches. Further, the change of contributors resulting from death and other causes mars the uniformity of its character.

The present Part under notice contains articles on several subjects, in alphabetical order, from Par Vagum to Pisces; and likewise the conclusion of the Abnormal Anatomy of Nervous Centres, and the commencement of the Physiology of the Nervous System, by Dr. Todd. The most considerable article is on Fishes, by Professor T. R. Jones; but it is as yet incomplete. It contains, as far as it goes, a good outline of the structure of this lowest class of the vertebrate kingdom. All the articles will tend to support the character of the Cyclopædia, the completion of which will be hailed by all as that of a laborious task; yet, when comparing ourselves with our continental neighbours, we must admit our inferiority as to the vigour and industry displayed in getting up like works, and as to the precision with which they are issued.

The Part before us is illustrated, where required, by engravings, concerning the execution of which, generally, we can speak in more favourable terms than that of those which have been inserted in foregoing numbers.

THE LANCET.

LONDON, SATURDAY, MAY 29, 1847.

We have a few more remarks to make on the discreditable conduct of the Council of the National Institute. A return has just been moved for in the House of Commons for a copy of the Memorial of the Council presented to Sir George Grey in December last, and dated December 24th, 1846. We must entreat the impartial attention of the profession to a comparison between the terms of that Memorial and the tenour of their advertisements of May 3rd, 1847. From the December of one year to the May of the next is no very long time in the history of an individual, and it certainly is not much in the history of a public body. It is, however, quite long enough for the Council of the Institute to turn its back completely upon itself. Winter and summer, December and May, are not more opposite and unlike than the tactics of this vacillating body at these two seasons of the year.

It will be remembered that last year the College of Physicians memorialized the Secretary of State for a new charter for that body; and the Council of the Institute also, in mere imitation, must forthwith have its Memorial for its charter, and its "head and home." In this Memorial, they pray that a charter may be given them for a new College, in which all educated men actually in practice at the time of its creation shall be received. Men from the north and the south, from the east and from the west, are to be included indiscriminately in the proposed institution. They propose at once to macadamize the great body of general practitioners, and thenceforth to constitute them one homogeneous assembly, none better, none worse, than his fellows. No matter where his qualification was obtained—"any recognised qualification or licence whatever" was to be sufficient for membership in the proposed College. The master in surgery of Glasgow; the graduate of St. Andrew's, or Aberdeen, or Edinburgh; the licentiate of the Dublin Apothecaries' Hall; the licentiate of the hall at Blackfriars; the man in practice before 1815; the member of the College of Surgeons of England, of Ireland, and of Edinburgh; the man with the double qualification as surgeon and apothecary; and the holder of either one qualification separately,—all were to meet together without distinction of rank or standing, as brethren, in the new institution. These were the liberal principles of the Council of the Institute on the 24th of December, 1846, just one week, be it remembered, before the printing of the first draft of Mr. Wakley's Registration Bill in The Lancet. But no sooner had the Bill appeared, than it became necessary to the Council to place themselves in direct hostility to its provisions. As the Bill in another form, substituting only Registration for College, embodied the same principle as that for which they had stoutly contended in their Memorial, they could only place themselves in opposition to the measure and its framer by recanting their own avowed opinions. No matter. They could and did adopt this monstrous renegadism. As though smitten by the wooden sword of Harlequin, they forthwith cry out against the Bill, as synonymous with equality, levelling, degrading the profession, and so forth. But that there may be no mistake, we proceed to place in juxtaposition their emphatic assertion of the principle of equality among the general practitioners in their Memorial, and their equally emphatic hostility to the self-same principle in the recent resolution and Advertisement of the Council.

| *Memorial in December*, 1846. | *Advertisement in May*, 1847. |
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| "They have a strong conviction, that the objects of medical reform can only be certainly attained by the establishment of a new college, distinct and different from either of the existing special institutions, *which shall embrace all persons possessed of any recognised qualification or licence whatever*, and in actual practice, as general practitioners, at the time of its foundation." | The Council object to the Registration Bill,—"That it would permit persons possessing a single qualification, as a physician, or as a surgeon, or as an apothecary only, to practise the three branches of the profession, [medicine, surgery, and midwifery,] who, according to the present laws, are unqualified so to do, thereby necessarily encouraging an inferior curriculum of medical education." |

Let the members of the Institute ponder upon these facts. The Council of the Institute falsely announce themselves to the Government as the duly elected representatives of "above "four thousand of the general practitioners of England and "Wales." This mendacious assertion is made in the teeth of the known fact, that the members of the National Institute have never reached fifteen hundred. This latter number even has been since thinned by numerous desertions; and we put it to the remaining members of this body, whether they think it honourable to themselves, or whether they think it conducive to the honour and interests of the profession, that they should continue to trust their names and subscriptions in the hands of the Council of the Institute. We well know that the members of the Institute who have not sent in their resignations, have not, with the Council, recanted the opinions of December in May; they are not frightened at the Medical Registration Bill; they are, in fact, petitioning, in great numbers, for the passing of that very Bill which their pseudo representatives would oppose by fair means and by foul. This is not as it should be. No name which has been or may be appended to a petition in favour of the Registration Bill should remain a day on the books of the Institute. Petitioners for the Bill, who so suffer their names to remain, render their petitions entirely nugatory; such a contradiction ought not to be longer permitted. For any general practitioner, in favour of the Bill for registering the educated members of the profession, and arresting unqualified practice, to permit his name to be still used by the Council of the Institute, is as though a man should supply his enemy with the arms and ammunition by which he may be shot down.

The members of the Institute may depend upon it, the acting members of the Council will exert themselves to the uttermost to damage the principle of registration, and to prevent its embodiment into an Act of Parliament. What the evidence of these parties before the Parliamentary Committee will be, time must show. We have evidence enough that it will be anything but straightforward and beneficial to the great body of general practitioners, whom they have already betrayed, in their memorials, their deputations, their printed transactions, their advertisements, and lastly and leastly, in the anonymous lucubrations of that eminent functionary, George Ross. When men put on the anonymous, of course they take a title as foreign to their own as possible. Cowards have hectored, liars have been truth itself, in a *nomme de guerre*. This worthy, on the principle of *lucus a non lucendo*, assumes a disguise as foreign to his nature as possible; calls

himself *Vox Veritas*, blowing his small trumpet against the Bill, and in favour of "a head and home." There is a simple way remaining for the members of the Institute to counterbalance all this great and small mischief—namely, by withdrawing their names from the Institute, and by petitioning Parliament in favour of MEDICAL REGISTRATION.

WE had last week to congratulate the profession on the liberal conduct of the Faculty of Physicians and Surgeons of Glasgow, in favour of the Registration Bill. This week we are glad to do the same with respect to the Colleges of Physicians and Surgeons of Edinburgh, both of whom have cordially petitioned Parliament in favour of the Bill. From all parts of the kingdom the accounts of the support given to the Bill are most cheering. We must entreat the friends of sound legislation, and the haters of presumption and quackery, to continue the presentation of petitions in favour of the Bill and against the irresponsible bodies who oppose. In particular, petitions should be sent in during the sitting of the Select Committee. Every petition should be reckoned as a good word spoken in the ears of the Committee, and as sure to produce a good result.

TEN years ago, Dr. COWAN put forward, as the epigraph of his pamphlet against quackery, the following sentence:—"The "ignorance of the community is the soil which it cultivates, "and *the press* is the machine which it sets in motion for "securing a full harvest to its labours." These words are unfortunately as true, in the general sense, in 1847, as they were in 1837. The press is still the great engine used by quackery of all kinds against legitimate medicine, and the health of the public; and strange to say, the true faith has scarcely used this powerful weapon at all in its defence. We are therefore the more delighted at any sign of the enlistment of the press on the right side, and against that huge, misshapen mass of falsehood, obscenity, and all crime, which characterizes the more odious forms of quackery in the present day.

We have often had occasion to refer to the *Glasgow Constitutional*, as originating in Glasgow an open opposition to quack advertisements—an opposition the more to be prized by the profession and by the public, as such an opposition, in the present state of things, is not prosecuted without considerable pecuniary sacrifice. The opposition to the insertion of notoriously lying quack advertisements in the Glasgow newspapers has now been carried on for many months, and several other papers besides the *Constitutional* are enlisted in this praiseworthy course. The *Glasgow Guardian* pointedly observes that "the practice of publishing abominable quack "advertisements, which is done regularly by several journals "in Glasgow, and, we blush to add, by *religious* periodicals "belonging to the Established Free Church, Wesleyan "Methodists, English Congregationalists, Episcopalians, &c. "We were lately at the trouble of examining the religious "press, for the purpose of ascertaining the extent to which "this practice prevails, and may, on some future occasion, let "the public see the names of the newspapers and magazines "which derive a portion of their support from this source." We trust the talented editor of the *Guardian* will perform his promise. He could do no greater service to morality and public decency. *We*, in turn, blush to say, that the editor of one of the Glasgow papers most notorious for the insertion of quack advertisements, is a quondam professional man, whose name we may have occasion to let the public see. Another able paper, the *Glasgow Argus*, is also a staunch opponent of the vile quack advertisements. In a recent number, an article in this paper concludes with a hearty offer to the *Glasgow Guardian* "to join it in any efforts it may make to remove the "foul blot upon the purity of the press, caused by the cupidity "of such religious and political journals as do not scruple to "take money for any advertisement, however objectionable, "and however unfit it may be to come under the notice of "modest people." We trust these upright journalists will pursue their course; they deserve the gratitude of the entire medical profession. We tender it on its behalf, and it should command the especial support of the Glasgow and Scottish faculty.

THE details of two cases, as remarkable as any which the annals of the British medical institutions have afforded, will be found in the present number of THE LANCET. We allude to the histories of the professional education and diplomas of JOHN HENRY OSBORNE, and JAMES DORE BLAKE. Both cases demand the gravest attention of the profession, and both call for notice at our hands.

In the case of JAMES DORE BLAKE, the Council of the College of Surgeons, after taking the opinions of their law advisers, decided, at an extraordinary meeting, that he had obtained his examination and letters testimonial "by false statements and imposition," and thereby declared them null and void, requesting Mr. BLAKE to return the diploma of the College forthwith. In the case of JOHN HENRY OSBORNE, all the notice taken of the matter is comprised in the query put by Mr. KEATE, "What can the Council do?" and the letter of Mr. WILDE, the law officer, full of doubts and quibbles, framed so as to check any idea of prosecution or punishment.

The profession will inquire what was the cause of the different treatment bestowed on the two cases in 1846 and 1847, and they will examine the evidence adduced in the two cases. We venture to say, that the evidence of the untruth of the certificates of Mr. JOHN HENRY OSBORNE, and of his violation of the regulations of the College of Surgeons, is infinitely more clear and cogent than any furnished against Mr. BLAKE. If punishment was so promptly meted to the one, why, we ask, was it withheld from the other? We can inform the profession of the reason; it was because, in 1846, there was no immediate fears of a Registration Bill, and of a Parliamentary Committee of Inquiry; in 1847, the Council of the College of Surgeons have both these fears before their eyes; hence their galvanic attempts to appear as defenders of the profession, by the punishment of wrong-doers! Such is the source of the very modern rigour and virtue of the Council of the College.

It is evident upon the record, that one year before he was diplomatized by the College, Mr. J. DORE BLAKE was labouring in his vocation as a retail pastrycook; that he applied himself to the study of medicine, not with a view to legitimate practice, but as a follower of the homœopathic quackery. He commenced the practice of infinitesimals by as infinitesimal a dose of study as possible. Looking at the man himself, no one would regret his disgraceful expulsion from the College; but it would and ought to be matter for grave regret,

if, even in the dismissal of such a person as this, the principles of justice and fair dealing were outraged.

Now, we are bound to say, that the conduct of the Council of the College is quite as reprehensible as that of Mr. Blake. The Council says, Mr. Blake obtained his diploma "by false statements and imposition." But there is no proof whatever advanced of anything of the kind, unless the certificates of Mr. Trotman, Surgeon, R.N., C. D. Lowder, M.D., and Dr. Sully, a late member of the Provincial Medical and Surgical Association, are to be considered as such. As far as the attendance on lectures and hospital practice goes, the veracity of the certificates are not impugned. There is not, as in the case of Mr. Osborne, any doubt raised of his having attended all the items of his certificates.

It is to the second memorial from the Taunton and Somerset Medical Association that we must look for the real grounds of the dismissal from the College. These are stated to be three —namely, that the proof of having been engaged five years in the acquirement of professional knowledge was imperfect, the testators referring to homœopathic, and not orthodox, practice; that certificates were received from one teacher on more than two branches of science; and that, instead of having attended anatomical lectures and demonstrations during two full seasons, he had only attended them during a winter and summer session. These constitute the grievances of the Association, and good grounds do they form for complaint, but not more against Mr. Blake than against the College which permitted these things to pass without check or notice until their own members called their attention to the case. In our opinion, the College of Surgeons, in depriving Mr. Blake of his diploma, have passed the heaviest censure which can be imagined upon their own gross negligence in admitting the owner of such a schedule as that of Mr. Blake's for examination at all. They are quite as culpable as he is, and they committed in their negligence a positive crime towards all members of the College who have obtained their diplomas by legitimate labour and study. When the matter was discovered, they should not only have dismissed Blake, but they should have dismissed the officers of the College, whoever they might be, whose culpable negligence caused this scandal and disgrace.

What security have the profession or the public that there are not many more cases of the same kind, in which the parties are only not guilty of being found out? We have no doubt an examination of the schedule of the passed candidate would show many other instances of teachers signing certificates in more than two branches of study. If this test were adopted inside the School in question on the present occasion, we could have a hospital in which all the diplomas of the pupils would be vitiated from a like cause; neither have we any doubt that the five years' study have been evaded—and the summer session called a season over and over again—and the dumb and blind beetles at the College, who pretend to register students and examine schedules, none the wiser.

The conduct of the Society of Apothecaries in the case of Mr. Osborne is utterly disgraceful. The profession will see, from the letter of Mr. Blatch, that the Hall authorities reserve to themselves a right of overruling any or all of their own regulations, and of deciding on admitting any candidate they choose to examination. Such a claim opens the door to the most glaring evils, and, we firmly believe, lays the Court of Examiners open to indictment for breaking their own Act of Parliament. The account of the case, as far as the Society is concerned, will serve to show the kind of protection afforded to the profession by Apothecaries' Hall. It is evident that all they wanted of Mr. Osborne was, that he should present himself before them, and pay for a licence.

To the gentlemen who have brought these cases forward, the gratitude of all right-thinking men in the profession is preëminently due. To Dr. Woodforde, and the other members of the Taunton and Somerset Association; but above all to Mr. J. E. Fosbrooke, of Calverton, near Nottingham. It is very difficult for a private individual to come forward on a matter of this kind—a private unaided individual, with nothing but a sense of right and truth to sustain him. In searching out the particulars of Mr. Osborne's delinquencies, Mr. Fosbrooke has, in the face of many obstructions, expended no inconsiderable sum of money. He has travelled upwards of fifteen hundred miles, has had many interviews with the officials at the College of Surgeons and Apothecaries' Hall, and has spared no time nor trouble in correspondence or inquiry. Therefore, when we say that Mr. Fosbrooke deserves the grateful esteem of his professional brethren, we mean it in no idle form of words, but with the most heartfelt sincerity. If the case of Osborne should rest where it is, it will be to the indelible disgrace of the authorities; but Mr. Fosbrooke will not be the less considered to have done good service to the cause of pure and sterling medical education, as opposed to assumption, trickery, and deceit.

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The Medical Registration Committee, now sitting at the Freemasons' Tavern, deserves all praise for the zeal and energy it has manifested in the cause of Medical Registration, and for the activity which it has successfully exerted in furthering the work of petitioning. We hope that its members will persevere in their laudable endeavours, and that future petitions to Parliament, in favour of the Bill, will also express the disgust of petitioners at the conduct of the odious, corrupt, and monopolizing medical corporations of London. Registration Committees, actuated by spirit and energy similar to that at the Freemasons' Tavern, ought to be established, to communicate with it in every county and borough in the kingdom.

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## SELECTIONS FROM THE PETITIONS

IN FAVOUR OF THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL, AND AGAINST THE CONDUCT OF THE CORPORATIONS IN OPPOSING THE MEASURE.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned legally qualified medical practitioners, showeth,—

That your petitioners take a deep interest in the measure now before your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," and believe that its provisions are calculated to protect them in the honourable exercise of their professional duties, and to shield the public from the nefarious pretensions of unqualified persons. Your petitioners have to regret the steps taken by the Presidents and Councils of the London Medical and Surgical Corporations, in opposing a measure which meets the views of a very great majority of the medical profession; and your petitioners have further to state, that these institutions have been productive of great evil to, and that their governing bodies have no feelings in

common with, the profession; that they have neglected to put in force those restraints upon the practices of ignorant and unprincipled pretenders which have been entrusted to them, to the serious detriment of the general, as well as of the medical public; that, instead of advancing the interests of the profession, they have retarded the progress of science; and that, instead of upholding the rights and privileges of legally-qualified medical practitioners, they have unjustly allowed them to be destroyed. Your petitioners, therefore, fully believing that the enactment of the Medical Registration and Medical Law Amendment Bill, now before your honourable House, would provide an adequate remedy for the grievances under which they are suffering, earnestly entreat your honourable House to enact that Bill into a law in the present session of parliament.

And your petitioners, as in duty bound, will ever pray.

SAMUEL LEAH, Werneth.
THOMAS COOPER LEAH, Hyde.
W. C. VAUDREY, Bridbury.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Patrick Ballantine Fergusson, residing at 14, Rivers-street, Bath, Graduate in Medicine of the University of Edinburgh, showeth,—

That your petitioner is deeply convinced that the Medical Registration and Medical Law Amendment Bill, brought forward by the hon. member for Finsbury, would prove of much advantage to the members at large of the medical profession, and be of essential service to the public; and your petitioner, therefore, earnestly hopes that no opposition brought forward by the Colleges of Physicians and Surgeons, or by any other incorporated bodies, seeking to defend privileges in their possession for the benefit of a few, unmindful of the whole body of the profession, and also of the public good, may be allowed to obstruct the appointment of a Select Committee of your honourable House, to investigate the subjects sought to be regulated by the aforenamed Bill. And your petitioner humbly and anxiously prays your honourable House to appoint such a Committee.

And your petitioner, as in duty bound, will ever pray.

PATRICK BALLANTINE FERGUSSON, M.D.

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## CASE IN WHICH THE REGULATIONS OF THE HALL AND COLLEGE WERE VIOLATED IN 1846.

*To the Editor of* THE LANCET.

SIR,—I beg to draw your attention to the following circumstances:—

In the medical weekly periodicals for August, 1845, the name of John Henry Osborne, of Epperstone, Nottinghamshire, appears as having passed his examination at the College of Surgeons, and as having obtained their diploma. It being well known to many medical men in this neighbourhood that he had not commenced his attendance at the lectures required by the curriculum laid down by that body prior to Nov. 1844, and had not continued it later than the end of the summer session of 1845, considerable surprise was created, and much curiosity excited, in the minds of several of his fellow-students, to discover in what way Mr. Osborne had been able to get through in so short a period as nine months. Convinced that the College of Surgeons had been imposed upon, I had several communications with Mr. Belfour, the secretary, on the subject. Inquiries were made by the College of all the gentlemen whose names were attached to Mr. Osborne's certificates, and their replies seemed satisfactory. In the August of 1845, Mr. Osborne commenced the practice of surgeon-apothecary in the village of Epperstone, where his father had previously practised. Satisfied that, although it had not been detected, fraud of some kind had been used, the attention of the Apothecaries' Company was drawn to the fact of his practising generally without their licence, through a requisition signed by Mr. Allen, of Arnold, Mr. Day, of Lowdham, Mr. Fowler and myself, of Culverton, (all of whom are licentiates of that body,) calling upon them either to prevent Mr. Osborne from continuing his practice, or to insist upon him undergoing his examination.

In March, 1846, Mr. Upton, the solicitor to the Apothecaries' Company, forwarded a note to me, stating that he had addressed a letter of caution to Mr. Osborne: this caution not being noticed, I subsequently received a series of interrogatories from Mr. Upton, which I filled up and returned to that gentleman; and, at his further request, an attorney was mentioned, who might collect the necessary evidence to a prosecution, and which was considered sufficient to warrant the issuing of a writ on the 17th of June. On the 20th of June, Mr. Upton wrote to Mr. Wigginton, of Bingham, stating that all proceedings against Mr. Osborne were suspended, he having represented to the Society that he was then in London, preparing to offer himself for examination. In a communication I then had with Mr. Blatch, the secretary to the Society, I again stated my suspicion that Mr. Osborne was not in possession of such authentic certificates as would justify the Apothecaries' Society in admitting him for an examination, and I offered to lay sufficient proof of my assertion before him in the course of the ensuing fortnight. In consequence, Mr. Osborne's examination was deferred. To enable me to indicate exactly where the fraud lay, Mr. Belfour furnished me with an authorized copy of the schedule Mr. Osborne had deposited at the College of Surgeons. On perusing the schedule, three distinct acts of fraud were at once manifest: the first consisted in the indentures of his apprenticeship with his father being antedated by at least seven years, (and when he wanted one month of twelve years of age,) in order that he might have the advantage of a less extended curriculum; the second, in his having obtained from Dr. Knox a certificate constituting his first annus medicus of attendance upon anatomical lectures, and of a six-months' course of dissections, with demonstrations at the Queen's College, Argyle-street, Edinburgh, during the winter session of 1839-40, Mr. Osborne never having been in Edinburgh at that time; and the last, in his having obtained a certificate of attendance on the hospital practice of the Glasgow Royal Infirmary for one year and seven months, from Nov. 1st, 1843, to July, 1845, whereas he was only entitled to a certificate for nine months. On Thursday, July 30th, in pursuance of my promise, I waited upon Mr. Wheeler, Mr. Blatch, and Mr. Upton, with the evidence necessary to prove the fraud. The first-named gentleman declined to see it, in consequence of his oath of office. I then laid before Mr. Blatch and Mr. Upton separately, a certificate from the Rev. Mr. Butler, of the Nottingham Free Grammar School, showing that Mr. Osborne was at that institution from the 30th of January, 1837, until Christmas, 1839, which proved that Mr. Osborne was not at Edinburgh during the first half of the session of 1839 and 1840, as certified by Dr. Knox, and also a letter from a gentleman, who was a fellow student with Mr. Osborne at the Andersonian University, Glasgow, stating that that person entered to the Anatomical and Physiological Lectures in the winter session of 1844-5, as a first year's student, and competed with the first year's pupils for the anatomical prize given in that session; also, a certificate from Mrs. Blagden, of Long Clawson, in the county of Leicester, to the effect that Mr. Osborne was assisting the late Mr. Blagden from Nov. 4th, 1843, until Nov. 2nd, 1844. I also laid before Mr. Blatch a letter, in which the writer gives the following explanation as to the mode in which the certificate for one year and nine months' hospital attendance was obtained, instead of for nine months only:—"I recollect standing in the lobby of the Glasgow Hospital towards the end of last summer session, which would be in July. Mr. Osborne was there also, waiting for Drs. Lawrie and Hannay to fill up his schedule for the College of Surgeons. Dr. Lawrie that day was late, and as there were a number of students waiting, he took Osborne's schedule, and signed it without filling up the blanks for the period he had been there, at the same time telling Osborne he could fill up the blanks himself. I also well recollect Osborne saying afterwards that he got Dr. Lawrie's signature, and, to use his own words, 'Now I can fill up my schedule for any length of time I like, as Dr. Lawrie has given me his signature without filling it up:' that was how the twenty-one months in Glasgow was obtained." Mr. Blatch expressed himself to me perfectly satisfied as to the fraud, and stated, that in consequence of various circumstances on the face of Mr. Osborne's certificates, his own suspicions had been awakened, and that he had appended a memorandum, with the object of drawing the attention of the Court of Examiners to them; that Mr. Osborne would not be allowed to go up for his examination, and that the prosecution would take its course. Mr. Upton also expressed himself satisfied, and observed to me, that if I had not brought forward the evidence that I then had with me, and Mr. Osborne had passed his examination, it would have been worse for him, and that I should have been the more culpable of the two, and that the Society would have considered themselves perfectly justified in entering an action against me if I had adduced it afterwards. On Thursday, August 6th, the Court of Examiners did admit Mr. Osborne to his examination, and granted him their licence; and on the 10th of that month, Mr. Blatch wrote to me, saying

that the court reserved the power of judging for themselves, in special cases, whether a candidate ought or ought not to be admitted for examination, and that they did not consider fraud had been used in this case. The College of Surgeons, seeing that the conduct of Mr. Osborne would not bear investigation, referred the matter to their solicitor, who requested me to furnish them with further evidence. On the point of Mr. Osborne being a student of practical anatomy under Dr. Knox, at the Queen's College, Edinburgh, Dr. Henry Lonsdale, who has possession of Dr. Knox's register of the practical anatomy class for 1839 and 1840, and who was his demonstrator after the winter session of 1840, says, "I have looked carefully through the class register of students attending the practical anatomy of Dr. Knox during the session of 1839 and 1840, but find no such person as John Henry Osborne, of Epperstone." Dr. G. Williamson, Fort Pitt, Chatham, who was Dr. Knox's demonstrator for the session of 1839 and 1840, on being applied to regarding Mr. Osborne's attendance, writes,—"I cannot recollect any person of the name of Osborne having attended the dissecting-rooms during the period mentioned, yet it is quite possible there may have been one of that name, whom I have forgotten, as there were many students who took out the ticket for the practical rooms, but seldom entered it, and therefore I cannot speak positive on the subject." As Mr. Osborne does not pretend to have entered to other classes than the anatomical and physiological lectures, and the course of demonstrations and dissections, it is not very probable that he would have neglected his attendance in the dissecting-rooms. With regard to Mr. Osborne's apprenticeship, I am now able to speak with confidence, that the indentures bearing the dates of 1833 to 1838 are made for the sole purpose of bringing Mr. Osborne under an earlier series of regulations, and thereby of very considerably shortening the period of his studies. The actual indentures were drawn up by Mr. Robert Sculthorpe, the deputy clerk to the Nottingham bench of county magistrates, and were executed at the residence of Dr. John Calcraft Williams, Nottingham, in the spring of the year 1840, Mr. Osborne being then with Mr. John Northern Thompson, also of Nottingham. I ought also to mention that Mr. Osborne had a certificate of attendance upon anatomical demonstrations in the Nottingham School of Medicine; but as there was not a complete set of these lectures and demonstrations delivered, they were never recognised either by the College of Surgeons or the Apothecaries' Society. Mr. Boddington's letter, dated Chesterfield, Oct. 26th, 1846, also proves that he was an assistant with his late partner, Mr. John Walker, from the 8th of December, 1842, until the 1st of September, 1843, thus shortening the period of his attendance at the Nottingham General Hospital at least four months and a fortnight, when he asserts that he was diligently attending them when at a distance of twenty-six miles.

Thus, Sir, you will see how a gentleman, who commenced his medical life in the year 1840, has been able to curtail his attendances at lectures, by means of fraudulent indentures and certificates, to the short period of nine months, and that the Society of Apothecaries, with its attention directed in the most forcible manner possible to these frauds, admitted him to his examination, and granted him their licence to practise. I herewith transmit you all the papers relative to this infamous transaction, and remain, Sir, your very obedient servant,

Calverton, near Nottingham. JOHN EDWARD FOSBROOKE.

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A large mass of important documents has been forwarded to us. From these we extract, first, a copy of the schedule of Mr. Osborne, supplied to Mr. Fosbrooke by Mr. Belfour, secretary to the Council of the College of Surgeons:—

"ROYAL COLLEGE OF SURGEONS OF ENGLAND.

CERTIFICATES OF EDUCATION.

*Preliminary Education.*

"If the candidate began the study of his profession previously to his attendance on lectures or hospital practice, let it be here stated, and whether the same was by an apprenticeship, or in what other manner.

It is hereby certified that Mr. John Henry Osborne served an apprenticeship to me, from May the first, one thousand eight hundred and thirty-three, till the first of May, one thousand eight hundred and thirty eight, during which time he had very extensive opportunities of witnessing medical and surgical practice, and also numerous cases of midwifery, under my care. (Signed,) JOHN OSBORNE, Surgeon.

Dated 28th day of May, 1844.

*Anatomy and Physiology.*

This and the following certificate are divided into two parts, as the regulations of the College require that the attendance should have been during two distinct anatomical lessons of six months each, and comprising at least 140 lectures, and 100 demonstrations.

It is hereby certified that Mr. John Henry Osborne attended my lectures on anatomy and physiology, at the School of Queen's College, Argyle-square, Edinburgh, from the fourth day of November, one thousand eight hundred and thirty-nine, to the first day of May, one thousand eight hundred and forty, and that this course included 140 lectures.

Dated first day of July, 1840. (Signed,) R. KNOX, M.D.

It is hereby certified that Mr. John Henry Osborne attended my lectures on anatomy and physiology, at the School of Anderson's University, Glasgow, from the first day of November, one thousand eight hundred and forty-four, to the thirtieth day of April, one thousand eight hundred and forty-five, and that this course included 140 lectures.

Dated 1st day of May, 1845. (Signed,) M. S. BUCHANAN, M.D.

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*Demonstrations and Dissections.*

It is hereby certified that Mr. John Henry Osborne attended my anatomical demonstrations at the School of Queen's College, Argyle-square, Edinburgh, from the fourth day of November, one thousand eight hundred and thirty-nine, to the first day of May, one thousand eight hundred and forty; that this course included 100 demonstrations; and that he carefully dissected during the same period.

Dated 1st day of May, 1840. (Signed,) R. KNOX, M.D.

It is hereby certified that Mr. John Henry Osborne attended my anatomical demonstrations, at the School of Anderson's University, Glasgow, from the first day of November, one thousand eight hundred and forty-four, to the thirtieth day of April, one thousand eight hundred and forty-five; that this course included 140 demonstrations; and that he most carefully dissected during the same period.

Dated 1st day of May, 1845. (Signed,) M. S. BUCHANAN, M.D.

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*Surgery.*

This certificate also is divided into two parts, as the regulations of the College require that the attendance on surgical lectures should have been during two distinct periods or seasons, each comprising not less than sixty lectures.

It is hereby certified that Mr. John Henry Osborne attended my lectures on surgery, at the Medical School, Portland-street, Glasgow, from the first day of May, one thousand eight hundred and forty-four, to the thirty-first day of July, same year, and that this course included sixty lectures.

Dated 31st day of July, 1844. (Signed,) W. LYON.

It is hereby certified that Mr. John H. Osborne attended my lectures on surgery, at the School of Anderson's University, Glasgow, from the third day of November, one thousand eight hundred and forty-four, to the twenty-fifth day of April, one thousand eight hundred and forty-five, and that this course included 120 lectures.

(Signed,) J. A. LAWRIE, M.D., Professor of Surgery.

Dated 21st day of June, 1845.

*Practice of Medicine.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified that Mr. John Henry Osborne attended my lectures on the practice of medicine, at the School of Anderson's University, Glasgow, from the first day of November, one thousand eight hundred and forty-four, to the twenty-sixth day of April, one thousand eight hundred and forty-five, and that this course included one hundred lectures and upwards. (Signed,) ALEX. J. HANNAY, M.D.

Dated 21st day of June, 1845.

*Chemistry.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified that Mr. John Henry Osborne diligently attended my lectures on chemistry, at the School of Anderson's University, Glasgow, from the first day of November, one thousand eight hundred and forty-four, to the first day of May, one thousand eight hundred and forty-five, and that this course included 110 lectures.

(Signed,) FREDERICK PENNY, Ph.D.,

Dated 4th day of June, 1845. Professor of Chemistry.

*Midwifery.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified that Mr. John Henry Osborne most faithfully attended my lectures on midwifery, at the School of Andersonian University of Glasgow, from the fourth day

of November, one thousand eight hundred and forty-four, to the first day of May, one thousand eight hundred and forty-five; that this course included 112 lectures; and that he has attended several midwifery cases under my direction.

(Signed,) JAMES PATERSON, M.D.

Dated 21st day of June, 1845.

*Botany.*

Required to occupy a period of three months, and to comprise not less than thirty lectures.

It is hereby certified that Mr. John Henry Osborne diligently attended my lectures on botany, at the School of Medicine, Portland-street, Glasgow, from the fourth day of May, one thousand eight hundred and forty-five, to the twenty-third day of July, one thousand eight hundred and forty-five, and that this course included sixty lectures.

Dated 23rd day of July, 1845. (Signed,) JOSEPH BELL, Surgeon.

*Materia Medica.*

Required to occupy a period of three months, and to comprise not less than thirty lectures.

It is hereby certified that Mr. John Henry Osborne attended my lectures on materia medica, at the School of Anderson's University, Glasgow, from the fifth day of November, one thousand eight hundred and forty-four, to the first day of May, one thousand eight hundred and forty-five, and that this course included 120 lectures.

Dated 1st day of May, 1845. (Signed,) J. A. EASTON, M.D.

*Hospital Surgical Practice.*

This certificate is divided into two parts, in case the attendance should have been at more than one hospital, or at the same hospital, but not during consecutive periods.

We hereby certify that Mr. John Henry Osborne very regularly attended the surgical practice of the Glasgow Hospital, from the first day of November, one thousand eight hundred and forty-three to the twentieth day of July, one thousand eight hundred and forty-five.

(Signed,) J. A. LAWRIE, } Surgeons to
A. J. HANNAY, } the hospital.

Dated 20th day of July, 1845.

*Certificate of Age.*

In the event of much difficulty or expense in obtaining the certificate of age on this sheet, it may be procured separately, and appended hereto.

*Baptisms in the Parish of Mansfield, in the County of Nottingham, in the year one thousand eight hundred and twenty-one.*

June 4th, No. 1906; John Henry, son of John and Harriet Osborne, Church-street, Surgeon. J. L. CURSHMAN, Vicar.

Extracted from the parish register of Mansfield, by me,
W. S. CURSHMAN, Officiating Minister.

*Declaration.*

This declaration to be signed by the candidate at the College in the presence of the secretary or other officer.

I, John Henry Osborne, candidate for the diploma of the Royal College of Surgeons of England, do hereby solemnly and sincerely declare, that I am twenty-two years of age; that I have been engaged during five years in the acquirement of professional knowledge; that I have regularly attended the hospital practice, and the several courses of lectures required by the regulations of the College; and that the foregoing certificates are in every respect correct and true.

(Signed,) JOHN HENRY OSBORNE.

Dated this 1st day of August, 1845.

Witness, HENRY P. GREGG.

*General Hospital, near Nottingham.*

These are to certify, that Mr. John Henry Osborne hath diligently attended the practice of medicine and surgery in this hospital for eighteen months, as physician's pupil from October 26th, 1841. Witness our hands this 20th day of May, in the year of our Lord, one thousand eight hundred and forty-five.

(Signed,) R. S. HUTCHINSON, } Physicians.
J. C. WILLIAMS, }
W. WRIGHT, } Surgeons.
G. M. WHITE, }
G. LEVICK, Secretary.

Clinical lectures on the cases of surgical patients in the Glasgow Royal Infirmary, by Dr. Pagan, and Dr. Hannay, Surgeons.

Mr. John Henry Osborne attended the above course from November, 1844, till May, 1845.

(Signed,) J. M. PAGAN.
A. J. HANNAY.

*Memoranda of additional Certificates, produced in Testimony of an Extended Professional Education.*

I certify that Mr. John Henry Osborne attended the practical chemistry course of lectures given in the laboratory of the Portland-street School of Medicine, Glasgow, from the 5th February till this date, being a course of not less than sixty lectures. (Signed,) ROBERT MACGREGOR, M.D.,
23rd July, 1845. Lecturer in Chemistry, &c.

I certify that Mr. John Henry Osborne attended the courses of anatomy and practical anatomy from 1st May till 1st August, 1845, and that, during this period, he most carefully dissected every part of the human body.

(Signed,) M. S. BUCHANAN, M.D.,
Professor of Anatomy, Anderson's University, Glasgow.

The following are the documents upon which Mr. Fosbrooke principally based his charges against Mr. Osborne, all of which, with others in addition, were formally submitted by him to the Council of the College of Surgeons, and the Court of Examiners at Apothecaries' Hall. The first letter testifies to the fact, (as far as the register of the school can testify,) that Mr. Osborne was at the Grammar School at Nottingham, from the beginning of 1837 to Christmas, 1839—a period of three years:—

Free Grammar School, Nottingham, July 27th, 1846.

I hereby certify, at the request of W. Watts, Esq., M.D., that John Henry Osborne was admitted into this school on the 30th of January, 1837, and left at Christmas, 1839, as appears from our school register.

W. BURDER, M.A., Clk.,
Master of the Free Grammar School, Nottingham.

By referring to the certificate of apprenticeship in the schedule, it will be seen that the apprenticeship is certified to have commenced in May, 1833, and ended in May, 1838; so that if it were possible to suppose the certificate of apprenticeship, and the certificate of the Rev. Mr. Burder, both true, Osborne must have been a boy at school during *the last year and a half of his apprenticeship, and for a year and a half subsequently*, and this at a time when his father testifies that he was enjoying "very extensive opportunities of witnessing medical and surgical practice, and also numerous cases of midwifery." (!) Further, by referring to the certificate of Dr. Knox, it will be seen that he was, according to the certificate, attending lectures on anatomy and physiology, and anatomical demonstrations, at Edinburgh, in November and December, 1839. The following letter appears altogether incompatible with his having been a student under Dr. Knox in 1839. If all the certificates were true, he must have been acting three different parts at one and the same time—namely, as his father's apprentice, as a schoolboy at the Nottingham Grammar School, and as a pupil of Dr. Knox at Edinburgh:—

Carlisle, Sept. 14th.

MY DEAR DR. WATTS,—I have looked carefully through the class register of students attending the practical anatomy of Dr. Knox during the session 1839-40, but find no such person as John Henry Osborne, of Epperstone.

I have not the register of those attending the lectures during that session, and, allow me to add, that I was not with Dr. Knox till the summer 1840.—Believe me, with sincere regards, yours faithfully, HENRY LONSDALE.

To Dr. Wm. Watts.

The next document appears to account satisfactorily for the presence of Mr. Osborne at Chesterfield, twenty-six miles from Nottingham, during the nine months between Dec. 8th, 1842, to Sept. 1st, 1843:—

Chesterfield, October 26th, 1846.

DEAR SIR,—In answer to your note of this morning, I beg to say that Mr. J. H. Osborne was an assistant of my late partner, Mr. John Walter, (and not of Mr. Hall,) from the 8th of December, 1842, until the 1st of September, 1843.—I am, Sir, yours truly, W. E. BODDINGTON.

W. E. Fosbrooke, Esq.

But by referring again to the schedule, it will be seen that Mr. J. H. Osborne receives a certificate during this nine months, when he was an assistant at Chesterfield, for having "diligently attended the practice of medicine and surgery"

in the Nottingham General Hospital. The certificate, it will be seen, is attested by Drs. Hutchinson and Williams, and Messrs. Wright and White, the physicians and surgeons to the Hospital.

Again, by referring to the testimonials of the two surgeons to the Glasgow Hospital, Messrs. Lawrie and Hannay, it will be seen that they testify to his having been in Glasgow from Nov. 1843 to July, 1845—a period of nearly twenty-one months. This seems, *prima facie*, an odd period to have been attending surgical practice, particularly as Mr. Osborne does not seem to have entered to any lectures in Glasgow, except those of Mr. Lyon on surgery, till Nov. 1844, just one year after his certificate testifies to his having entered to the surgical practice of the Glasgow Hospital. The letter below appears to show very satisfactorily that Mr. Osborne was not in Glasgow at all, but at Long Clawson, from Nov. 1843 to Nov. 1844. It also accounts, in an extraordinary manner, for the certificate of Messrs. Lawrie and Hannay in favour of twenty-one months' attendance on hospital practice:—

Long Clawson, Melton Mowbray, July 21st.

My dear Sir,—In reply to your note of Saturday last, I am quite sure Osborne's certificates are altogether false. He never has attended Dr. Knox's lectures, I feel confident, or he would have told me so when he was here. In fact, I have heard him repeatedly say that he had not attended any lectures, except, perhaps, some of Mr. Caunt's, previous to his going to Glasgow. I know, from White, that he was inquiring after Dr. Knox's address last spring. With respect to his Glasgow certificate, I can speak very positive as to how that was obtained, and also as to its falsity. I recollect standing in the lobby of the Glasgow Hospital, towards the latter end of last summer session, which would be in July; Osborne was there also, waiting for Drs. Lawrie and Hannay to fill up his schedule for the College of Surgeons. Dr. Lawrie that day was late, and as there were a number of students waiting, he took Osborne's schedule, and signed it, without filling up the blanks, for the period he had been there, at the same time telling Osborne he could fill up the blanks himself. I also well recollect Osborne saying afterwards, that he had got Dr. Lawrie's signature, and, to use his own words, "Now I can fill up my schedule for any length of time I like, as Dr. Lawrie has given me his signature, without filling it up." That was how the eighteen months in Glasgow was obtained. How he has got Dr. Knox's I know not. I cannot possibly be mistaken, because Osborne came to Clawson on the 4th November, 1843, and left on or about the 2nd November, 1844. I have no doubt his indentures are false; he cannot be twenty-seven years of age, and he would be if they were correct. I do not know where he was in 1839 and 1840, but I fancy at home with his father. He was some little time assistant to some surgeon at Chesterfield, whose name I forget; he was also assisting Bowker, of Bulwell, previous to his coming here; he also was assisting Thompson, of Nottingham, I think, more than once. I think if you inquire of Yates he can throw some light upon the subject, as they were schoolfellows in Nottingham. I think, very likely, if you ask him, he will tell you he was at school between the years 33—38. The register of his birth will tell you his age.

He entered the anatomical and physiological classes, in Glasgow, as a first year's student, and also competed with the first year's students for a prize. This he would not have done had he been in Edinburgh before. I think I can tell you what classes he attended in Glasgow. In the Winter Session, 44—45, he had—Surgery, Anatomy and Physiology, Demonstrations and Dissections, Practice of Physic, Materia Medica, Midwifery, Chemistry, Clinical Surgery. Summer Session, 45—Surgery, Practical Chemistry, Botany, Anatomy, and Physiology. I am, dear Sir, yours very truly,

W. E. Fosbrooke, Esq. Francis Sibery.

The testimonial from Mr. Lyon is dated from May, 1844, to July 31st, 1844; but Mr. Sibery positively states, in an extract which we shall make from a second letter to Mr. Fosbrooke, that it was in 1845 he attended these lectures. It would have been very extraordinary for a pupil to have attended Surgery in the summer of 1844, and then in the winter of 1844 to have commenced attendance upon Chemistry, Materia Medica, and Botany. But besides this, there is the positive evidence of a letter from Mr. Blagden, bearing testimony to his having been her late husband's assistant, at Long Clawson, in Leicestershire, from 1843 to Nov. 1844, a period which includes the time when he is certified to have been attending the Glasgow Hospital and the surgical lectures of Mr. Lyon.

"Osborne attended Dr. Lyon's lectures, in the Portland-street School, from May, 1845, to July, 1845; and not from May, 1844, to July, 1844. He was at Clawson at that time. I think probably he has got Dr. Knox's certificate from Mr. Maddence, Knox's demonstrator. I know they were great friends during the time he was in Glasgow. This is only supposition; but at any rate they are false certificates."

The next letter affords corroborative evidence of Mr. Osborne's having been only one winter and one summer session at Glasgow.

Dispensary, Nottingham, Saturday evening, Jan. 10th, 1845.

Sir,—In accordance with your wish, I have thought over the matter you named to me this morning, and shall endeavour to afford you all the information in the present letter I possibly can.

In respect to the winter session which Mr. Osborne spent in Glasgow—viz., 1844-5—I may say that he attended the following lectures, with hospital practice and dissections:—Surgery; Anatomy, Physiological; Anatomy, Demonstrative and Surgical; Chemistry; Midwifery; Practice of Physic; Materia Medica. These I know he entered his name for, because I recollect well introducing him to the whole of these lectures, save the one on Surgery. Whether he entered for Medical Jurisprudence or not, I cannot say; if he did, however, it was unknown to me; I believe he did not. He has since spent a summer session in Glasgow, making, in the whole, one winter and one summer course of lectures. I am not aware that he was attached to any medical school in the kingdom before he attended in Glasgow, except that he attended the anatomical lectures delivered in the Nottingham Medical School some years ago. I believe, at least I have heard, that he obtained certificates to that effect, and of course they are legal. He also received a certificate from the General Hospital of having attended the practice therein for a period of—I don't know how long. With the hope that this information will meet your wishes, I am, Sir, yours very obediently,

To W. E. Fosbrooke, Esq., Calverton. W. Yates, Surgeon.

The next three letters are official communications from the Hall and College, in reply to the statements and evidence forwarded by Mr. Fosbrooke. Other letters have been placed in our hands; but as they are chiefly acknowledgments of formal communications, we have not thought it necessary to print them. The documents, taken together, bear out everything urged in Mr. Fosbrooke's letter in an extraordinary manner.

(*Copy of Letter from the College Legal Adviser.*)

College-hill, September, 1846.

Sir,—I have read the certificates, letters, and papers respecting Mr. John Henry Osborne, with reference to Mr. Fosbrooke's communications to the College; and of course I need not say, that before any proceedings are adopted, there must be clear evidence of the untruth of the certificates, as it does not appear that there is any doubt of such certificates having been signed by the persons by whom they purport to be signed. The question as to the correctness of Dr. Knox's certificates, appears to be the most material; and the principal document disproving such certificate, as to his being at Edinburgh from the 4th of November, 1839, to the 1st of May, 1840, appears to be the certificate of Mr. Burder, the master of the school; that, however, you will perceive, only states that he left at Christmas, 1839, as appears from the school register; and it is inferred that he, therefore, could not have been at Edinburgh from the 4th of November to Christmas. This I do not think sufficient, as his name might appear on the register, although he was not actually there. Some evidence should be furnished that he was at the school during that period, and also evidence that he was not at Edinburgh from the Christmas, 1839, to the 1st of May, 1840. This, you will perceive, is indispensably necessary, as it appears that Dr. Knox does maintain that his certificate is substantially correct. A large portion of the letters and evidence appears to relate to the certificate given by Mr. Lawrie and Dr. Hannay. I believe, however, I understood from you, that the additional certificate (annexed to the schedule) from Dr. Pagan and Dr. Hannay, is correct, and that that certificate did satisfy the then existing regulations of the College. With reference to his service, under the indentures, to his father, it would appear, from the terms of the father's certificate, that he may have so far

attended to his father's practice, as to prevent it being said that the certificate is untrue; but I should be glad to be informed of the specific regulation that this certificate was given to satisfy. I am not aware that there is evidence that any of the other certificates, required by the regulations, are incorrect.—I am, Sir, your obedient, humble servant,

(Signed,) E. A. WILDE.

Edmund Belfour, Esq., Secretary.

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Albemarle-street, March 14th, 1846.

DEAR SIR,—I have just received your letter of yesterday's date, and am sorry that Mr. Belfour has not been able to give a reply to your letter about Mr. Osborne; but I know that every inquiry has been made of the teachers who signed the certificates, and answers have been received from all but Dr. Knox, who was going abroad at the moment he received Mr. Belfour's letter, and could not reply till his return. I heard last night that Dr. Knox was said to have returned, and I know that Mr. Belfour was to write to him to-day, and also to you, to explain this cause of delay—which certainly might have been communicated to you before.

I, for one, am much obliged to you for pointing out any cases of deception and irregularity, but the Council cannot punish without proofs; and, as far as inquiry has been made, according to the information given by you, all the professors and teachers whose names are affixed to the certificates, and which you say are forged, all these professors say that their signatures are genuine, and not forged. Can you bring forward any proof to convict these gentlemen of stating to the Council what you declare to be false? What can the Council do, when told that A has forged a certificate, purporting to be from B, but refer to B, and ask if the signature to the certificate be genuine or forged? and if B says it is his genuine signature, how can the Council punish A?

If you can point out any means whereby we can convict the professors of falsehood, and Mr. Osborne of forgery, I am sure the court will be very ready to take measures to check so evil a system.

I write this in a great hurry, but I dare say you will receive a letter from Mr. Belfour by this same post; and whenever a reply may be received from Dr. Knox, you will receive all the information which the Council may be able to give.—I am, dear Sir, your very faithful servant, R. KEATE.

J. E. Fosbrooke, Esq.

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Apothecaries' Hall, London, August 10th, 1846.

SIR,—I beg to inform you that your letter of the 4th inst. was laid before the Court of Examiners on Thursday last, and received their attentive consideration. After fully weighing the statements made in your letter, and upon a careful investigation of the evidence adduced by Mr. Osborne in proof of his medical education, the court was of opinion that no sufficient reason existed for refusing Mr. Osborne an examination on the ground of fraud; and with respect to a candidate's education, the court reserve to themselves the power of judging in special cases, whether, with reference to all the circumstances of the particular case, the candidate ought or ought not to be admitted to examination.

I beg further to inform you, that the court having decided upon admitting Mr. Osborne to examination, he was examined accordingly, and received a certificate of his qualification to practise as an apothecary.—I am, Sir, your obedient servant,

HENRY BLATCH,

J. E. Fosbrooke, Esq. Sec. to the Court of Examiners.

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CASE

## IN WHICH THE REGULATIONS OF THE COLLEGE OF SURGEONS WERE VIOLATED IN 1847.

*(From the Provincial Medical and Surgical Journal.)*

"CORRESPONDENCE.

Taunton, July 8, 1846.

SIR,—I am instructed by the members of the Taunton and Somerset Medical Association to forward the enclosed memorial to the President and Council of the Royal College of Surgeons of England through you.—I am, Sir, your obedient servant,

CHARLES HAYES HIGGINS, Hon. Sec.

To Edmund Belfour, Esq., Secretary to the Royal College of Surgeons.

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Taunton, June 25, 1846.

*To the President and Council of the Royal College of Surgeons of England.*

GENTLEMEN,—We, the undersigned, being Fellows and Members of the Royal College of Surgeons of England, residing in the town and neighbourhood of Taunton, and being desirous of upholding the dignity and respectability of our College, feel it our duty to draw your attention to the fact, that a Mr. James Dore Blake, who until May, 1845, and for a period of about thirteen years previously, was a retail pastrycook and confectioner in that town, has lately obtained the diploma of the College of Surgeons; and to represent to the Council, as well the scandal to our College which such a circumstance is calculated to produce, as the extreme hardship to those members of the College, who, by the regulations of the College, have been obliged to go through a lengthened period of regular study, and a great deal of expense, in order to obtain a diploma which has been granted to a retail shopkeeper of thirteen years' standing, after a period of only one year of alleged study, and at a comparatively trifling outlay of money.

And we farther call upon you, the President and Council of our College, to prosecute such inquiries into the testimonials and certificates produced by Mr. James Dore Blake, before the Court of Examiners, as shall place the matter in a position satisfactory to all concerned in upholding the honour and credibility of the College of Surgeons.—We have the honour to subscribe ourselves, your obedient servants,

R. R. SEWELL, Bridgewater; F. H. WOODFORDE, M.R.C.S.E., Taunton; W. M. KELLY, M.R.C.S.E., Taunton; G. CORDWENT, M.R.C.S.E., Taunton; J. PRANKERD, M.R.C.S.E., Langport; H. W. RANDOLPH, M.R.C.S.E., Milverton; H. F. LING, M.R.C.S.E., Stogumber; C. H. HIGGINS, F.R.C.S.E., Taunton; C. HUGO, M.R.C.S.E.; J. DYER, M.R.C.S.E., Creech; W. BEADON, M.R.C.S.E.; W. CATLETT, M.D., M.R.C.S.E.; H. ALFORD, F.R.C.S.E.; F. WELCH, F.R.C.S.E.; F. FOSTER, M.R.C.S.E.; H. LIDDON, M.R.C.S.E.; J. LIDDON, F.R.C.S., Eng.; C. H. CORNISH, F.R.C.S., Eng., Wellington; W. C. PYNE, M.R.C.S.E., Wellington; W. C. PYNE, jun., M.R.C.S.E., Wellington; A. LANGLEY, M.R.C.S., Eng.; G. KIDGELL, M.R.C.S.E., Wellington.

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Royal College of Surgeons of England, July, 1846.

SIR,—I have laid before the Council of this College the memorial enclosed in your letter of the 8th instant, signed by five (four*) Fellows, and eighteen other Members of the College, residing in the town and neighbourhood of Taunton, drawing the attention of the Council 'to the fact, that a Mr. James Dore Blake, who, until May, 1845, and for a period of about thirteen years, was a retail pastrycook and confectioner in that town, has lately obtained the diploma of the College of Surgeons,' and calling upon 'the Council to prosecute such inquiries into the testimonials and certificates produced by Mr. James Dore Blake, before the Court of Examiners, as shall place the matter in a position satisfactory to all concerned in upholding the honour and credibility of the College of Surgeons.' And I am directed by the Council to transmit to you copies of the several certificates handed in by Mr. Blake, prior to his admission to examination for the diploma of this College.—I am, Sir, your most obedient servant,

EDMUND BELFOUR, Sec.

Charles Hayes Higgins, Esq.,
Hon. Sec. Taunton and Somerset Medical Association.

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ROYAL COLLEGE OF SURGEONS OF ENGLAND.

CERTIFICATES OF EDUCATION.

*Preliminary Education.*

If the candidate began the study of his profession previously to his attendance on lectures or hospital practice, let it be here stated, and whether the same was by an apprenticeship, or in what other manner.

[*Printed Certificate filled up.*]

It is hereby certified, that Mr. J. D. Blake has been employed in the study of medicine during the last ten years, about five of which he acted with me, and under my directions, and to my perfect and entire satisfaction.

(Signed,) W. H. TROTMAN, Surgeon, R.N.

Dated 2nd day of April, 1845.

(See also letters appended.)

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*Anatomy and Physiology.*

This and the following certificate are divided into two parts, as the regulations of the College require that the attendance should have been during two distinct Anatomical Sessions, of six months each, and comprising at least 140 lectures, and 100 demonstrations.

It is hereby certified, that Mr. James Dore Blake very diligently attended my lectures on Anatomy and Physiology, at

* The number of fellows appears to be five, from the list of signatures.—[ED.]

the School of Medicine, Charlotte-street, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of August, one thousand eight hundred and forty-five, and that this course or session included seventy lectures. (Signed,) G. D. Dermott.

Dated 1st day of April, 1846.

It is hereby certified, that Mr. James Dore Blake very diligently attended my course of lectures on Anatomy and Physiology, at the School of Charlotte-street, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six, and that this session included 142 lectures.

Dated 1st day of April, 1846. (Signed,) G. D. Dermott.

*Demonstrations and Dissections.*

It is hereby certified, that Mr. James Dore Blake very diligently attended my Anatomical Demonstrations, at the School of Medicine, Charlotte-street, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of August, one thousand eight hundred and forty-five; that this session included fifty demonstrations, and that he diligently dissected during the same period.

Dated 1st day of April, 1846. (Signed,) G. D. Dermott.

It is hereby certified, that Mr. James Dore Blake very diligently attended my Anatomical Demonstrations, at the School of Medicine, Charlotte-street, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; that this session included upwards of 100 demonstrations, and that he diligently dissected during the same period.

Dated 1st April, 1846. (Signed,) G. D. Dermott.

*Surgery.*

This certificate also is divided into two parts, as the regulations of the College require that the attendance on surgical lectures should have been during two distinct periods or seasons, each comprising not less than sixty lectures.

It is hereby certified, that Mr. James Dore Blake very diligently attended my lectures on Surgery, at the School of Medicine, Bloomsbury, from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of August, one thousand eight hundred and forty-five; and that this course included forty lectures.

Dated 1st day of April, 1846. (Signed,) G. D. Dermott.

Mr. J. D. Blake also very skilfully performed many of the capital surgical operations on the dead body under my superintendence.

It is hereby certified, that Mr. James D. Blake very diligently attended my lectures on Surgery, at the School of Medicine, Bloomsbury, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this session included eighty lectures.

Dated 1st day of April, 1846. (Signed,) G. D. Dermott.

*Practice of Medicine.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified, that Mr. J. D. Blake very diligently attended my lectures on the Practice of Medicine, at the School of Medicine, Charlotte-street, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this course included 100 lectures.

Dated 1st day of April, 1846. (Signed,) J. C. B. Aldis, M.D.

*Chemistry.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified, that Mr. James D. Blake attended my lectures on Chemistry, at the School of Medicine and Surgery, Charlotte-street, from the 1st day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this course included sixty lectures.

Dated 1st day of April, 1846. (Signed,) John Ryan.

*Midwifery.*

Required to occupy a period of six months, and to comprise not less than sixty lectures.

It is hereby certified, that Mr. James D. Blake attended my lectures on Midwifery, at the School of Midwifery, Russell-place, from the 1st day of May, one thousand eight hundred and forty-five, to the last day of December, one thousand eight hundred and forty-five; that this course included upwards of 100 lectures, and that he has attended several midwifery cases under my direction.

Dated 13th day of February, 1846. (Signed,) J. H. Davis.

*Botany.*

Required to occupy a period of three months, and to comprise not less than thirty lectures.

It is hereby certified, that Mr. J. D. Blake has diligently attended my lectures on Botany, at the School of Medicine, Charlotte-street, from the 5th day of May, one thousand eight hundred and forty-five, to the 24th day of July, one thousand eight hundred and forty-five; and that this attendance included thirty lectures.

Dated 29th day of July, 1846. (Signed,) B. Clarke.

*Materia Medica.*

Required to occupy a period of three months, and to comprise not less than thirty lectures.

It is hereby certified, that Mr. James Dore Blake attended my lectures on Materia Medica, at the School of Medicine, Charlotte-street, Bloomsbury, from the 2nd day of October, one thousand eight hundred and forty-five, to the 1st day of April, one thousand eight hundred and forty-six; and that this course included eighty lectures.

Dated 1st day of April, 1845-46. (Signed,) G. Smith, M.D.

*Hospital Surgical Practice.*

This certificate is divided into two parts, in case the attendance should have been at more than one hospital, or at the same hospital, but not during consecutive periods.

We hereby certify that Mr. James D. Blake attended the surgical practice of University College Hospital from the 1st day of May, one thousand eight hundred and forty-five, to the 1st day of May, one thousand eight hundred and forty-six.

(Signed,) Robert Liston; R. Quain;
Dated 1st day of May, 1846. Surgeons to the Hospital.
W. Long.

*Certificate of Age.*

In the event of much difficulty or expense in obtaining the certificate of age on this sheet, it may be procured separately, and appended thereto.

*Declaration.*

This declaration to be signed by the candidate at the College, in the presence of the secretary or other officers.

I, James Dore Blake, candidate for the diploma of the College of Surgeons of England, do hereby solemnly and sincerely declare, that I am twenty-two years of age; that I have been engaged during five years in the acquirement of professional knowledge; that I have regularly attended the hospital practice, and the several courses of lectures required by the regulations of the College; and that the foregoing certificates are in every respect correct and true.

Dated this 4th day of May, 1846. James Dore Blake,
Witness, H. P. Gregg.

Taunton, Feb. 20th, 1846.

I hereby certify that Mr. James D. Blake, of Taunton, was born in Salisbury, on the 18th day of November, one thousand eight hundred and five. James Blake.

*Memoranda of additional Certificates, produced in testimony of an extended Professional Education.*

I certify that Mr. James Dore Blake has skilfully performed many of the principal surgical operations during the session last past, and terminating this present month.

School of Medicine, Bloomsbury, April 29th, 1846. G. D. Dermott.

[*Schedule according to the regulations of March*, 1835.]

Edm. Belfour,
Sec. College of Surgeons, June 2nd, 1846.

*Private Certificates in the form of Letters, forwarded from the College of Surgeons.*

(copy.)

I hereby certify that Mr. J. D. Blake has been employed in study and practice of medicine during the last ten years, about five of which he acted with me and under my direction, and to my perfect and entire satisfaction.

Bristol, 2nd April, 1845. W. H. Trotman, Surg. R.N.

(copy.)

This is to certify that Mr. J. D. Blake, of Taunton, Somerset, has been for many years a student of medicine and surgery, for which he has a rare natural aptitude; that he was

for some years under the direction and superintendence of a qualified practitioner; and, moreover, that he has been actually pursuing the practice of medicine for several years past.

C. D. J. Lowder, M.D.,
Physician to the Bailbrook Lunatic Asylum.

Sion Lodge, Bath,
Dec. 3rd, 1846.

(COPY.)

Oakhills, Taunton, Somerset, April 20th, 1845.

This is to certify that Mr. James D. Blake has for many years, to my knowledge, been studying medicine as an amateur, and for several years past in the profession, as an assistant and practitioner.

Henry Sully,
M.D. to his Majesty the King of Hanover.

(COPY.)

I have great pleasure in testifying that I have known Mr. J. D. Blake for several years, during which time he has been studying medicine and practising the same.

I consider him to have a *peculiar aptitude* for this branch of science, and I should put myself under his care (and, indeed, have consulted him) with the greatest confidence.

Sheffield, Nov. 13th, 1845. J. W. Wellesley.

(COPY.)

I hereby certify that Mr. James Dore Blake has unceasingly and most diligently attended my lectures during the summer of 1845, commencing on the 1st day of May last, and terminating in the latter end of the July following.

That he has also very diligently dissected during the above period, and performed, under my superintendence, many of the capital surgical operations.

That he is also attending, with the strictest diligence and regularity, the present winter courses now delivered at the Charlotte-street School of Medicine. G. D. Dermott.

Feb. 9th, 1846, Bedford-sq.

(COPY.)

This is to certify that Mr. James Dore Blake has been in very regular attendance on the Hospital-practice and clinical lectures at the Institution, since May, 1845.

Richard Quain, M.D.,
House-physician, University College Hospital.

Feb. 7th, 1846.

(COPY.)

University College, Feb. 6th, 1846.

I certify that Mr. J. Dore Blake has been a diligent attendant at the Hospital during the time he has been a pupil of the Hospital. R. Quain.

Memorial Second.

*To the President and Council of the Royal College of Surgeons of England.*

Gentlemen,—Some time since, a memorial, signed by four Fellows and nineteen other members of the College of Surgeons, was presented to you, touching the diploma of a Mr. James Dore Blake, for many years, and until May, 1845, a retail shopkeeper &c. in the town and neighbourhood of Taunton, Somerset. In reply to this memorial, you were pleased to transmit, through the secretary of the College, authentic copies of the testimonials and certificates, in consideration of which Mr. Blake was admitted to an examination, and subsequently obtained from you a diploma.

Having given these testimonials and certificates full consideration and a careful examination, we, your memorialists, beg to submit, that in *three particulars* they are at variance with the regulations and requirements laid down by the College authorities for the observance of candidates of Mr. Blake's (supposed) standing; and we beg respectfully to call your attention to this circumstance, believing, as we do, that it is calculated to throw great discredit upon our own diplomas, and to prejudice the respectability of our College.

By the regulations of the Council respecting the professional education of candidates for the diploma, dated March 14th, 1835, candidates are required 'to bring proof,' amongst other matters, of having been engaged five years in the acquirement of professional knowledge—of having studied anatomy and physiology by attendance on lectures and demonstrations, and by dissections, *during two anatomical seasons.**

It is moreover stated, that 'certificates will not be received on more than two branches of science from one and the same lecturer; but anatomy and physiology, demonstrations and dissections, materia medica and botany, will be respectively considered as one branch of science.'

Now, upon referring to Mr. Blake's certificates, we find the following points upon which the regulations of the College appear to have been avoided or neglected:—

And, first, as to certificates of the period or duration of professional education, we can discover only certain loose letters from various persons, referring to a period of about ten years; whereas the College authorities require that it should be stated 'whether' such professional education '*was by an apprenticeship, or in what other manner.*' And on this point we beg farther again to draw your attention to the fact, that from the year 1830, to the 1st of May, 1845, Mr. Blake was actively engaged as a retail tradesman, his career during that time having been as follows:—

From 1830, or thereabouts, until December, 1839, Mr. Blake was *personally* engaged as a retail pastry-cook, in the town of Taunton. At that date he embarked in co-partnership with a Mr. Richards, of the same town, in an iron foundry, taking an active share in his new business. From Mr. Richards Mr. Blake separated, somewhere about March, 1841, when he opened a pastry-cook's shop in the city of Bristol, where he remained until September, 1842, combining with the duties of his shop the study of homœopathy, under a Mr. Trotman, an homœopathic practitioner in that city, and from whom a certificate was received at the College, as proof of Mr. Blake's professional education. From September, 1842, to December, 1843, Mr. Blake was occupied in smelting iron ore for Sir Thomas Lethbridge, residing in the immediate neighbourhood of Taunton. And finally, in December, 1843, or January, 1844, he returned to Taunton, having purchased the business of a Mr. Hitchcock, a retail pastry-cook, and in which business he was constantly and personally engaged, until May, 1845, combining, as at Bristol, with the duties of his shop, the study and practice of homœopathy. In May, 1845, he removed to London, and on the 8th of May, 1846, he obtained his diploma, and is now a professed homœopathic practitioner at Taunton.

In the second place, we find, that instead of two anatomical seasons, each extending 'from October to April, inclusive,' and comprising at least 140 lectures, 100 demonstrations, &c. &c., Mr. Blake's certificates only show attendance on the required studies during one winter season, of 140 lectures, and one summer season of three months, comprehending only seventy lectures on anatomy and physiology; and one winter season of demonstrations, of 100 demonstrations; and one summer ditto, of fifty demonstrations.

And lastly, we find that Mr. Blake has been permitted to hand in certificates of lectures on *three distinct* branches of science, delivered by one and the same person—viz., on anatomy and physiology, on demonstrations and dissections, and on surgery.

Having pointed out these circumstances, we beg to commit the matter into your hands, trusting that you will cause such inquiries to be instituted, as, in the words of our former memorial, 'shall place the matter in a position satisfactory to all concerned in upholding the honour and credibility of the College of Surgeons.'

Signed by desire, and on behalf of the former memorialists and of the members generally of the Taunton and Somerset Branch of the Provincial Medical and Surgical Association.

Francis Henry Woodforde, M.D., M.R.C.S., Pres.
Charles Hayes Higgins, F.R.C.S.E., Hon. Sec.

Taunton, Nov. 12th, 1846.

No reply having been received to the second memorial, the following letter was addressed to the authorities of the College:—

*To the President and Council of the Royal College of Surgeons of England.*

Gentlemen,—We are instructed by the members of the Taunton and Somerset branch of the Provincial Medical and Surgical Association to draw your attention to their memorial bearing date Nov. 12th, 1846, and referring to the diploma of a Mr. James Dore Blake, until very lately a retail shopkeeper, and now an homœopathic practitioner, in the town of Taunton.

And we are further directed to inquire whether any and what answer may be expected to the above memorial.

(Signed)
Francis Henry Woodforde, M.D. &c., President.
Charles Hayes Higgins, F.R.C.S.E., Hon. Sec.

Taunton, Dec. 15th, 1846.

* An anatomical season is understood to *extend from October to April inclusive, and to comprise at least* 140 *lectures on anatomy and physiology, and at least* 100 *demonstrations &c.*, exclusive of dissections, of which distinct certificates are required.

*To F. H. Woodforde, M.D., and C. H. Higgins, Esq.*

Gentlemen,—I have received your letter of the 15th inst., relating to a memorial on the subject of the diploma granted to Mr. James Dore Blake, and inquiring whether any and what answer may be expected to that memorial.

I beg to inform you that the earliest opportunity was taken of laying that memorial before the Council, who are now engaged in the consideration of the subject, regarding it as one of great importance, and requiring full investigation, which they are determined to follow up with as little delay as possible.—I have the honour to remain, Gentlemen, your very obedient servant, William Lawrence.

Royal College of Surgeons, Lincoln's-inn-fields.

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Royal College of Surgeons of England,
29th April, 1847.

Sir,—By direction of the Council of this College, I transmit to you copies of resolutions of the Council, on the 27th inst.

I have the honour to be, Sir, your most obedient servant,
Edmund Belfour, Secretary.

Dr. Woodforde, President of the Taunton and Somerset Branch of the Provincial Medical and Surgical Association.

At an extraordinary meeting of the Council of the Royal College of Surgeons of England, on Tuesday, the 27th of April, 1847,

Resolved,—That the following resolution of the 19th of April inst. be confirmed:—

'That it appears to the Council that Mr. James Dore Blake obtained his examination and letters testimonial by false statements and imposition, and the Council does therefore recal such letters testimonial, and hereby declares the same to be void.'

Resolved,—

'That Mr. Blake be requested to return the diploma granted to him, he having ceased to be a member of this College.'

Edmund Belfour, Secretary.

## Correspondence.

### THE AGE OF MANUALS.

*To the Editor of* The Lancet.

Sir,—I have by no means said all I have to say and intend to say on this subject. Not that I would devote another word upon a person who can think and write in the manner of "A Friend to the Pupil." But leaving that person to the contempt he has inspired, I would pursue the important topic.

It is not the low and mean kind of knowledge and attainment which must satisfy the views of those students who confine themselves to these channels; but, Sir, it is the mean and grovelling mind that such proceedings must engender.

What aspirations after science, and scientific distinction, can these readers of Manuals by any possibility have or manifest? What love of science in themselves—what esteem for science in others? What a mean thing must our profession be in their hands—in their administrations! How mean must be the position in society of such men and of the profession into which they are admitted! Why should the country practitioner be so far below the village clergyman? Why should not the country practitioner grace the profession, as Jenner, even had he not been "the immortal Jenner," would have graced it? and be the friend, yes, and the companion, of the well-bred and well-informed people of his district? What is requisite to accomplish this elevation? Literature; but especially science; a liberal education; a habit of investigation.

Can Manuals teach these things? Can Manuals infuse this spirit? I say—and I say loudly—No!

Instead of these Manuals, which, after all, are but sordid, money-making speculations, let our students possess a library—a library of the original and best works; not a trumpery encyclopædia neither; but works, the result of investigation. Let them read the Life of Jenner! Let them catch *his* spirit. Let them imitate him, at however humble a distance,—yes, and his worthy successor, Mr. Ceely, of Aylesbury. How exalted and noble would our profession and our position then soon become!

I am happy to say that Mr. Ceely's is not the only name which I can propose for imitation and emulation on the part of our students. Let them pursue the honourable career recently pursued with so much talent, perseverance, and advantage, by Mr. Crisp, of Walworth. Such are the men who will raise both themselves and our profession. Mr. Ceely and Mr. Crisp never imbibed their zeal and their spirit from the low study of mere Manuals. I rather imagine that the works of Jenner himself, and Hodgson, were *their* models, day and night; and of *such* works I will say to our pupils,

"Nocturnâ versate manu, versate diurnâ."

Let them think, too, of the rank all these gentlemen, instantly as it were, took in their profession. It is not by Manual-labour that these things are achieved, but by works breathing the love of science, the ardent love of inquiry, and research, and discovery—in a word—of further attainments.

But Manual-knowledge, and review-knowledge, and cyclopædia-knowledge, let them eschew: hirelings are these writers all. Let our students imbue themselves with original works; not alone with the facts they contain, but with their spirit, the spirit of investigation.

We shall then raise the idea of our profession in the public mind, which at present soars no higher than that of seeking a remedy for a disease: whereas the human frame is a machine, to be studied in its natural and in its deranged conditions, and instead of the empirical trial of *a* remedy for *a* disease, we want *every* appliance which can conduce to the restoration of health, scientifically and literally considered.

Can Manuals, or any such mean things, inspire our students with such a noble spirit? I gravely and conscientiously answer—No!

A Looker-On.

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### FEES BY INSURANCE COMPANIES.

*To the Editor of* The Lancet.

Sir,—Apropos of the dinner in aid of the Fund for the Relief of the Widows and Orphans of Medical Men, announced in your columns for Saturday next, has not this excellent Society a claim, fair alike in business and charity, on the several life assurance companies of London, for their active, constant, and hearty support? And may not this suggestion receive form and substance among the members of the social meeting, of the 22nd instant, at the London Tavern? Let it be in routine duty with the esteemed secretary of the institution, to inform the directors of every accredited office for the assurance of lives in London, of the existence, usefulness, and careful administration of this our medical benevolent fund; and let it be a point of honour with every medical man attached to a life assurance company, to remind the shrewd, well-intentioned capitalists with whom he is associated, of the opportunity thus afforded to them for showing their good will to the profession, whose services they so largely need and use. By a moderate annual contribution from each insurance company, a large certain addition might be secured to the fund for the support and comfort of the bereaved individuals whose interests it represents. Nay, a basis might thus be established for a wider national benevolent society, comprehending numbers of the profession in all parts of Great Britain and her colonies. Surely our profession have a right to some remuneration for the time that they devote, and for the responsibility which they individually incur, in submitting to the questions so frequently imposed on them by the directing boards of the rival offices. Let it then, for the future, be understood, that the claim of the individual thus catechised to his legitimate, hardly earned fee, will be waived in all cases where the office, inviting his opinion, is known to contribute, through its secretary, to the maintenance of a medical benevolent fund. It seems to me that this arrangement would be a graceful conciliation of the very painful and difficult question now constantly raised between the office, the medical referee, and the proposer. In the "triple duel" to which these several parties now stand committed, there is fear that the development of the great principle of life assurance may receive a check.

May 19th, 1847. J. A. W.

*** We received the above excellent letter last week too late for publication, but we take the earliest opportunity of publishing it.—Ed. L.

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### BLOOMSBURY DISPENSARY.

*To the Editor of* The Lancet.

Sir,—In the early part of the present year, you did me the favour of inserting in your journal a letter relating to the exclusion of patients affected with venereal diseases from the benefits of certain charitable institutions; and I then availed myself of the opportunity of explaining some remarks in a leading article with reference to the Dispensary I have the honour of being surgeon to, endeavouring at the same time to remove an imaginary stigma from so excellent an institution,

by placing before the public eye the exact circumstances under which it stood, and admitting the existence, though merely nominal, of a law on this subject, it having been the offspring of some ill-judged opinion; but when I state that sixty-five cases of the venereal disease—some in the primary, and others in the secondary, forms—have been admitted under my care during the last twelve months, without the fine referred to being exacted in a single instance, you will readily admit all the weight and concurrence in my feelings on this matter. Still, the fact of such a law being in existence was a grievous eye-sore, open to future acts of cruelty towards the sufferers, and of extreme injustice to the community, by refusing relief to distressed applicants, thereby disseminating abroad the evils of these diseases. On these grounds I resolved to rescind the same, and accordingly gave notice at the quarterly meeting in January to that intent, which I duly brought forward at the annual meeting of the governors on Wednesday last, and carried the motion without a dissentient voice, expunging from the code an objectionable and most arbitrary clause.—I have the honour to be, Sir, your obedient servant,

GEORGE L. COOPER, F.R.C.S.E.
Surgeon to the Bloomsbury Dispensary.

Keppel-st. Russell-sq.,
April, 1847.

## ROYAL SEA-BATHING INFIRMARY.

*To the Editor of* THE LANCET.

SIR,—An article appeared in THE LANCET of April 24th, which is so partial in its character, and so calculated to mislead the governors of this Infirmary, that your informant must either have been most ignorant of his subject, or, what I should be sorry to believe, guilty of wilful misrepresentation.

The protest of the Medical Board, which he quotes, signed by so many names of the highest respectability, had no allusion whatever to the existing medical arrangements, but was intended to counteract another proposition, then before the directors, which he does not mention, leaving it to be inferred that it alludes to the present medical staff, which consists of two physicians, a consulting surgeon, a resident surgeon, and his assistant.

Though I cannot lay claim to the advantage of being a very old member of the College, the assertion that I am a young one, thus prominently expressed, may mislead. I have been in practice four years, previous to which I passed more than the usual time in preparation, in London and Oxford.

I have before publicly contradicted the unfounded assertion that I received any support from the treasurer.

Though I feel myself by no means to deserve the intended compliment of the consulting surgeon, I would remind your informant that there is little merit, or even honesty, in taking an isolated sentence (still less half of one) from a long speech, for the exercise of his satire, or to serve any other object he may have in view. I am, Sir, your obedient servant,

A. G. FIELD,
Resident Surgeon to the Royal
Sea-Bathing Infirmary.

Westbrook, May, 1847.

## REMARKS ON QUACKS AND QUACKERY.

(NO. III.)

*To the Editor of* THE LANCET.

QUACK.—"My dwelling is the shadow of the night,
Why doth thy magic torture me with light."

SIR,—I have again to thank you for your increasing efforts in endeavouring to put an extinguisher on Quacks and Quackery, whether existing in the ranks of legitimate practitioners, or in the herd of plunderers who are continually walking about like so many "roaring lions, seeking whom they may devour." The extent to which the profession is robbed by Quacks is perfectly astonishing, and few medical men are at all aware of the extent of it. Take for example one compound, "Lococks Pulmonic Wafers;" I am in a position to prove, that during the month of January, 1847, one house in London paid the Jew who vends the article, no less than 700*l.* Seven hundred pounds! and that for the consumption of one month only. You are aware that they are a compound of morphia and ipecacuanha; and I was told, only yesterday, by a highly respectable chemist, that he is in the habit of selling box after box to clergymen, ("orandum est, ab mens sana, in corpore sano:") he mentioned two vicars and one curate who are in the constant habit of encouraging the Jew who continues to use the name of Dr. Lococks, and that, too, after the Doctor has continually stated, the compound was made (as we of the profession of course know very well; not so the public,) without his knowledge, and his name used without his consent. A few weeks ago, a mother brought into my room her son, in the last stage of phthisis pulmonalis. The poor fellow appeared in a dreamy state, the pupils were contracted, and from his general appearance, the partial stupor, &c., it was at once evident to me that he was labouring under the effects of some narcotic. I asked her what her son had taken? The reply was, "Almost everything, Sir, *and I reckon you can do him no good; for although we are bad off for something to eat at times, I have got him four boxes of these Wafers that are put out by the Queen's Head Doctor*," and she produced from her pocket an empty box of "Dr. Lococks Pulmonic Wafers." I told her that she had been cheated by a Quack,—that Dr. Lococks knew nothing about the wafers; and telling the poor lad to take no more of the filthy poison, advised her to put her son upon a milk diet, and to let me see him again in a week. He never came; and I have no doubt, from the state he was in when I saw him, that he is dead. Now, I ask, Sir, is it not abominable that the present state of the law should be such as to permit the daily use of Dr. Lococks name in this most improper manner?—nay, more, is it not a disgrace to our country, to our Queen and her government—a vile blot on our civilization, to permit this quack and his hundred brothers to sell their poisonous compounds to the public, ornamented and protected by a government stamp? There must be something very imperfect in the condition of that country which derives a portion of its revenue from the duty paid by the compounders of quack poisons, which have hurried, and are hurrying, so many of our friends and neighbours to the grave.

I turn from this quack, the poor, deluded, plundered mother, and her dying son, to a consideration of the state of quackery in the county in which I reside—Nottinghamshire; and I much question if a single paper, printed and published in it, is sufficiently decent to be taken up by any lady. For "Manhood; the Causes of its Premature Decay"—"Urino-Genital Diseases"—"On Marriage, and the Disabilities which Prevent its Consummation," would meet her eye at almost every part of the paper; and I ask, as the father of a family, if such publications are fit or proper to meet the eye of a wife or a daughter? If a man places in his shop-window an indecent print, the law takes cognizance of his offence; why not so alter its provisions as to draw within its grasp the publishers of all papers containing indecent advertisements? Three months on the treadmill would be a punishment most richly merited; and if any honest man will look at the question fairly, he will at once say, no punishment is too severe for the publisher, editor, or proprietor of a newspaper, who will permit such advertisements as the following, all appearing in one paper, published yesterday in Nottingham, and now before me:—Franks on "Urino-Genital Diseases," recommended by "*Bell's Life*" "to those who, suffering under deserved penalties, wish to pay them off as speedily as possible." Then we have Curtis and Co. (the filthy beasts, I cannot call them men) "On Solitary and Sedentary Habits;" and then come Brodie and Co. on "Solitary Indulgences, Neglected Gonorrhœa, Secondary Symptoms; followed by Observations on Marriage, with Proper Directions for the Removal of all Disqualifications." Such are the advertisements which are permitted to be paraded before the public in a family newspaper. My remarks on this part of the quackery question must be reserved for another occasion. I fear too much of your valuable space has been already taken up; yet with a view of showing the manner in which the quack-firms conduct their business, I must now place before your readers the following circular. It is signed R. and L. Perry and Co., and addressed,—"Mr. F. Appleby, Chymist, Church Gate, East Retford. If left, to be opened by his successor."

"19, Berners-street, Oxford-street, London, 1847.

SIR,—Being desirous of establishing an Agency in your town, for the sale of our MEDICINES and SILENT FRIEND, we shall have no objection, if it meet your approval, to insert your name in all the newspapers in your town, and other influential papers around your district.

We annex a scale of nett cash prices of our Medicines and Book, which may be had in *any quantity, as required, direct from our Establishment*, or from Messrs. Barclay and Sons, Farringdon-street; W. Sutton and Co., 10, Bow Churchyard; W. Edwards, 67, St. Paul's Churchyard; Butler and Harding, 4, Cheapside; R. Johnston, 68, Cornhill; Hannay and Dietrichsen, 63, Oxford-street; J. Sanger, 150, Oxford-street.

We wish it to be distinctly understood, that our business is only conducted on CASH TERMS, and as the SILENT FRIEND is part and parcel of our MEDICINES, it will of course by no means answer to separate them—should you, however, prefer your supplies through the medium of the London Wholesale

Houses, it will in nowise interfere with the insertion of your name as agent.

As we are at this moment giving every possible publicity by advertisement, to extend the sale of our Medicines and Work, we feel satisfied, by perseverance on your part, much may be done towards our mutual benefit.—The favour of an immediate reply will oblige, Sir, yours very respectfully,

R. & L. Perry & Co.

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*M* London, 1847.

Bought of R. & L. Perry & Co.

Surgeons,

19, Berners-street, Oxford-street, London.

TERMS CASH.

| | | Nett. |
|---|---|---|
| Cordial Balm of Syriacum..... | at 33s. | 22s. 6d. each bottle. |
| Ditto ditto | at 132s. | 90s. 0d. per dozen. |
| Concentrated Detersive Essence | at 33s. | 22s. 6d. each bottle. |
| Ditto ditto | at 132s. | 90s. 0d. per dozen. |
| Purifying Specific Pills..... | at 132s. | 90s. 0d. ditto. |
| Ditto ditto | at 54s. | 37s. 6d. ditto. |
| Ditto ditto | at 33s. | 22s. 6d. ditto. |
| Silent Friend ..... | at 30s. | 15s. 0d. ditto Books. |
| Packing Case | | |

N.B.—All Orders to be sent to 19, Berners-street, Oxford-street, London."

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Leaving the above circular without comment for the present, I shall, with your permission, resume my remarks on Quacks and Quackery, in an early number of The Lancet.—I remain, Sir, yours very faithfully, John Charles Hall.

Grove-street, East Retford, April, 1847.

## House of Commons,

May 22nd, 1847.

### REGISTRATION OF MEDICAL PRACTITIONERS.

*Committee nominated*:—Mr. Wakley, Mr. Macaulay, Sir James Graham, Mr. George Hamilton, Mr. Bannerman, Mr. Acland, Mr. Hawes, Mr. Fitzstephen French, Sir Robert Harry Inglis, Mr. Dennistoun, Viscount Sandon, Mr. Boyd, Mr. Aldam, and Mr. Lascelles.

Power to send for persons, papers, and records. Five to be the quorum.

## Obituary.

### JOHN PHILLIPS POTTER, F.R.C.S.,

*Demonstrator of Anatomy in University College, and Assistant-Surgeon of University College Hospital.*

In the death of this gentleman we have to record a most melancholy and disheartening instance of brilliant talent and promise blighted in the bud: too often, alas! does it happen, that those endowed with the rarest gifts of intellect, and the most amiable qualities of humanity, are the first to fall; as though the Great Ruler of our destiny would spare them the disappointments, cares, and anxieties, inseparable from a prolonged life. Those who, like ourselves, have sat side by side with the late Mr. Potter, pursuing together the same path of study, day after day, cheered on in the toil by his lively and happy company; and others, who have since then received the benefit of his excellent teaching; will know that we cannot say too much in eulogy of his talents and amiable character. Any one more universally accomplished, whether in his peculiar studies, literature, manners, and the polite arts, we have never had the good fortune to be acquainted with: never was a young man so fitted to win praise and reputation, or whose short course has been attended with more complete respect and deep esteem from all who knew him.

John Phillips Potter was the only son of the Rev. J. P. Potter, late of Oriel College, Oxford. He was born April 28th, in the year 1818, at Southrop, in Gloucestershire, where his father was then officiating as curate. At an early age he was placed at school, under Dr. Morris, of Brentford, for three years; he was then removed to the new proprietary school at Kensington, under the Rev. J. T. Evans, a friend of his father. In the session 1831-32, being in his fourteenth year, he was entered at University College, beginning his studies with the classes of experimental and natural philosophy, under the late Dr. Ritchie; in the session 1832-33, he obtained the second honour in that class. In the following session, he was placed as laboratory pupil to the late Dr. Turner, and attended the lectures on chemistry under that eminent professor, and obtained the gold medal and first honour in competition with the whole body of medical and arts students. In 1834-35, he took the class of botany, in which he stood sixth. In 1835-36 he became a private pupil to Mr. Quain, the professor of anatomy, and may be said now to have begun his medical studies. In the honours, we find him standing fourth in anatomy and physiology, and fourteenth in anatomy. This low position on a subject requiring so much pure memory shows that his mind was better adapted to subjects involving systematic theories and speculations than to one of mere facts; it also affords encouragement to those who sometimes despair of learning anatomy, when it is coupled with the perfect acquaintance and distinction he afterwards attained on that subject. In 1836-37 he obtained the highest honours in anatomy and physiology, and comparative anatomy and zoology. In the three following years he devoted himself to the practical study of medicine and surgery in the wards of the hospital, filling the offices of clinical clerk to Dr. Williams, dresser to Mr. Liston, and subsequently house-surgeon to Mr. Liston. In 1841 he took his M.B. at the University of London, and obtained the great distinction of the highest honours in anatomy and physiology, and in surgery, with a scholarship in each of £50 per annum.

He was chosen to the honourable office of junior demonstrator in session 1843-44, and continued to perform the arduous duties, in company with Mr. Ellis, up to the time of his illness, with uniform kindness and zeal towards the students, all of whom express their deep regret in the loss of one so admirably suited for the office. Scarcely a fortnight before his illness, he was appointed assistant-surgeon to the University College Hospital.

We come now to the sad occurrence which led to his death. Since the time when he was house-surgeon to Mr. Liston, he frequently assisted that eminent surgeon in his more important operations in private, as in the case of the unfortunate Mr. Seaton, at Portsmouth. For some weeks before his illness, he had been assisting Mr. Liston in dissections, which were always done early in the morning; and on the 22nd of April, he was engaged in taking a pelvis, with diseased hip-joint and abscess, from a subject, and being pressed for time, received in some way a small puncture on the knuckle of the forefinger, which was disregarded at the moment; but on the following day, it became painful, and after the early morning dissection, he came home, complaining of feeling chilly and very unwell. The little wound was inflamed, and the swelling and redness soon extended up the arm to the axilla and side of the chest, accompanied with severe pain, and great constitutional disturbance.

In two days, symptoms of great depression came on, accompanied with complete jaundice and other dangerous symptoms, which led his medical attendants, Mr. Liston, Mr. Travers, Dr. Watson, and Dr. Brodie Sewell, almost to despair of his rallying. It was thought advisable to make two deep incisions in the seat of pain, in hopes of finding matter, but none issued from the wounds. Stimulants were administered, and he rallied considerably, but continued to vary, till the 15th of May, when intense pain was experienced in the side and loins, with symptoms indicating the formation of pus Free incisions were again made by Mr. Liston; from the principal one, in the sacral region, about three pints of pus were discharged, and about two pints from the others upon the chest. On the 16th he was much exhausted, but on the 17th had rallied so much, that hopes were entertained of his recovery; but in the afternoon, signs of exhaustion again came on, with great pallor and altered countenance, and death relieved him from a state of great suffering, which had been borne with the most undaunted courage and patience. But we do not pretend to give an accurate account of the case, because it will probably come before us as a strictly medical one; and it is, indeed, most desirable that every study should be given to the treatment of such fatal cases. We would earnestly advise all against venturing to dissect when the slightest abrasion of the skin exists; it is from these wounds, which may be guarded against, more than from those which occur by accident from the instruments employed in dissecting, that mischief results. One other fact suggests itself in connexion with our lamented friend's case; he was in the habit of rising early in the morning, and hurrying to the dissecting-room without breakfast, and we have

repeatedly heard him speak of the hunger he felt often while dissecting. Such a state is, we know, the most favourable to absorption, and this danger should never be incurred.

The funeral took place on Saturday, at Kensall-green, and, besides his immediate relatives, upwards of two hundred professors, students, and friends, assembled to pay his remains the last tribute of respect; a speaking testimony of the regard felt for him. Death has in this sad case inflicted an irreparable loss upon the sorrowing relatives and friends, and indeed upon the profession, and society in general.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions received for Presentation by Mr. Wakley, M.P.*

C. D. Fitzpatrick, Bootle, near Liverpool; William Thompson, Student of King's College, London; Medical Practitioners of Whitehaven, (two signatures;) Sinclair Blere, M.D., High-street, Poplar; Matthew Carter, M.D., Castle Cary, Somerset; W. Philson, M.D., Hitchin, Hertfordshire; Frederick Hawkins, M.D., Hitchin; Samuel Boyden, 20, Brunswick-place, Westminster; Geo. Wilkin, M.D., Liverpool; John Maxwell, Tysoe-street, Wilmington-square; Edward Martin, 6, Radnor-place, Paddington; William Richardson, Oxford-terrace, Paddington; David Dickenson, Porchester-place, Paddington; J. Kinnier, M.D., Dorset-place, City-road; F. L. Hooper, Newington-terrace, Southwark; Erasmus Wilson, Charlotte-street, Fitzroy-square, London; Robert Brockman Newhouse, Brampton, Oxfordshire; William Brooke Maxwell, Chelsea; Alfred Brooke Barnes, Chelsea; John Augustus Lloyd, Bart.; George Bird, Osnaburgh-street, Regent's-park, London; J. Gledhill, Broad-street, Halifax; William Mark Powell, Clapham-road, Surrey; Francis R. S. Upjohn, Rudham, Norfolk; Medical Practitioners of Cirencester, (four signatures;) Horatio Nelson Tilsley, North Petherton, Somerset; Medical Practitioners of Bristol, (thirty-seven signatures;) Medical Practitioners of Bristol, (seventeen signatures;) Medical Practitioners of Honiton, Devon, (six signatures;) Medical Practitioners of Scarborough, (nine signatures;) William Anderson, Billinghay, near Sleaford, Lincolnshire; J. W. Jones, Kennington-lane; W. Barnard Boddy, Walworth; Frederick Bastone, Duke-street, Lincoln's-inn Fields; Henry Meredith Townsend, Newington Causeway; John Owen, Kennington; John Teevan, Princes-place, Kennington-cross; Charles Taylor, Bethel-place, Camberwell; B. D. Frankis, New Kent-road; J. T. Mitchell, Harleyford-place, Kennington; Samuel Edwards, Kingsland-road; William Hentsch, Laurie-terrace, Southwark; David Williams, London-road; W. Morris, M.D., New Kent-road; F. R. Gowar, Kent-place, Old Kent-road; Edward Morse, South-place, Lambeth; Charles Price Symonds, Alfred-place, Newington Causeway; James Baker, Dorchester-place, Hoxton; Charles Parker, 12, Pitfield-street, London; Henry Thomas Lomax, Stafford; William Smith, Repton, Derbyshire; Alfred Crabb, M.D., Poole, Dorsetshire; G. Leney, Maidstone; Rice Wasbrough, M.D., Yatton, near Bristol, Somerset; Richard Shillitoe, Hertford.

## Medical News.

Royal College of Surgeons.—The following gentlemen were admitted Members of this College on Friday, the 21st inst.—viz., Messrs. Robert Preston Bailey, Broadstairs, Kent; William Henry Brace, Bath; Henry Tireman, York; Robert Bentley, Hitchin, Herts; John Francis O'Leary, Cork; Henry Wright Slack, Liverpool; Alexander Somers, Dublin; George Anderson Wilkinson, Bishop Wearmouth, Durham; William Beedzler Deacon, Market Deeping, Lincolnshire; John Ward, Sunderland, Durham; and Richard Norris Bower, Chelsea.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 20th, 1847:—Charles King, Southampton; George Milburn, North Shields, Northumberland; William David Wilkes, Salisbury; John Smith, Bishops Lydiard, Taunton, Somerset; Samuel James Augustus Salter, Poole, Dorsetshire; Richard Jones, Brackley, Northamptonshire; Ellis Southern Guest, Manchester; Charles Frederic Augustus Courtney, Ramsgate; William Honner Fitzpatrick, 11, Earle-street, Liverpool.

Monument to Bichat.—The Municipal Council of Paris have granted the sum of 1000 francs, as a contribution, towards the erection of a monument to Bichat, in the Faculty of Medicine. This is said to be done in consideration of Bichat, who, although he lived but thirty-one years, "merited so highly of science and humanity, and rendered his name immortal by his labours, his discoveries, and his genius."

Belgium.—The Royal Academy of Belgium has proposed the following subjects for their prizes:—To illustrate and discuss the works and the new views of physiologists and of chemists, on growth, and on the function of assimilation in vegetables. At the same time, to point out what means can be adopted, in order to increase the richness of agricultural productions. The treatise to be furnished with experiments. To give the descriptive and comparative anatomy of the placenta, in the different orders of mammiferæ. The prize for each of these questions will be a gold medal, of the value of 600 francs. The memoirs to be legibly written, in Latin, French, or German, and addressed, free, to M. Quetelet, Perpetual Secretary, before the 26th of September, 1847.

Middlesex Hospital School of Medicine.—Distribution of prizes, May 22nd, 1847.—Francis Hawkins, M.D., in the chair.—*Medicine:* prize, Mr. S. G. Bousfield.—*Surgery:* prize, Mr. W. B. Clapham.—*Anatomy:* prize, Mr. Charles Pates; certificate, Mr. Arthur Smith.—*Pathology:* prize, Mr. S. G. Bousfield; certificate, Mr. W. B. Clapham.—*Practical Anatomy:* prize, Mr. C. Pates.—*Materia Medica:* prize, Mr. C. Hayman; certificate, Mr. J. Sims.—*Midwifery:* prize, Mr. S. G. Bousfield; certificate, Mr. E. B. Passmore.—*Certificate for Practical Midwifery:* Mr. A. D. Home.—*Forensic Medicine:* prize, Mr. W. B. Clapham.—*Botany:* certificate, Mr. G. W. Haytor.—*Theological Prize given by the Rev. D. Laing, F.R.S.:* Mr. A. Grant.—*Honorary Certificates for Regular Attendance and General Good Conduct:* Mr. Bousfield, Mr. Clapham, Mr. Davidson, Mr. J. Day, Mr. Fearon, Mr. Hayman, Mr. Pates, Mr. Sims, and Mr. Woods.—Certificates have been also granted to the following Gentlemen, for Regular Attendance and General Good Conduct, during the Session 1845-46: Mr. Bousfield, Mr. Boyers, Mr. Clapham, Mr. Day, Mr. Grant, Mr. Home, Mr. Smith, and Mr. Tomkins.

Disgraceful Treatment of Poor Law Medical Officers.—The Board of Guardians of the Thame Union have furnished their afflicted poor with printed forms for the medical officers to note in the sick chamber their respective visit, after the manner of the excise, as a check in the weekly returns they officially make to the Board!

Bloomsbury Dispensary.—An interesting Report of this Dispensary, from April, 1846, to April, 1847, has been issued by the medical officers, from which some statistical observations, and the state of the public health during the past year, may be collected. The total number of patients treated was 2899, of whom 2366 were cured or relieved, 63 died, and 470 remained under treatment. The Report, though brief, bears ample witness to the influence of bad ventilation and filth, if not in generating fever, at least in promoting and harbouring it. The report says, "Within the last month, scarlet fever has broken out in several parts of the district. It was first seen in a dirty, ill-ventilated room in Little Compton-street; and in Tudor-place there have been several cases." It further remarks, "A reference to the Dispensary Records would show that where the air is most polluted, there the largest amount of disease is found." An outline is drawn, from the medical officers' own experience, of the evils resulting from deficiency of sewerage, of water, of proper abodes, and of pure air, under which the poor labour; and several instances are given, furnishing a proof of the great and immediate necessity there is for sanitary measures, in order to check disease and misery, and to remove those remediable evils which exist as so many blots on the plan of the social life of this country, and without the extinction of which our claim to civilization can scarcely be admitted.

Births and Deaths.—Another of those mines of medical statistics furnished by the quarterly returns of the health and mortality, has been issued by the Registrar-General. It abounds with many most judicious remarks on the causes which favour the prevalence of sickness in this kingdom; and it is furnished with several tables of meteorological observations made at different places. We make the following quotations:—"For many years the number of deaths in England has been highest in the winter and lowest in the summer quarter. In the summer quarter of 1846 the reverse was observed; the mortality was greater than it had been in any quarter of the seven preceding years; and in the last winter quarter, ending March 31st, 1847, fifty-six thousand one hundred and five persons in the districts which make the returns; a number greater than has been registered in any corresponding quarter, and 6,035 above the corrected average. The deaths in the quarter, in all England and Wales, may be estimated at 120,000." Again,

15,289 deaths were registered in London during the first thirteen weeks of the year; a greater number than has been registered in any previous winter since the weekly table commenced. Upon the whole, the health of London, like that of the rest of the country, has been below the average. The temperature was below the average (last winter), and the severity of the weather was one cause of the increased mortality. It is, however, worthy of remark, that at Greenwich the temperature was lower in the winter-quarter of 1845, when the deaths returned were 49,949, than in the past quarter of 1847, when the deaths were 56,105. Coupled with the severe cold of the past quarter, as a cause of increased mortality must be the high price of provisions, which was so general.

Animal Magnetism.—An absurd performance is now taking place at the Hanover-square Rooms. It is termed "Oneiromancie Artistique," or, in other words, "Artistic Dream-Prophesying." The dream prophet is one Mdlle. Isæ Prudence, who sits in a chair, her brow wreathed with laurels, bands of gold on her arms, and sandals on her feet, giving no bad idea of a Pythoness. This lady calls herself "the celebrated ecstatic," and when thrown into her mesmeric trance, the public are given to understand, and invited to believe, that she becomes acquainted with the contents of any paper the company might put into her confederate, Mdlle. Laurent's hand, through magnetic agency, and is forced by the will of the latter lady to represent the sentiment it contains. All the passions are then gone through in this manner. One gentleman, however, wished upon his scrip of paper for a delineation of Calypso lamenting the departure of Ulysses; but the lady, instead of looking the picture of wo, assumed an expression of great terror: these little mistakes will sometimes occur, however.

Morphia versus Ether.—Dr. Chisholm, of Inverness, has, it is said, substituted morphia for ether in the production of insensibility, with some success. Excision of the mamma was performed whilst the patient was under its influence, and she states that she felt no pain during the operation.

In the *British American Journal*, (Montreal,) an advertisement appears, announcing an election by *concours* to the chairs of the institutes of medicine, medical jurisprudence, botany, &c., in one of the medical schools of the city. Candidates must understand the French and English languages.

Dorset County Hospital.—The funds of this institution have just been increased by the munificent donation of 1000*l.*, bequeathed to it by the late Mr. Williams, the wealthy banker, of Birchin-lane.

Carmarthen Infirmary.—The requisite notice has just been given to the keeper of the borough jail, to give up possession of the premises, as a temporary asylum for the sick, till the completion of the projected Infirmary.

Meeting in Favour of the Registration Bill.—A preliminary meeting of the Council of the Shropshire and North Wales Branch of the Provincial Medical and Surgical Association was held at Shrewsbury on the 24th inst., when it was determined to convene a meeting of the members of the Association, and the medical practitioners of Shropshire generally, for Friday, the 28th inst. Other branches of the Association may be expected to follow the example of this spirited and influential Branch Association.

Northampton General Lunatic Asylum.—We have received the sixth report for 1846; besides an account of the general funds and expenditure of the Institution, there is also a report from the physician superintendent, Dr. Nesbitt. We learn from it that the non-restraint system, as advocated by Dr. Conolly and practised at Hanwell, is also fully carried out at the Northampton Asylum, and, as at Hanwell, is attended with the most happy results. Surely those who entertain objections to the non-restraint system must become convinced of its applicability and utility, when they see it carried out on so large a scale, and among all kinds of lunatics in the asylums named, and in others like them. We are informed by Dr. Nesbitt "that the stomach-pump has in two instances been called into request after all other available methods had failed," in the endeavour to overcome the unwillingness of the patients to take food. "One administration sufficed in one case; in the second, it was persevered in for ten days. The patients thus saved from perishing are now in good bodily health, and take their food with avidity." Of the 241 patients, on an average, daily in the house, no less than 155 of them have been engaged in various employments; and the proportion appears still larger when it is considered that all forms of mental disease are admitted, "from the drivelling idiot to the incurable epileptic." Besides the manual employments going on, the instruction of the mind has not been neglected, nor have religious ordinances. The monotony of asylum life has also been relieved by the introduction of various amusements and entertainments, as music and dancing. Moreover, liberty has been extended so far to some, that they have been allowed to go out of the asylum alone, returning at meal times, and at a certain hour in the evening; and this privilege has not in one case been abused. Another point worthy of remark is, "that there have been some discharged as relieved, who had been for years inmates of the house." This was done, as all means of cure seemed to be unavailing, and as their delusions were harmless. Some months have now elapsed since they reached their respective homes, and the tidings received are, that they are "following some useful vocation, and, for the most part, earning their own livelihood."

During the year, 152 patients were admitted, and of these 32 were discharged cured. Rightly to appreciate this account it must be borne in mind, "that one-third of those admitted are known to have been confined in this or some other asylum at some former period." There were, besides, 16 recoveries among those admitted in former years. In the year 28 deaths occurred, the majority of which was among those of the year's admission, and they took place, "in the proportion of males over females, as eleven to four." Of the 241 in the asylum, "eighty-five have been for various periods of time secluded," the average duration of the seclusion being "under fifty-two hours per patient per annum. . . . The seclusions on the female side are numerically much greater, in the proportion of nearly three to two; those on the male side in duration exceed them." Other interesting particulars might be extracted from the Report, and from the statistical tables subjoined. We are happy to observe, that the finances of the institution are in a flourishing condition, for of all classes of human beings, those with their intellects enfeebled or deranged especially deserve our sympathy and kindness.

## CORRESPONDENTS.

*D. S. S.*—The apprenticeship of five years is peremptorily enforced by the 55th George III., and if the Board of Examiners have granted licences to individuals who have not served any such apprenticeship, the Examiners themselves have committed a misdemeanour in every instance. Such a pupilage as our correspondent has mentioned would not confer the legal right described. The clinical reports, if containing matter of practical value, will be inserted.

We beg *Dr. Merryweather*, (Whitby,) who, with Dr. Ley and Dr. Clark, of that town, has petitioned in favour of the Medical Registration Bill, to receive our thanks for his kind expressions.

The printed copy of the petition of *Dr. John Thomson* (Edinburgh) has been received.

*Chirurgus*, (Oxon.)—We hope to find room to print his excellent petition at an early date.

The pamphlets of *Mr. Turner* shall receive due attention.

*John Bull.*—It can never be "infra dig." to give advice to the poor; but it is below the dignity of a professional man to make a parade of the matter; to make what should be the charitable exercise of his profession a means of puffing and advertisements, and pursue it as such a mean to such an end.

*M. A. N.*—Particular medical men are never recommended in the pages of The Lancet.

*Amor Justiciæ* shall receive insertion in an early number.

*Inquirer.*—The continuation of the "Alphabetical Notices" of Dr. Robert Dick will appear as speedily as possible.

*Dr. W. Trench* will have seen that the account of the important meeting at Liverpool, in *favour of* the Registration Bill, had already appeared. We regret it did not contain a notice of the vote of thanks to the worthy chairman, which was carried by acclamation.

*Dr. Skae.*—We shall be happy to afford space for the article alluded to by Dr. Skae.

*First-Session Student.*—We have no doubt that such a course of study would be a most valuable help to obtain the prize in question. Our correspondent should address Mr. Blatch, at the Apothecaries' Hall.

Communications have been received from—Mr. Mitchell Henry; Mr. James Allen, (York;) Mr. James Prior; Dr. Gavin Milroy; One of the Profession; Dr. Addison, (Malvern;) Mr. W. J. Mackarsie; Mr. Page, (Carlisle;) Mr. W. J. Gorringe, (Truro;) Amor Justiciæ; Mr. William Wood, (College of Surgeons, Edinburgh;) Mr. J. Rogerson, (Wigan;) Dr. Robert Dick; Dr. Henry Bennet; Mr. J. F. Clarke; Dr. W. Trench, (Liverpool;) Mr. G. S. Pedler; Britannicus; Mr. J. G. Lansdown, (Bristol;) Mr. Long Marsh, (Nottingham;) Dr. Skae, (Edinburgh;) First-Session Student; Dr. Gilham, (Madeira;) T., (Liverpool;) A Retiring Member of the Institute; Mr. Amesbury; Mr. G. Harvey, (Castle Hedingham;) Mr. W. Smith, (Bristol;) Mr. Frederick Hyett; Mr. H. D. Smith; Dr. J. A Wilson; Mr. Wharton Jones; A Looker-On; John Bull; Detector; Mr. J. E. Fosbrooke, (Calverton;) Somebody; Mr. Perigrine James; A Seceder from the Dishonest Institute; Mr. Cattell, (Braunston;) Mr. Walsh.

# A Course of Lectures ON THE PHYSICAL PHENOMENA OF LIVING BODIES.

## DELIVERED IN THE UNIVERSITY OF PISA.

By PROFESSOR MATTEUCCI, F.R.S.

(*Translated, for* THE LANCET, *by* S. J. GOODFELLOW, M.D. Lond., *late Physician to the Cumberland Infirmary.*)

### LECTURE I.

GENTLEMEN,—I never before felt so diffident of my own powers as I do now, when I am about to perform the duty which has been imposed upon me, of delivering a course of lectures upon the *Physical Phenomena of Living Bodies.* But while I feel the difficulty of such an undertaking, I also hope that my efforts may be rewarded by the advantages you may derive from them. In fact, this is perhaps the first time that such a course of lectures has been introduced into medical studies: there is no book which treats of this subject: the elementary principles are, indeed, scattered here and there, but they have never been considered in that light which is the most favourable to their development.

If, at the commencement of every course of instruction, the teacher endeavours to give an exact definition of the science under consideration, to show its limits and its object; in one word, to trace a plan or programme, certainly the necessity for these preliminaries was never more apparent than in the present instance.

Living bodies possess the general properties of all natural substances. The most extravagant *vitalist* has never dreamt of denying that living organized matter is extended, impenetrable, divisible, and porous. How can we believe that heat, electricity, light, and chemical affinity, act upon these bodies in a manner entirely different to that in which they are observed to act upon other natural bodies?

In some highly esteemed works on physiology, you will find tables of the differences, or rather of the opposing properties, supposed to exist between organized and inorganized bodies. I should find it a long and useless discussion to demonstrate that many of these pretended differences are of little or no value. Animals and vegetables increase by *intussusception*, minerals by juxtaposition; or, in other words, in the first, growth takes place by internal juxtaposition, in the latter, by external; and that because organized bodies conceal in their interior the dissolved elements of new formations, while, on the contrary, these elements are external to inorganized bodies.

During life there is a continual struggle between the physical and vital forces, and death is the triumph of the former over the latter. But is this sufficient to prove that vital and physical forces are essentially distinct and opposed in their mode of action? Would it be correct to say that the different parts which, united, form one arch, are endowed with a force opposed to that of gravity, merely because they do not fall?

Organized living bodies, like all others in nature, are, as I have said, extended, impenetrable, divisible, porous. Plunge them into water, or any other fluid, and they will imbibe, such, for instance, as pounded glass, porous bodies, and those formed of capillary tubes. This property of living bodies is of the greatest importance. In a great number of animals, life can be suspended for a long time with impunity, but on the application of water, which they have the power of imbibing, they return to active life, and reacquire its movements. Who is not acquainted with the beautiful experiments of our illustrious countryman, Spallanzani, upon the rotiferous animals? Look at a tendon, a membrane, which, as I show you, is hard and horny, appearing never to have formed a part of an organized body; yet if we plunge it into water, you will perceive that, according to its imbibing power, it will become moist, supple, elastic, and enabled to perform, in the living body, the functions which belong to it.

All living bodies, as well as all others in nature, are endowed with elasticity. For example: I can, at will, stretch or compress, more or less, a piece of intestine or artery. If I open this cock attached to the trachea, you perceive that the lung falls upon itself, whilst it swells and becomes dilated again, if I force air into it. You cannot, therefore, believe that these different organs can perform their respective functions, without the elasticity of the pulmonary parenchyma, and that of the intestine and artery. Let it be destroyed, and the functions will cease, or at least be altered.

Gravity acts upon the solid, liquid, and gaseous parts of living bodies, in the same manner as upon all others which exist or are found in Nature. We cannot explain the functions of respiration and absorption, if we do not consider the physical properties of the solids, liquids, and gases of the economy, and their conditions of equilibrium.

If you apply a sufficient degree of heat to an organized body, you will see the gas disengaged, the vapour of water escape, and carbon and hydrogen burn in the air, producing carbonic acid and water. If the first application of heat often hardens organic substances, and shrivels them, instead of dilating and liquefying them, as ordinarily happens to inorganic bodies, you certainly cannot attribute this difference to vital action, since life has been long extinct when these phenomena take place.

All these effects are caused by the particular structure and chemical properties of the elements of which these tissues are composed. In fact, organized bodies, submitted to the action of heat, first lose the water which they contain; and this effect begins in the part exposed to the greatest heat. The substance then rolls itself up in the form of a horn, like a sheet of paper moistened on one side, in such a manner that the longest side occupies the convexity of its new shape.

These organic bodies often contain albumen, which coagulates by heat. Their elements separate in the gaseous state, and form more simple combinations, which are consequently more lasting.

The electricity of tension pervades organized bodies, and spreads through them with more or less facility, according to their different degrees of humidity. If the spark passes through them, it volatilizes, burns, and reduces them to ashes. If the electric current passes through the fluids of living bodies, it decomposes their salts—the acids are collected at one pole, the bases at the other. Albumen coagulates at the positive pole, where are yielded the oxygen, and a frothy liquid acid. Hydrogen goes to the negative pole, with a liquid alkali. Every one knows that rays of light, traversing the humours of the eye, deviate from a right line by diverging and converging, according to the different density of the humours, and the form of the parts which contain them, in the same manner as in an optical instrument. I would add, that the elements which compose living bodies always obey the general laws of affinity. A chemist can detect and separate them by the ordinary methods of analysis. Treat them with chlorine, bromine, or iodine, and hydrogen will be the first element which is separated, and combines with these metalloides to form hydracids. All oxidizing action will convert organic matter into acids. Are we justified in concluding from this that all the phenomena presented by living bodies can be explained by the general properties which they exhibit in common with other natural substances, merely by the action of the great physical forces—heat, light, electricity, and attraction? Such a conclusion would be as far from the truth as that of those who deny these general properties to living bodies, and who regard them as altogether beyond the influence of physical agents.

Examine these phenomena of living bodies, which, if I may use the expression, are the most physical or chemical, and you will see a considerable difference in the mode of action of physical and chemical agents, when acting upon organized matter; a difference which is inexplicable in the present state of our knowledge of the laws which govern these forces. Do not even the phenomena of vision, which may be called entirely physical, present peculiarities which have not hitherto been explained? If the latest discoveries of science enable us to explain the distinctness of vision at all distances, and the absence of coloured fringes, how can we explain by physical laws the perception of an object as single and in its natural position, from a double and reversed image? Why can we not say that hearing and voice are simply the effects of particular vibrations of the air, propagated through solids, according to the general laws of acoustics? Science can give no completely satisfactory answer to all these questions.

The chemical action of light which decomposes carbonic acid, carries the carbon, under the form of new combinations, into the interior of vegetables, disengages the oxygen, and produces such combinations as the most powerful chemical affinities are unable to effect, is certainly different from that which decomposes certain oxides and metallic chlorides, which can be effected by the weakest chemical action.

If you direct the electric current upon the nerves of any living animal, the singularity of the phenomena exhibited will convince you of the immense difference which exists in the effects of the great forces of nature, upon living and organized bodies and upon those which are inorganic and dead.

What is, then, the cause of these great differences in the mode of action of physical agents upon living bodies and upon other natural bodies? Here is a question of primary importance, to which the present state of science does not permit us to reply with certainty. Let us not, however, abandon the analogies which are offered to us by physics. A ray of light which passes obliquely through a piece of glass, or a body of water, leaves the right line; if, on the contrary, it meets with a crystal of carbonate of lime, it is divided into two rays, each of which deviates in a different degree. The reason of the difference of these phenomena is the difference of physical structure which exists between glass and crystalized carbonate of lime, and perhaps also between the chemical nature of their molecules. But no doubt these modifications of the ray of light are more owing to the diversity of structure, or to the peculiarity of the molecules, than to the difference of chemical composition. We know that glass acts differently upon the rays of light, when it is more or less compressed on different sides, without any change in its chemical composition.

Who could confound an organized with an inorganic body? In these groups of closed vesicles, of different dimensions, united and disposed in an irregular manner, there is certainly *something* essentially different to a mass of polyhedral particles, united in a crystal. To say, with some microscopical observers, that organization is crystalization effected in a liquid by which the first crystals formed can be imbibed, is equivalent to admitting that the structure of a stalactite is the same with that of the parenchyma of the lung and the liver.

Molecules, composed of not less than three elements, in each of which a great number of elementary atoms enter, necessarily form chemical systems, the affinities of which differ from those possessed by molecules composed generally of two elements, and in which the number of elementary atoms is small; and if ordinary chemical action shows us that combinations become more feeble in proportion as the number of elementary atoms is increased, it explains the tendency of organized bodies to resolve themselves into more simple combinations; so, also, chemistry furnishes many examples of this tendency in some compound inorganic bodies, the composition of which bears a great analogy with some organic bodies; yet this must not induce us to admit that the laws of inorganic chemistry are sufficient to explain exactly the chemical phenomena of life. We must conclude from this that the organization and molecular structure of living bodies occasion great modifications in the action of different physical and chemical agents.

We must not omit to add, that every day increases the number of a particular class of chemical phenomena, the explanation of which cannot be given on the ordinary laws of affinity: I allude to actions of contact, or to those of a catalytical nature. In the greatest number of these actions, we remark that a body, ordinarily in very small quantity, causes, without undergoing any modification itself, some considerable transformations, either of chemical composition or physical properties, in other combinations. In this category of phenemena we find the different kinds of fermentation. We shall see that the number of these catalytic actions in living bodies is immense. We can produce them also in our laboratories; they are of the same nature as those which the black platina powder exerts upon a mixture of hydrogen and oxygen, and silver scattered on oxygenated water.

I should here notice a fact of some importance relative to our subject, and of which, by and by, I shall have to speak more at length. The cellule is certainly the elementary organ, or the molecule of organic bodies. We can now explain, by the aid alone of the phenomenon of endosmose, (occasioned entirely by the dominion of the physical forces,) the mechanism of life of this little cell, and render an account of the manner in which the materials of its nutrition can penetrate it, while others are eliminated. We constantly meet with a great series of physiological facts, of which endosmose furnishes the explanation. We may also add, and are able fully to demonstrate it, that light, heat, and electricity, are produced in the interior of living bodies, by the play of the same physico-chemical actions as those which take place in inorganic bodies, and are attended with the same results. But can we hope, by the aid of all these facts, and analogies, that we shall be permitted to arrive at the complete explanation of all the phenomena of living bodies? At the present time, at least, this is a vain hope. Open an animal, and examine its kidneys and liver, and then inquire by what physical force it can be explained, that the blood which is carried to an organ forms bile and urine. How can we, in having recourse to the play of chemical affinities, even modified as much as we can imagine by the aid of the particular structure of organs, and even also by the actions of contact—I will not say comprehend—but even have a glimpse of the manner in which the different organs effect the separation and transformation of the constituent parts of the blood, in which all the organic elements are mixed, partly suspended, partly dissolved, and of which there must be continually a want to repair their lost parts? What can we say of the functions of nerves, and generation!

We must conclude from this,—

1. That living bodies have properties common to all bodies in nature, and that these properties exercise an influence in the production of phenomena which are peculiar to them, and which cannot, therefore, be neglected or overlooked in their explanation.

2. That the great physical agents—heat, light, electricity, molecular attraction—act upon living as upon all other bodies in nature; and that their action must of necessity interfere in the production of functions peculiar to those bodies.

3. That these forces, when exerted upon organized matter, sometimes modify their general mode of action; and that this modification is owing to a difference of structure and chemical composition of organized bodies.

4. That there are, moreover, in living bodies, phenomena which are termed vital; that these are numerous, and of the highest importance; that, in the present state of science, we cannot understand how the physical agents, even when modified in their action by the organism, can interfere in their production. This is the reason why there exists a study, a science, which has for its object the physico-chemical phenomena of living bodies; like as there is an experimental physiology. The intimate and necessary connexion is found in the third class of facts which we have pointed out. The organization modifies the action of physical agents, and the study of these modifications requires the combination of physical and experimental physiology. Let us not forget that we have formed a fourth class of phenomena of living bodies, which we have termed vital. I have said vital phenomena, and not vital forces, and in fact the difference is truly vital.

If Newton had only or merely called that force which rules the wonderful system of the celestial mechanics attraction, or attractive force, his name would long since have fallen into oblivion; but in demonstrating that the attraction is exerted in a direct ratio to the masses, in an inverse ratio to the squares of the distance, and revealing the eternal, the unchangeable laws of this force, he has rendered his name immortal.

To speak of vital forces, to give their definition, to interpret phenomena by their assistance, and to be ignorant of the laws which govern these supposed forces, is to say nothing, or, that which is worse, it is to satisfy the mind to no purpose, to stop the search after truth. To say that the liver separates the elements of bile from the blood by means of the vital force, is to say no more than that the bile is formed in the liver. By this change of the word, we become conscious of a dangerous illusion.

I think I have satisfactorily established the end at which it seemed necessary to arrive in the study of the phenomena of living bodies, which brings us back to the last analysis in the examination of the physico-chemical phenomena of these bodies, of their organization, of the modifications which this organization exerts in the general action of physical agents, and lastly, the search after the laws of phenomena purely vital, which up to the present time are empirical.

I hope I have succeeded in determining what are the limits which we ought to impose upon ourselves in the vast extent of physiology, and what part of this we ought to study under the title of physico-chemical phenomena of living bodies. The general principles I have just unfolded ought to be sufficient to make you estimate their importance for understanding the functions of living bodies. In these lectures, I propose to myself another end no less important; it is to introduce in the exposition of physiological facts, and in the investigation of their laws, that precision of language, that exactness of expression, that rigorous method, which are too often set aside in the study of physiology and medicine, and which have hitherto been almost exclusively the distinctive qualities of physical science. Every step that we take towards this object, however trivial it may seem at first, will certainly prove of great serviec

to physiology. It will lead to a certain conquest, because it will be founded upon a separate acquaintance with the science of organization, the basis of which will be established and supported by the physical theories, which, as you know, are almost complete, and every proposition of which has been rigorously demonstrated.

# Hospital Reports.

## LONDON HOSPITAL.

### TWO CASES OF POST-PHARYNGEAL ABSCESS, FROM IMPACTION OF FISH-BONES.

Reported by JOHN ADAMS, Assistant-Surgeon to the London Hospital.

Feb. 24th, 1846.—A young woman, twenty years of age, was admitted into the London Hospital, labouring under most severe distress from having swallowed a fish-bone. She had applied at the hospital ten days ago, in consequence of the bone of a plaice having stuck in her throat whilst eating. The house-surgeon had attempted its removal by means of a blunt hook attached to the one of a probang, and failing in this, he pushed an ordinary probang down into the stomach, to force it onwards. This was followed by considerable pain about the throat, and difficulty of swallowing, for which she came again to the hospital. When I saw her first, besides the symptoms just mentioned, her neck was somewhat swollen and tender, the swelling being evidently deeply seated, and it was more perceptible on the right than on the left side; her pulse was quick, her breathing somewhat difficult, and she laboured under much constitutional excitement. She was immediately taken into the hospital, was ordered leeches repeatedly, and calomel was administered, so as to affect the mouth. So far from any amelioration of the symptoms, she became gradually worse, her dysphagia became more complete, and her breathing was so difficult as to threaten immediate suffocation: my attention was therefore called to her, as her symptoms became more urgent, and in addition to her difficulty of breathing, she had paroxysms of suffocative cough. I suspected abscess behind the œsophagus. I could not examine the throat, in consequence of her inability to open her mouth. As the signs of impending suffocation were more urgent, I immediately determined to open the larynx, which I did with some difficulty, owing to its being pushed rather to the left side, by the swelling of the neck on the right. The dyspnœa was at once relieved, and I left her tolerably comfortable, but still unable to open her mouth, or swallow, and complaining of excessive thirst; she was therefore ordered an enema of milk-and-water, alternating with beef-tea, every three hours.

On the following day, the dyspnœa had returned, and as this appeared to depend on partial closure of the opening, by coagulum and a swelling of its sides, a small piece of cartilage was removed. She was relieved at once, and the injections were ordered to be repeated, and one drachm of mercurial ointment was rubbed in every three hours.

The next day she was decidedly better, and breathed freely through the opening. The swelling of the neck was softer, and is equal on both sides; there was no evidence of fluctuation. Her mouth was slightly affected by the mercury. She was ordered to rub in some mercurial ointment, and to continue the injections. She became much worse on the day following; her difficulty of breathing increased, and she now complained of great pain in the left side of the chest; her pulse became excessively quick, and her countenance was expressive of the greatest anxiety. She died in the evening.

On opening the chest, distinct marks of recent inflammation were visible in the pleura covering both lungs. In attempting to remove the pharynx and œsophagus for examination, an opening was made into a large, fœtid abscess, from which a quantity of most horribly stinking pus, mixed with air, escaped with great violence. On slitting these parts open after removal, the fish-bone (that of the fin of a plaice, and about an inch and a quarter long, thin, and with a sharp point) was found at the back of the lower part of the pharynx, quite loose; the abscess extended some distance down the œsophagus. In the anterior mediastinum there was an effusion of lymph at the upper part. No opening or mark of an opening was visible, indicating the situation at which the bone had penetrated the pharynx or œsophagus.

I confess that the result of this case distressed me very much; and I may perhaps be permitted to record the remarks I made at the time, as the justice of them is amply proved by the result of a precisely analogous case, occurring within fourteen months of the previous one. There could be no doubt that the bone was pushed through the pharynx when the probang was used, and I have always questioned the propriety of employing this instrument in cases where sharp-pointed, foreign bodies are lodged in the pharynx or œsophagus. Indeed, I would say, that it never ought to be used under such circumstances. If the foreign body cannot be extracted by the œsophagus forceps, the round, button-like hook, attached by means of elastic steel, covered with ribbon to the other end of the probang, should be employed; as by this, pins, and needles, and pieces of coin, have been repeatedly extracted from even the lower part of the œsophagus. As this modification of the probang is not much known, I have sent a rough sketch of one in use at the London Hospital.

With regard to the treatment of this case, I suspected matter behind the œsophagus, but could not detect any fluctuation in the neck, as the fluid was close to the spine and behind the carotid sheaths, and I could make no examination by the mouth, owing to its completely closed state. I therefore contented myself with relieving the patient from impending suffocation, leaving the opening of the abscess to the efforts of Nature. From the result of the examination after death, I said at the time, that should a similar case happen, I would at any rate make an explorative opening into the pharynx, and, if necessary, to effect this I would extract some teeth; and, in the event of matter being present, I would make an incision for its evacuation.

Case 2.—March 29th, 1847: A woman of middle age applied at the London Hospital to-day, in consequence of her having swallowed a fish-bone on the 24th, which had stuck in her throat. She was eating part of a plaice, when a bone passed into the pharynx, which she could not remove. She had seen no medical man, and consequently no attempts had been made to remove it but what she herself had made, and she said she had removed two pieces of bone. She was labouring under very great excitement, with considerable dyspnœa and difficulty of swallowing; her countenance was exceedingly anxious. She inclined her head forwards, and could not raise it without inducing an increased difficulty of breathing. Her voice was altered in pitch, but was quite clear. The neck was examined, and a deep, indistinct, and diffused swelling was observed on the right side of and behind the trachea. I passed my finger into the pharynx, but could not feel the bone; the pharynx seemed thickened, but no fluctuation could be perceived. I had little doubt that an abscess was forming behind the pharynx and upper part of the œsophagus. Mr. Andrews saw her with me, and advised the application of leeches with warm fomentations and poultice; and she took a grain of calomel every four hours.

31st.—She is worse in every respect; her countenance is exceedingly anxious; the dyspnœa excessive; dysphagia complete. The neck is swollen, especially on the right side; the outline of the larynx and trachea being nearly lost. I passed my finger into the mouth, and distinctly felt an elastic swelling in the back of the pharynx towards the right side, which I had no doubt was an abscess communicating with the swelling on the right side of the neck. Mr. Andrews and Mr. Luke coincided in this opinion. It was therefore determined to make an opening at once: this was readily accomplished by the tonsil lancet, or pharyngotome, guided on the left forefinger. About two ounces of most fœtid pus immediately gushed out; this in passing over the glottis excited a good deal of suffocative cough, but she was very soon relieved, and the internal swelling as well as the external, subsided.

April 1st.—She is in every respect better; and has spat up a considerable quantity of stinking matter; the pain in her chest, of which she had previously complained, is gone. She takes beef-tea, and wine with sago.

2nd.—All urgent symptoms have subsided; she spits up a quantity of fœtid matter, and coughs up mucus in small quantities. A probe is ordered to be passed daily to keep open the orifice in the pharynx.

It would occupy too much time to give a detailed account of the progress of this case from day to day, and a general description of her condition will probably be sufficient.

After the first few days, in which she appeared progressing very favourably, she became gradually much weaker; she spat up a large quantity of matter, of the most disgusting odour; she was troubled with constant cough, and her neck commenced again to swell; she also complained of a pricking sensation in the neck. The fish-bone could not be felt. She seemed, indeed, to be gradually sinking, like a person dying of phthisis. The abscess could still be evacuated without difficulty, especially by the introduction of the probe or the finger; but the escape of the matter was not easy, independent

of these means. It appeared that her sufferings were exacerbated by the want of a free opening for the discharge of the matter. I therefore, on the 15th, with the advice of Mr. Andrews, introduced a probe-pointed bistoury, and divided the pharynx upwards to the extent of at least three-quarters of an inch, by which a free exit was given to the matter. This relieved her at once, and from this moment she began to mend, the discharge being free, and becoming gradually odourless, and a small quantity of curdy matter escaping with the discharge. She was in the habit of squeezing the matter out with her hands firmly pressed around the neck, and thus has continued to evacuate the cyst. Previously to the enlargement of the wound by the bistoury, the extremity of a sound was passed into the wound; and this, by the employment of considerable force, was made to project under the right sterno-cleido-mastoideus muscle; and it became a question whether an opening ought not to be made upon the sound through the muscle, rather than to enlarge the pharyngeal opening; but the depth of parts to be divided, and the close proximity to the carotid sheaths, together with the anticipated difficulty of keeping the opening patent, induced me to adopt the latter alternative.

May 18th.—She has left the hospital completely cured.

## Original Papers.

# ON ULCERATION OF THE CERVIX UTERI ACCOMPANYING UTERINE POLYPI.

By HENRY BENNET, M.D.,

OBSTETRIC PHYSICIAN TO THE WESTERN GENERAL DISPENSARY, ETC.

(*Read before the Harveian Society, April*, 1847.)

In a former communication, published in The Lancet of July, 1845, I drew the attention of the profession to the fact of uterine polypi being frequently accompanied by ulceration of the mucous membrane of the cervix uteri, and of its cavity. I then stated, likewise, that further investigations would, in all probability, show this complication to be very frequent. These views, which my subsequent experience has entirely confirmed, have lately received the fullest sanction and support from one of the most eminent uterine pathologists of the present day—Dr. Montgomery, of Dublin. In a very interesting and valuable article on uterine polypus, which appeared in the last August number of *The Dublin Quarterly Journal*, Dr. Montgomery has given the history of several patients in whom the two diseases coëxisted, the ulceration having evidently been produced by the presence of the polypus. I have recently met with a case of this description, which has presented so many important features, both with reference to the antecedents, the diagnosis, and the treatment, that I think it worthy of being placed on record.

In May, 1846, I was requested to see, in consultation, a lady, aged thirty-nine, who had been suffering for many years under obscure uterine disease. From the gentleman in attendance, and from the patient herself, I elicited the following details:—Menstruated rather early in life, about twelve or thirteen; she enjoyed good health as a girl, although always rather delicate; at eighteen she went abroad, and settled in South America, in a tropical climate. Here she married, and had two children within the first few years of her marriage. The labours were ordinary, and were not followed by any untoward symptoms. About the age of twenty-five, the menses, which had previously only lasted four or five days, began to be more abundant and more prolonged; this state of things became gradually more and more marked, the flow of blood often lasting fourteen, twenty, or more days, without, however, being excessively abundant, except during the first three or four. She also experienced severe and continued pain in the lower part of the back, and slight pain in the ovarian regions, especially the left, and had a white vaginal discharge. The uterus was examined per vaginam; the only lesions, however, which were detected, were slight hardness and tenderness of the cervix.

Every known means of arresting uterine hæmorrhage were resorted to, but without avail. As the general health was rapidly giving way under the influence of the continued hæmorrhage and uterine irritation, and as it was thought that a tropical climate might be the cause of the obstinate resistance of the morbid symptoms to all remedial agents, she was at last ordered home to Europe. She was then thirty-one years of age. The change of climate, however, brought no alleviation in the hæmorrhage and local pains. The former continued to occur at each monthly period; the flow of blood sometimes continuing from one period to the other. During the eight years that had elapsed when I saw this lady since her return to this country, she had been nearly always under medical treatment. The uterus was always examined with the hand by the various practitioners who attended her, but never with the speculum, instrumental examination being invariably deemed unnecessary; and different opinions had been given. All who were consulted, however, agreed in considering the womb inflamed, and in recommending antiphlogistic treatment. In consequence of these ideas, she was cupped in the loins some score times or more, and was quite drained by leeches applied to the hypogastrium and vulva. The antiphlogistic measures thus pursued, *à outrance*, appeared, however, only still further to debilitate the general health, which became more and more affected. At one time, the solid nitrate of silver was applied to the cervix uteri through a tube, without a speculum being used, daily, for six weeks. This treatment appeared to lessen the duration and amount of the hæmorrhage for a few months, as had occasionally been the case with other means, but it then returned as before. A few years ago, the medical gentleman who had attended the lady in America, returned to England, and, on examining digitally, found that the cervix, which was hard and closed when he last saw her, had become open and soft. This change in the state of the cervix had evidently occurred recently, as it had been noticed by the practitioner in attendance, who told the patient that he was afraid it was a forerunner of cancerous degenerescence. Her medical friend, by whom I was called in, told me that he then thought the change was the result of the excessive loss of blood which she had suffered, both from the treatment and the disease.

The above account was by no means encouraging, and I much feared that I should find the patient labouring under some organic disease of the uterus. The complexion presented the pale, rather sallow hue, which we find in the ulcerative stage of uterine cancer; but this cachectic hue is also met with in severe chronic inflammation of the uterus, and in obstinate flooding as well as in cancerous disease. At the same time, the lengthened duration of the morbid symptoms proved that they could not all along have depended on cancerous disease, even if it then existed. On examining digitally, I found the vagina lax, and very sensitive; the cervix low, very retroverted, voluminous, and indurated, but perfectly smooth and even; the os so open as freely to admit two-thirds of the first phalange of the index. The kind of small cavity into which the finger thus penetrated, was soft and fungous to the touch; the uterus was rather voluminous and sensitive to pressure, but presented no nodosities or inequalities. The hypertrophied state of the cervix, and the patent velvety condition of the os, showing at once that there was inflammation of the cervix, and ulceration around and in its os, I explained the necessity of an instrumental examination. This was at once assented to, and with a large bivalve speculum, and in a good light, I raised the retroverted cervix, and expanding the blades to their fullest extent, brought the cervix and open os fairly into view. I then at once saw the cause of the hitherto unexplained uterine sufferings of the patient. Just between the separated lips of the enlarged cervix was a small vascular polypus, about the size of a hazel nut, occupying the cavity of the os, and merely showing its anterior extremity on the blades of the bivalve speculum being expanded. If they were allowed to approximate even partially, the hypertrophied lips of the cervix closed over the os so as to conceal it and the contained polypus. I ascertained, by means of the uterine probe, that the polypus proceeded from the uterine edge of the cavity of the neck, above an inch from the os cervicis. It was connected with the point from which it originated by a soft pedicle. The cavity of the uterine neck was much dilated, and all that portion of it that was accessible to the eye was ulcerated. The ulceration occupied the entire contour of the os for a few lines beyond the point reached by the head of the polypus. The latter was very red and vascular, and so soft as to pit deeply under the slightest pressure. The circumstance of its being thus embedded, as it were, in the cavity of the os, and its softness, accounted at once for its not being perceptible to the touch. The fingers, on examining the os uteri, merely felt a small, soft, fungous cavity, representing the apex only of the polypus, and the surrounding ulcerated tissues. The cervix itself was much enlarged, red, and inflamed, and so much retroverted as to be brought into view with some difficulty. It was not without trouble that I succeeded in persuading the patient, even with the corrobora-

tive evidence of her medical friend, that she really was suffering from the presence of a small uterine tumour, that had probably been there for many years, and had thus occasioned the hæmorrhages and uterine inflammation, by which her life had been so long embittered. Having family matters to arrange, it was determined that the extirpation of the polypus should be deferred for a few weeks, and that she should then return to town and place herself under my care.

It was not for some months that I again saw this lady. It appears that after leaving town, her belief in the existence of a hitherto undiscovered cause for her sufferings became staggered, and she began to think that it was next to impossible that so many different practitioners, previously consulted, could be wrong. The persistance of all the symptoms, nevertheless, again drove her to town towards autumn. She determined, however, to seek for corroboration of my opinion. She accordingly consulted an experienced accoucheur, told him that she had been suffering for many years from uterine hæmorrhage—that she had been treated for inflammation without beneficial results—that she fancied there might be more than had been discovered by her previous attendants—some tumour or ulceration; and that she wished him to examine her with the speculum. This was accordingly done. A careful speculum examination was made, and the patient told that she had neither tumour nor ulceration, and that her disease was merely retroversion of the uterus. Simpson's probe was introduced into the cervix, and the uterus brought, as it was stated, into its right place. She was likewise told, that if this operation was repeated at proper intervals for a sufficient length of time, the vitiated direction of the organ would beremedied, and that she would recover her health.

A few days afterwards I was sent for, and frankly acquainted with what had occurred. The lady stated, however, that she had no confidence in the opinion last given, because the examination was made in such a manner as to convince her that but little information could have been obtained. She was examined, it appears, on her side, in the usual obstetric position, on a sofa away from the window, a conical or cylindrical speculum being used, and artificial light resorted to. I had examined her, as I generally do, reclining on the back, in a strong natural light, opposite a window. I was so much surprised to hear that a careful examination had been made by a very competent person, and no tumour found, that I concluded the polypus had fallen off, by ulceration of the pedicle—a circumstance which I have known to occur. To my astonishment, however, on separating the blades of the speculum, I found the small vascular tumour lying in the os, surrounded by a ring of ulceration just as before. It became evident, therefore, first, that the practitioner last consulted could not have been aware that an open fungous os uteri indicated ulceration; secondly, that by the use of the conical or cylindrical speculum, the hypertrophied lips of the cervix had been so approximated as to cover the os uteri and conceal the polypus and ulcerated surface.

By means of a pair of speculum forceps with a very small serrated extremity, I broke down, and brought away by torsion, the small tumour, and the greater part of its pedicle. A few drops of blood only were lost. I subsequently cauterized the ulcerated surface, which appeared to extend to the entire depth and circumference of the cavity of the uterine neck.

From this time forward the case resolved itself into one of inflammation and hypertrophy of the cervix, along with deep-seated ulceration; and was treated by the means which I usually employ—cauterization at variable intervals, emollient or astringent vaginal injections, hip-baths, leeches to the inflamed cervix, and rest in the recumbent position. Both the inflammation and ulceration, however, proved very rebellious to treatment. It was only by very slow degrees that the inflammation and hypertrophy of the lips of the cervix subsided. As this latter change occurred, the cervix, which, as I have stated, was very low and retroverted, gradually rose in the pelvis, and reassumed a more normal direction; and the ulceration likewise began to cicatrize. All that part of the ulceration external to the cavity of the os healed in the course of a few weeks, but the internal ulceration proved very obstinate, and the more so the deeper it was situated. It was only after six months' nearly continued treatment that the cavity of the cervix was completely healed. As it cicatrized it closed, until, from being long sufficiently open for an inch in depth to admit a large-sized drawing pencil, it became so contracted as merely to admit the uterine sound. For the last six weeks of the treatment, the ulceration appeared limited to a small deep-seated surface, probably that from which the polypus sprung, near the inner orifice of the cavity of the uterine neck. In order not to destroy the cicatrix of the healed part, in passing caustic up to the ulcerated surface, I used small silver tubes, half an inch in length, which I fixed in the os uteri, and pushed in the requisite depth. The caustic used, always a fluid one, was passed through this tube. When the eye could no longer reach the parts still ulcerated, I judged of its continued existence by the oozing of pus from the lips of the os uteri, and of blood from the surface affected, on its being touched with the uterine probe. At the time the local treatment was thus brought to a close, (last March,) the cervix was at least two inches higher in the pelvis than when I extirpated the polypus. It was also very much smaller, very much less retroverted, and presented no evidence of inflammatory induration, although still rather larger and harder than natural. The vagina was quite healthy. All the uterine organs were very sensible to the touch; but in this respect they merely participated in an exaggerated state of nervous sensibility of the entire economy. Ever since the evulsion of the polypus, there had been no continued sanguineous discharge after the monthly periods, although the purulent discharge was often streaked with blood, especially after cauterization. The menses flowed five or six days rather abundantly, and were then replaced by the purulent or sanguineo-purulent discharge from the ulcer.

The slowness of the process of cicatrization in this case may be accounted for by two circumstances,—first, by the very lengthened existence which I feel warranted in ascribing to the ulceration; secondly, to the extremely debilitated state of the general health, depraved by fifteen years' flooding and suffering. Not only was the patient so reduced by the continued loss of blood, morbid and artificial, that loud anæmic murmurs were heard in the heart, and in the large bloodvessels; but the digestive and nervous system had received a very severe shock. The stomach could scarcely bear even the very lightest food, and that only in very small quantities; the action of the bowels was irregular; they were often relaxed and irritable; and no dietetic, stimulant, or medicinal tonic, could be borne. She had been salivated more than once, and attributed this extreme susceptibility of the digestive system partly to this cause. Iron, quinine, iodine, &c., were all tried at various periods, but as often suspended from the disturbance they created in the economy. The intercostal, the sciatic, the crural, and the dorsal and other nerves, were all, at different times, the seat of severe neuralgic pains, which generally proved rebellious to local therapeutic agents. They seemed to change their seat, or disappear under the influence of atmospheric variations, or mental or bodily conditions of a still less tangible nature, and were evidently the result of the general anæmic state of the economy.

This patient had for some years, she said, been in so excitable and sensitive a state, as not to be able to bear the operation of any medicinal substance, and had latterly entirely given up taking any. This state of the system improved considerably whilst she was under me, although she was scarcely conscious of the fact. When she left town, however, she was still very weak and debilitated, and there was still an anæmic murmur in the large vessels. She had, likewise, still pain in the back and ovarian regions; but as nearly every other part of the body was likewise the seat of neuralgic pains, I did not attach much importance to their apparent persistence. They were, however, she herself stated, much less intense than formerly. The bearing-down sensation had nearly entirely disappeared. A month after her departure from town I again had an opportunity of examining the state of the uterus. I found the os quite closed, the cervix still smaller, and all evidence of internal ulceration gone. She had been nearly entirely free from any show of blood, except during the monthly period, which passed off easily. Subsequently to my examination, however, ten days' extra exertion were followed by a very slight sanguinolent discharge from the uterus, showing that the tendency to uterine congestion and hæmorrhage had not entirely disappeared.

*Remarks.*—In the above case there are several points more especially deserving of notice. One of the most important is the connexion of the tumour which I found with the symptoms which the lady had suffered for so many years. There can be no doubt in my mind that the hæmorrhage which she experienced in America was owing to the existence of the

polypus, then concealed, however, within the cavity of the cervix. Hæmorrhage at the monthly periods is one of the most prominent and most universal symptoms of uterine polypi, and occurs with the smallest polypi, as well as with the larger ones. In the course of time, no doubt, the polypus occasioned inflammation and ulceration of the mucous surfaces with which it was in contact—thus giving rise to all the symptoms which are produced by inflammatory ulceration of the cervix uteri. As I have already stated, I firmly believe that the production of such ulcerations is very frequently, if not generally, the result of the presence of polypi issuing from the os uteri; so that the practitioner has, in most cases, two diseases to treat,—the uterine tumour, and the inflammation and ulceration produced by it. In the case which I have just narrated, the ulcerative inflammation may be considered as important an element in the disease as the polypoid tumour, if we judge by the reaction which they each produced on the economy. The polypus debilitates the system by the continued losses of blood which its presence occasions; but the ulcerative inflammation has an equally pernicious effect on the processes of assimilation and nutrition, through the sympathetic reaction which it produces.

Although, as this case shows, the additional existence of ulcerative inflammation is of extreme importance in the history of uterine tumours, it is, as yet, I may say, generally unknown to the profession. It is not even alluded to in a recent able work, written, *ex professo*, on Uterine Tumours, by Mr. Safford Lee, and is not mentioned by any writer that I am acquainted with, always excepting the recent able article of Dr. Montgomery.

In the case of my patient, the polypus would appear to have taken some years to work its way to the orifice of the os. It was no doubt the dilatation of the os, and the soft sensation produced by the apex of the vascular growth, that made one of this lady's medical attendants think that cancerous degenerescence was imminent. Her first attendant finding, on his arrival in England, the cervix, which he had formerly known hard, then extremely soft, and the patient, blanched by the continued depletion resorted to, concluded that the softening and opening of the os was the result of the treatment adopted. He tells me, that at that period depletion had been carried to such an extent, that she was like a person in the last stage of chlorosis, and that the blood which came from her was nearly all serum.

The extreme irritability of the nervous system, and the nervous pains noticed in this case, are not at all extraordinary. It is what we meet with continually in cases of great anæmia and physical exhaustion, whatever may be the cause. The most curious feature, however, in the history of the patient, is the fact of the existence of the tumour not having been recognised during the many years she was under medical treatment. The last error shows, that even instrumental examination does not always convey information, if imperfectly carried out. It would never have been committed, had the practitioner who made the examination used a bivalve speculum, when he found that the os uteri was open and fungous, so as to separate the lips, and to examine the cavity of the os. This is a precaution which should always be taken when the os appears open to the touch, and there is consequently reason to believe, that the cavity of the cervix is diseased. Cylindrical and conical spicula of the ordinary size do not always open the os sufficiently to admit of the eye penetrating into its cavity, and should not, consequently, be exclusively used in such cases. Indeed, no one speculum will answer for all cases, some requiring one size or form, and some another size or form. No artificial light, either, is equal to the full light of early day; and that position is best which best enables you to throw the daylight on to the structure examined, without any reflectors or other artificial assistance.

The general health of my patient, although evidently improved, was not restored when she left town, notwithstanding the eradication of the uterine disease. At this we cannot be surprised, when we consider that she had been suffering from a severe debilitating disease during a great part of her existence. It is, however, my conviction, from past experience of such cases, now that the thorn has been withdrawn from her system, now that the incubus of actual disease has been removed, the economy will gradually recover its tone under good management, hygienic and medicinal; and that she will yet live to enjoy an amount of health which she has not known since her youth. It is not all to cure a disease that has been undermining the constitution for years; time must be subsequently allowed to admit of Nature's rallying.

Cambridge-square, Hyde-park, June, 1847.

## ON THE USE OF ETHER IN NATURAL LABOUR.

By J. G. LANSDOWN, M.R.C.S.E.,
SURGEON TO THE BRISTOL GENERAL HOSPITAL.

From what I saw of the effects of the ether in the case of turning, as reported in The Lancet of April 24th, I resolved to use it in natural labours, fully confident, not only that it would not check the accustomed action of the uterus during the process of parturition, but that it would materially expedite the delivery of the child, and that the mother would be relieved from the suffering usually attendant upon its immediate expulsion. The views I then formed of the result of its action have been fully borne out in two cases in which I have administered it. Mrs. O—— was taken in labour May 7th, with her sixth child. With her first she went the full period of gestation, and at her delivery she had an exceedingly painful time; with the four succeeding ones she went only seven months, and with each had a less painful and more speedy delivery; upon this occasion she had gone her full period, and was consequently dreading a repetition of her first painful time; against this I held out hopes of relief, which the result proved I was justified in doing. I was summoned to her at a quarter to five P.M. Upon examination I found the labour progressing favourably; head presentation; os uteri dilated to the size of half a crown, her pains returning about every five minutes; from half-past six they were so sharp that she began to cry out for help from the nurse and myself; at half-past seven I commenced to give her the ether at the approach of a pain; for nearly ten minutes, as often as she inhaled, an irritable cough was the result; she would then quickly withdraw the pipe and again replace it to her mouth. During this period I allowed but little vapour to escape from the bladder, and her nostrils were free; at length I desisted from persevering with its use, but of her own accord she said, that as she had not felt pain while taking the ether, she preferred the cough to the pains. From this time forward she had no return of the cough; at the approach of every pain she asked for her pipe, as she called it, and slept during the time of each contraction of the uterus, her consciousness returning about half a minute after each had ceased, and continuing for three minutes; the contractions of the uterus were sometimes very considerable, so that she caught tight hold of her nurse or friend during their continuance, at the same time pressing her feet firmly against the bed-post, and pushing her body up higher on the bed, yet upon her awaking she said she had felt no pain, nor was she conscious of any effort being made on her part; the head was much longer in its descent than I had anticipated it would have been, the child not being born until twenty-five minutes past ten, nearly three hours from the commencement of the inhalation, during which time she felt no pain nor any inconvenience after the cough had ceased; at the last the head came down with a rush, but the perinæum was fully prepared for it, being in a perfectly relaxed state; ten minutes after the birth of the child the placenta came away; there was no fluid discharge either accompanying or following the expulsion of the placenta; the uterus contracted immediately. I did not feel her pulse during the time she was under the influence of the ether, but subsequently to the birth I found it 84. According to her own expression, the ether refreshed her and kept up her strength, so that she was quite cheerful, instead of dreading the approach of each pain, as she had been previously doing. During the progress of the labour she was perfectly cool, not requiring her face to be wiped, neither was there more than her usual colour upon her cheeks.

May 9th.—Going on well; has had no after-pains, from which, upon former occasions, she had suffered very much.

12th.—Found my patient up; she said she was so well it was useless her lying in bed any longer.

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Mrs. T——, aged thirty-five; pregnant with her eighth child; with her last three she had such profuse hæmorrhage immediately following the expulsion of the placenta, that it was with great difficulty her life was preserved.

Oct. 30th, 1846.—I was called to her, as it was supposed she had miscarried; the discharge was very considerable; she had last menstruated in the middle of August; there was no coagulum of any kind passed away; the discharge continued at intervals for a month; the pregnancy progressed to its full period, and I was sent for May 16th, ten A.M. I was then informed that labour-pains had commenced the day previous, about mid-day, but had passed off in an hour or two, and had not returned until this morning; during the first twenty minutes I was there she had four pains; the os uteri was dilated to the size of a shilling; the pains then abated in fre-

quency, returning very slightly every half hour. I left her at one, and returned at twenty minutes to six P.M. The head was then freed from the uterus, and had descended nearly to the perinæum; the pains were now five minutes apart, and severe; at five minutes past six, I commenced with the ether; three strong contractions followed very quickly, the first expelling a large quantity of liquor amnii; the second, the head of the fœtus; and the last, its shoulders, with the remainder of the body, which was fully born at ten minutes past six; the placenta immediately followed, being removed in two minutes after the expulsion of the child, unaccompanied by any discharge, so that she had not to endure the trial she had suffered from upon the three previous occasions; after the delivery she fell into a doze, which lasted about five minutes; when she awoke she was regretting very much the absence of her pains. Fifteen minutes after the birth of the child, she remarked to us, her sister and the nurse being present, that the pains having again left her, she feared she should have to pass through another night without her child being born: it was with difficulty we could persuade her to believe what had happened: at length she felt the abdomen, and then remarked, "Surely her child was gone, but she had felt nothing of it; she had merely had a pleasant dream instead of suffering pain."—Quarter to seven: She had perfectly recovered from the effect of the ether, and said she was very comfortable, but she could not understand the child being born without her feeling any pain; her pulse was now 72, the uterus being well contracted, and there being no discharge. I took my leave in much better spirits than I had entered the house, for I fully expected, upon this occasion, that I should have had a serious affair, taking into consideration her illness in October, and her former hæmorrhages.

May 18th.—Has passed a good night; has had no after-pains; the uterus well contracted; has had no bad symptom.

20th.—Very well; says she does not know why she remains in bed, as there is nothing the matter with her.

These cases fully show that the ether may be given in natural labours with impunity, and also that the suffering may be entirely removed; this alone is quite sufficient to remove that depression under which the pregnant female frequently labours for months previous to her delivery, and which often produces a great shock to the system generally, quite unfitting her for any exercise, which is so beneficial to her when in that condition. I am better pleased with its application to natural labours than to any of the cases in which I have used it, which have now, for different purposes, amounted to fifty; and in none have I seen a bad symptom following its use.

May 14th, I removed the leg of a child, four years old, for diseased ankle-joint, of three years' duration. She was perfectly insensible during the operation, knowing nothing that was being done for her. She took nothing to drink either during the operation or for some time afterwards; yet with this child there was no depression, no shock to the nervous system; the transitory effect of the ether having passed off, she was much more cheerful than she had been during her residence in the Bristol General Hospital, previous to the amputation. Her diseased ankle being removed, and that without her knowledge, and without any shock accompanying it, has quite altered her character, and made her a lively little girl. Half an hour after she was in bed, she was not aware that her leg had been removed.

I have not yet seen an instance in which any depression has followed its use; but, on the contrary, it has generally produced an exhilarating effect, neither the vascular nor nervous systems suffering from it.

Bristol, June, 1847.

## ALPHABETICAL NOTICES

OF SUBJECTS CONNECTED WITH

# THE TREATMENT OF DYSPEPSIA.

By ROBERT DICK, M.D.

(*Continued from p.* 359.)

*Constipation.*—There is a form of constipation which occurs in the young of both sexes, from the fourteenth to the twentieth or twenty-second year, which rather indicates health than disease, and is the result of active assimilation and absorption in the small intestines. Hence, a too great dryness and solidification of the fæcal matters, which, besides being thoroughly drained of assimilative matter, are reduced to so small a volume, as not sufficiently to excite peristaltic action. This form of constipation usually disappears spontaneously at that time of life when, less exercise being taken, and the development of the body being completed, absorption goes on less actively in the bowels, the mucous surface of which is again plentifully lubricated with mucus, as in the first years. As, however, from neglect or mismanagement of the constipation of youth, chronic disorders often result, a few observations on it may not be out of place.

The first means is, attention to diet, by which alone, in the outset, we ought to seek the cure of the disorder. The food should be pultaceous and herbaceous. A porridge, morning and evening, or at least once a day, of barley and oatmeal, will often be sufficient to regulate the bowels. Turnips, greens, potatoes, should be freely used at dinner, as well as salad, celery, &c. Bread should be sparingly used, and what is taken of it should be brown or rye. Apples, pears, prunes, grapes, raisins, strawberries, gooseberries, raspberries, cherries, should be used with little restraint, and lemonade or cider may be drank.

Such a system of diet failing to remove the affection, the next thing to be tried (*in addition* to the above diet, which should be persevered in) is injections. A simple one of tepid water, of considerable volume, should be first employed, every morning or alternate morning, after breakfast. If this is insufficient, then a medicated one should be had recourse to, consisting of gruel, with olive or castor oil, or turpentine; or infusion of senna, &c. As a too great spissitude of the fæcal mass is the evil to be contended with, and as the colon is the part where the accumulation principally occurs, so ought the remedy to be as local as possible. The giving of aperients by the mouth for a simple and very local affection, confined to the opposite extremity of the intestinal tube, besides being a circuitous measure, is, moreover, attended with inconveniences and disadvantages. In order to relieve the colon, the secretions of the whole upper part of the intestinal tube are, by the method referred to, artificially augmented, and the liver, jejunum, ileum, &c., are thus insidiously trained not to act efficiently, unless under the influence of purgatives. Young persons are thus unwittingly ensnared into a permanent dependence on medicines during life.

If, however, neither a chosen diet nor enemata are sufficient, and some aperient appears to be indispensable, we ought to select one, which, leaving the upper bowels unaffected, act only or chiefly on the colon, the seat of derangement. Aloes, combined with myrrh or with galbanum, sulphur, &c., fulfil this object. Castor or olive oil are, perhaps, the next best resource.

The constipation of youth, if not mismanaged, generally ceases spontaneously at from the twentieth to the twenty-sixth year. It is, however, often mismanaged by young persons themselves, their friends, or medical attendants. Chronic costiveness is established, with all the disturbances to chymification and chylification occasioned by the use of purgatives, even when most judiciously selected and most moderately used; and with those alternations, now of what we might name vascular collapse, now of plethora, according as purgatives are employed too energetically, or, on the other hand, not with *sufficient* freedom and frequency, *after* their use has been unfortunately established.

We have met with remarkable idiosyncrasies in patients suffering from costiveness, and requiring purgatives. It is, also, singular and important to observe with what rapidity some persons are debilitated by purgatives; how well others bear them; what a slight dose suits one individual; how large a dose is required by another. This patient is freely purged by a teaspoonful of castor oil; that one is only sent to stool by mercury, gamboge, or croton oil. Of those by whom the writer is at present consulted, there are five or six, whose only laxative is a cigar.

Sulphuro-saline waters, as those of Aix-la-Chapelle and of Vichy, and saline waters, as those of Püllna and Seidlitz, are useful in costiveness, and involve fewer risks of future ill consequences than most other means.

The time or times of the day at which purgative medicine should be taken is a matter of no small importance to those seeking not to fall into a *habit* of using such medicine, and to confine the quantity of laxative as rigorously as possible to that merely which is required. We should therefore aim at imitating as nearly as possible the action of Nature. Now it is during meals, and probably for from one to two hours subsequent to these, that the biliary, pancreatic, and mucous secretions, as well as the secretion or formation of hydrochloric acid, specially take place. Purgatives, then, ought, perhaps, to be given, not once, but several times in the twenty-four hours—namely, immediately before, or during, or soon after, the principal meals. They would thus coöperate in time and action with the natural secretions, and with the

more active periods of the peristaltic movements. And this leads me to notice one laxative, which may be used conveniently as a condiment in soup, &c., in place of common salt. I refer to the phosphate of soda, by which children may be unconsciously beguiled into the taking of purgatives on the principle referred to by Tasso.

> Così all' egro fanciul porgiamo aspersi
> Di soavi licor gli orli del vaso;
> Succhi amari, ingannato, intanto ei beve;
> E dall' inganno suo, vita receve.

Which we may translate thus:—

> When the sick child requires the bitter draught,
> We smear with sweet the cup from which 'tis quaff'd.
> The infant's sense the honey'd drug deceives;
> He drinks, and from the error life receives.
>
> GERUSALEMMA LIBERATA, Book i.

*Copper.*—Copper may be employed as a tonic and antispasmodic; but it has this disadvantage, that its toxical effects are apt to be developed before any considerable therapeutical benefit is derived. Consequently it is not to be compared, in conveniency and efficiency, with iron, zinc, bismuth, or silver; but, like them, may be employed, united with vegetable sedatives, in gastrodynia consisting purely of morbid innervation, and where the mucous membrane is healthy. We have used it, also, with evident advantage, as part in a series of treatment for paralysis, local and general. But, for the reason stated above, the range and degree of its utility are limited.

*Coriandrum.*—A carminative which requires no remark. It may, however, be worth while just to observe, that, in Cullen's opinion, coriander seeds correct, better than any other carminative, the griping effect of senna.

*Cornaro.*—Though not a proper subject for a "Notice," yet, in this series of papers, a slight reference to Cornaro can scarcely be called out of place. Our only object, however, in here naming him, is to direct attention, in the briefest manner, to the quantity and quality of that diet, and to the hygienic means by which, after a life of intemperance up to his forty-first or forty-second year, he both recovered entire health, and deferred death till his ninety-eighth year.

Between his thirty-fifth and fortieth years, he became, as he tells us, subject "to pains in the stomach, colic, gout, attended by what was still worse, an almost continual slow fever, a stomach generally out of order, and a perpetual thirst." He had been a free-living man, but now determined on a reform equally thorough and abrupt. He suddenly reduced his hitherto large allowance of food to twelve ounces of solid, and fourteen of liquid, daily. His solid food consisted, as he tells us, "of bread, panada, with an egg, or such other spoonmeat. Of flesh I eat veal, kid, mutton, poultry of every sort, partridges, thrushes;" he also ate fish. Of the fourteen ounces of liquid food, Tuscan wine appears to have formed a principal part. We presume the wine then drank in Tuscany was probably of much the same strength and quality with what is now used, and this contains about three per cent. less alcohol than sherry, and five or six less than port. In the writer's opinion, the wines of Tuscany are pleasant and sound, suit well the diet and the climate, and used as Cornaro used them, (and considering his formerly stimulant, and now reduced diet,) would answer well. The flesh of the kid and thrushes is still used in Tuscany and in Italy generally; and hearty and savoury meals we have made of both.

Cornaro makes little or no mention of vegetables or fruits. These, and particularly salads, are much used in Italy, and, from our own observation, we should pronounce the inhabitants of Rome greater devourers of salads than even the Parisians.

In addition to the above dietetic restrictions, Cornaro was careful to avoid extremes of heat and cold, fatigue, mental toil, moral excitement, and sexual excess.

How was his reformation rewarded? In a few days he began to receive benefit and improvement from his new system; within a year his health was entirely restored. Of medicines he makes no mention. He died, sitting in his chair, at ninety-eight, (other accounts say at upwards of a hundred), in a manner which quite realized the *euthanasia* of Grecian sages; his breath exhaling from his body as gently as, at the first cold of autumn, the leaf, detaching itself from the tree, rustles down in the forest's stillness.*

What is valuable in Cornaro's case, is the illustration it affords of how much can be effected by temperance and hygienic means, and on how small an amount of food life and health may be maintained.

*Cough.*—We are sometimes consulted for what patients call a stomach-cough, a liver-cough, &c. These phrases, though perhaps not quite accurate, yet express nosological truths. There *are* coughs primarily due to the state of the stomach and liver respectively.

Cough, from peculiar states of the stomach and liver, may be caused in various ways. Great flatulent distention of the stomach may provoke expulsive efforts in the respiratory muscles. An inordinately large meal may produce a similar effect; so may also a hypertrophied liver. The connexions of the par vagum with the hepatic plexus, and with the stomach, on the one hand, with the anterior and posterior pulmonic plexuses, on the other, sufficiently explain the cough and dyspnœa which occasionally result from irritated or inflamed liver, and from morbid conditions of the gastric mucous membrane. "The connexion," observe John and Charles Bell, "between the stomach and bronchiæ, through the medium of the par vagum and pulmonic plexus, is evident from those asthmatic attacks which depend upon foulness of the stomach."

Again, there are certain aphthous and other morbid states of the gastric mucous membrane, which are evidently gradually propagated up the œsophagus and down the trachea, and causing, in this way, reflex actions in the respiratory muscles.

The treatment of such sympathetic coughs is, of course, entirely subordinate to that of the stomach or hepatic lesion which causes them. Sometimes, however, in phthisical and strumous subjects, the pulmonary irritation, though, at first, merely sympathetic, becomes independent, refuses to yield, even after the disappearance of its first cause, and issues fatally. Hence the justice of Andral's advice, to watch with jealousy dyspepsia in strumous persons.

*Croton Cascarilla, and Croton Tiglium.*—It is to be regretted that two substances so unconnected, and of properties so opposed, should have a name in common. We do not see the smallest reason why the unmeaning expletive croton should be retained, but should consider it much more simple and convenient that, henceforth, cascarilla and tiglium should alone be employed.

Cascarilla is an excellent aromatic tonic, which agrees with most stomachs. It may either be given by itself or else conjoined to stronger tonics or to purgatives. Thus it corrects the cold and griping tendency of senna and neutral salts. In a course of tonics, we may often advantageously commence with cascarilla, and go on to gentian and quinine.

For the circumstances in which croton oil is to be used, we refer to the notice of cathartics, page 88 of THE LANCET for this year. It is there noticed, that in congested states of the vena portæ, in cerebral congestion, in some forms of cephalalgia, and of tic douloureux, croton oil is a powerful and prompt, though almost always a harsh and debilitating remedy. It is indispensable to its being administered safely, that there be no tendency to inflammatory congestion of the gastro-enteric mucous membrane. It suits best leuco-phlegmatic subjects, and persons whose congestions are venous, not arterial; passive, not active; and the torpor of whose portal circulation is due to no organic cause in the liver or heart. In such cases, croton oil is sometimes singularly serviceable.

Bentinck-street, Manchester-square.

* We have here, in part, availed ourselves of what we consider one of the most exquisite descriptions or allusions in the Æneid:—

> "Quam multa in sylvis, autumni frigore primo,
> Lapsa cadunt folia!"—Lib. vi. verse 309.

## Selections from Correspondence.

*Unqualified Assistants to Medical Practitioners.*

A SURGEON OF THIRTY YEARS' STANDING writes to complain of the practice adopted by many medical men of employing unqualified assistants—persons who are, he says, reckless of character, and careless of what they do; he adds that they greatly annoy all the legitimate practitioners in the neighbourhood. The Apothecaries' Company seem to think that such persons are not liable to legal proceedings unless they take the *entire charge of medical cases without the supervision of the qualified employer*, so that the most trivial attention on the part of the latter will free his assistant from all danger of a prosecution.

[*** The subject which our correspondent has opened in this communication is one of immense difficulty, and in relation to it we shall be glad to receive suggestions with a view to legislation. Unqualified persons are sometimes appointed to reside and act in localities situated at a considerable distance from the practitioners who employ them. As the law stands, the unqualified person is not liable to the penalties of the Apothe-

caries' Act, and there is now no mode of punishing his employer. Such an abuse is a great one, both professional and social. In this particular case it may not be difficult to apply a remedy.

*Suggestion for a Uniform Pharmacopœia.*

Mr. Barber, of Dublin, suggests that a short clause be introduced into the Medical Registration Bill, authorizing and directing the Colleges of Physicians in London, Edinburgh, and Dublin, to prepare and publish one uniform imperial pharmacopœia for the three kingdoms. He alleges as a special reason for urging it at this moment, that the English and Irish colleges are preparing new editions of their respective pharmacopœias, and consequently a better time could not be chosen. The advantages resulting from the publication of an imperial pharmacopœia are undeniable. As the law at present stands, prescribers and dispensers of medicine in Ireland suffer much from the diversity of pharmacopœias: the former has, in case of patients leaving that country for England or Scotland, to consult the formulæ of the London or Edinburgh College before he can venture to prescribe; and the latter labours under serious loss in being obliged to keep on hand a stock of preparations ordered by the London and Edinburgh Colleges. The public also suffer from some practitioners prescribing by the formulæ of the London College—a proceeding which, in the case of active preparations, may be attended with serious results to their patients. A similar state of things, with respect to the operation of the three pharmacopœias, must of course exist in the other kingdoms. It is full time that this anomaly should cease.

*Surreptitious Possession of Medical Diplomas.*

"Somebody" is desirous of calling attention to the facility with which a diploma of the College of Surgeons, or licence of the Society of Apothecaries, may be surreptitiously obtained: for instance, a member of the College dies, and a man of the same or somewhat similar name obtains the diploma of the deceased by purchase or otherwise, and then passes it off as his own property. This case, he asserts, is not entirely suppositious; he has known it practised, in one instance, with success, for a considerable time; the fraud was, however, eventually discovered.

[Such a fraud as this cannot be prevented by any Act of the legislature; but all persons cognizant of its commission are bound in common justice to give notice thereof, in order that the impostor may be punished.]

*Quackery in the Provinces.*

Mr. Mackarsie, of Clay-cross, Chesterfield, in writing on the prevalence and growing evils of quackery, states, that in the village where he formerly resided, a fully-qualified respectable practitioner can scarcely obtain a moderate subsistence, while an uneducated, unqualified man has been elected to the various clubs, and gains a good livelihood. The extensive colliery, to which his partner and himself are surgeons, is the almost weekly resort of such men, who not only derive a pecuniary benefit from it, but too often excite a feeling of disaffection and want of confidence, thus not only injuring their income, but also their professional reputation, and degrading them in the estimation of the public. It is not an uncommon thing, adds Mr. Mackarsie, for a village with a very large population to have no other resident professor of the Æsculapian art than a quack.

*The National Institute and the College of Surgeons.*

"Britannicus," in commenting on the proceedings of the National Institute, states that he was induced to request the erasure of his name as a member, in consequence of looking on the governing body as a party of men who were willing and ready to betray their trust to the Apothecaries' Company, to aggrandize themselves with the medical public;—who would rather be the founders and council of a chartered college, than the mere masters of a city company, and who were not very particular as to the means of attaining this very desirable distinction.

How different, he then proceeds to say, was the course of the governing body of the College of Surgeons. They manfully and straightforwardly maintained a most unpopular course; and what is the result? The college is what it then was, and its unpopular acts are in a measure forgotten, while the popular double-dealing of the company's governing body has brought contempt on themselves and their institution.

[Britannicus is grievously mistaken in his opinions respecting the governing body of the College of Surgeons. Their conduct, in their late proceedings, has been neither manly nor straightforward; the charter, which they obtained by secret and unenviable influence, has not left the College where it was, for while it has for a time given higher power to a certain portion of the commonalty, and to the Council, it has inflicted an indelible disgrace on the latter body, and irretrievably sunk them in the estimation of their professional brethren. Nor is their position among the public at large, the same as it was before the alteration of the charter: the indignation that gross act of treachery excited, was not confined to the ranks of the profession, but has been fully participated in by the thinking and educated portion of the public. Nor is it right to assert that these unpopular acts have been forgotten: were the Council to retrace their steps, they might be forgiven, but forgotten they cannot be, nor can confidence ever again be placed in a body of men who have so wilfully and so shamelessly betrayed their trust.]

*Dentists and Cuppers under the New Bill.*

"A Dentist" of nearly twenty years' standing suggests, that in Clause twenty-seven of the Medical Registration Bill, the words "on or before the first day of March, 1847," should be left out, and the following substituted, "or practising and studying such profession or business of a dentist or cupper at the time of passing this Act, and all those persons or students that are under articles for the space of two years from the time of passing this Act, and all those dentists and cuppers that are now practising in the said profession, shall register their names with the names of all their students or pupils under articles of servitude at the time of passing this Act, under the penalty of pounds."

[If this recommendation were carried into effect, a person commencing his apprenticeship or pupilage at the time the Medical Registration Bill became law, would be freed from all supervision under its enactment—a provision which would hardly be consistent with justice. Those who are already in business would be properly relieved therefrom, but not those who may hereafter become dentists and cuppers.]

*Report of the Liverpool Meeting.*

We have received two letters, one signed "A Retiring Member of the National Institute," and the other, "T."—from which we gather that the meeting at Liverpool, respecting the Medical Registration Bill, was very numerous, (upwards of 200,) and was, with three exceptions, unanimously in favour of the provisions of the Bill. The objections which were raised against it, founded on the advertisement issued by the National Institute, were completely controverted, and shown to be altogether unfounded. "T." goes still further, and shows the little support medical men have hitherto derived from the existing Colleges, either in the immediate exercise of their profession, or against the intrusion of quacks; the only body that possesses real power—the Society of Apothecaries—directing its attacks against qualified members of the profession, instead of against those who exercise the art without any qualification. "T." concludes by earnestly recommending the medical men of every city and every town, every parish and every hamlet, to follow the example of Liverpool, and petition in terms not easily to be misunderstood.

## Reviews.

*Observations on the Nature and Treatment of Pulmonary Consumption.* By Thomas Woods, M.D., &c. Shields: Parsonstown. London: Aylott and Jones. 1847. pp. 95.

If it were a rule that our knowledge of any subject was increased in an equal ratio with the quantity of matter written upon it, and put forth to the world, it would follow that phthisis—the great scourge of this country—would be the disease, whose causes, course, effects, and treatment, were the best understood. But this is not the case; on the contrary, our knowledge of the true pathology of tubercle is very imperfect, and our treatment having no basis, being merely empirical, and most unsatisfactory. Numerous have been the attempts to elucidate the pathology of tubercular disease; and although they have failed fully to do so, yet much light has been thrown on some of its chief features. The author of the

treatise under consideration has contributed his mite—has started one or two novel notions; but many contributions must yet be made, and those already received must be collected, compared, confirmed, in order that benefit may be derived from them, and the desired object attained.

In the views the author advances, Liebig's hypotheses are freely employed, and thus pulmonary consumption is represented as an excessive oxidation of the whole body. Setting out with this idea, all the symptoms of phthisis, and several of its plans of treatment, are interpreted by it. He would make the delicacy or depression of the vital powers, brought about by what are called the remote causes of phthisis by most people, the first stage of the disease, or "its originators;" "the deposition of tubercle, or what is regarded as the proximate cause, the second stage." Upon the state of depression much stress is laid; but is this state peculiar to phthisis, or rather, does it not usher in other maladies? If to the question in the second form, an answer be returned in the negative, we may ask, what are the peculiarities of that low condition, as distinguished from others resembling it, and which precede other diseases than tubercular consumption?

Founding it on the theory of excessive oxidation of the tissues, Dr. Wood starts the idea, that the deposition of tubercle is an effort of Nature to save the patient, on account of its blocking up more or less of the pulmonary tissue, and so diminishing the capacity of the lungs for air; in other words, by its preventing so large a supply of oxygen to the economy. He says, "Now, when Nature wishes to lower the amount of oxygen with respect to the frame, when it is not strong, to withstand its invasion, she has her choice of three modes of acting: either to shut up part of the lung, the door through which it enters; to diminish the number of blood-globules, or carriers; or to increase the quantity of bile. It is obvious that any of these will have the desired effect. If the alteration produced by the three most marked diseases of debility,—consumption, chlorosis, and scrofula,—which may be taken as types of all the others, be examined, it will be found that, in the first, the amount of oxygen is lessened by filling up the lung; in the second, by decreasing the number of globules; and in scrofula, Andral has shown that the functions of the liver are morbidly active,' the liver being hypertrophied.' In some diseases these three resources are made use of together: in phthisis, for instance, the scrofulous liver is frequently met with, the blood-globules are diminished, and lastly, the air-cells are occluded by tubercular matter." Nature has other means of lessening the capacity of the lungs, as, by their solidification, in weak rachitic children; and another example mentioned is, the occurrence of bronchitis in fever.

The above, which are adduced by the author as efforts of Nature towards recovery, would appear to us to indicate a further progress of morbid action, or of a process of depraved assimilation or nutrition. From our physiological notions of the functions of the blood-discs, we conclude them to be most essential to the processes of nutrition going on in the blood, as to the elaboration of fibrine. If this be their purpose, the abstraction of them would still further impair nutrition, which is already at a low ebb, in phthisis, chlorosis, fever, and other diseases, marked, as Dr. Wood says, by a depressed state of the system; and it is the general rule of practice to increase the nutritive powers, and, especially in chlorosis, to regenerate the lost red corpuscles. Another means of warding off the too rapid oxidation of the body is said to be the increased activity of the liver—i. e., by the increased secretion of bile. But although the liver be enlarged in phthisis, as it frequently is, is this enlargement coupled by an increased production of bile? Is it not rather the reverse—that the secreting cells of the liver being unduly gorged with fat or oily matter, have less power of separating the constituents of the bile.

But, were the conditions adduced by the author, instances of the *vis medicatrix Naturæ*, as he imagines, the selection of means would appear most unfortunate, for they are such as would make a bad matter worse. In Liebig's hypothesis of excessive oxidation, and in the deductions raised in the treatise before us, upon it, we would put little faith; they all look very pretty on paper, like many an elaborately designed machine, but the test of experience chases away all hopes.

The same hypotheses are employed to found a plan of treatment upon in phthisis; all its indications are reduced to two,—First, to lessen the relative quantity of oxygen; and secondly, to strengthen the vital power. The principle upon which the author acts is, "increasing the quantity of bile, in order to saturate more than the ordinary portion of oxygen, thereby diminishing its amount with respect to the system, and arriving at the same end, by stimulating the system itself both to withstand the invasion of the gas, and to assimilate more vigorously." He looks upon naphtha as "one medicine of the class to be employed for assisting the bile to saturate the oxygen," but not as the best. He is in the habit of administering "spirit of turpentine, and carbonate of ammonia, fifteen drops of the former, increased to double that number, three times in the day; and about a quarter or half a grain of the latter." This medicine, with mild mercurial alteratives, Dr. Woods believes to be very useful, checking emaciation, and rendering the breathing more free.

Such is an outline of the leading ideas of this book on consumption, concerning the features of which malady little new could be said; but the treatise is worthy of perusal, not only on account of the many practical remarks it contains, but also from its applying the doctrines of Liebig to this subject of pathology. There are some typical blunders which we might note, and which should have been corrected.

## Medical Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

May 11.—J. M. Arnott, Esq., F.R.S., President.

Case of Cyanosis, with a Description of the Appearances presented on Dissection. By F. Le Gros Clark, Assistant-Surgeon to St. Thomas's Hospital, and one of the Secretaries of the Society.

W. B——, aged nineteen, shoemaker, was admitted into St. Thomas's Hospital in July, 1846. He was of spare make, and his complexion was remarkably livid; skin cold and dry; lips swollen and blue; he suffered from urgent cough, and extreme dyspnœa, especially in the recumbent posture; the superficial veins of the neck were distended, and there was, at times, a jugular pulsation; pulse quick and labouring; the impulse of the heart was natural, but its sounds were superseded by a very loud, prolonged, systolic bruit, heard over the whole region of the heart, but most especially over the aortic valves; the sound, however, did not extend beyond its arch, in the direction of the aorta, but spread out laterally from the point where it is heard in its greatest intensity, with an equal degree of force along the course of the left branch of the pulmonary artery, to the periphery of the chest. The sound was also heard on the right side, but to a more limited extent; there was, also, a systolic bruit over the apex of the heart. These symptoms were unrelieved by treatment, and he died 3rd Jan., 1847.—*Autopsy:* The liver was large and dense; the spleen was thrice its ordinary bulk, but apparently unaltered in texture; the lungs presented tubercles at different parts; the heart was large; the left side presented no abnormal appearance of consequence, but the right auricle (especially its appendix) was much dilated, and there was an oblique communication between the auricles; the walls of the right ventricle were much hypertrophied, being nearly twice as thick as those of the left, and the cavity itself was slightly encroached upon. In place of the usual arterial outlet from this ventricle, there was a contracted circular aperture, about the diameter of a writing-quill, which communicated with a small muscular chamber or compartment between the ventricle and pulmonary artery—the long axis of the ventricle itself being curtailed to a corresponding extent. Above this aperture there was a second outlet from the ventricle, of similar form and size, which

opened into the angular interval between two of the aortic semilunar valves. The canalis arteriosus was short, and closed by what appeared like a patch of organized lymph in the pulmonary artery. The bronchial arteries were unusually large and tortuous, as was also the arteria comes nervi phrenici, which terminated in the lung. The author remarks that the symptoms during life were satisfactorily accounted for by the post-mortem appearances—the dilatation of the right auricle and hypertrophy of the corresponding ventricle being dependent on the obstructed arterial outlet from the latter. The morbid condition of the liver and spleen he considered as probably indicative of some function performed by these organs vicariously of the lungs; and that the large size of the bronchial arteries was due to the exigencies of the lungs, dependent on the obstruction of the circulation through the pulmonary system of vessels.

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Case of Encephaloid Disease of the Brain, inducing Amaurosis. By J. Dalrymple, Esq., Surgeon to the Moorfields Ophthalmic Hospital.

Miss B——, about twenty-eight years of age, had been totally blind about four years; but the ocular symptoms date nearly a twelvemonth previous, commencing with dimness of vision in one eye, and gradually involving both in total darkness. There were no morbid appearances in either eye, and with the exception of the iris being sluggish, there was little to indicate the extent to which the blindness had proceeded, for the pupils were never much dilated, and never wholly lost the power of contraction. About the time Mr. Dalrymple first saw the case, there were obscure symptoms of some disease of the brain, severe pains at the back of the head, some partial numbness of one side of the face, and occasional jerking of the muscles of the right arm and leg. These symptoms entirely disappeared under a full course of mercury, and never returned in any noticeable degree. The blindness, however, continued. By careful dietetic and hygienic treatment Miss B—— enjoyed good health, only complaining of occasional vertigo, and subject to frequent attacks of "faintishness," which occurred at irregular intervals, and lasted but for a few minutes. In the first week of Feb. 1847, this lady died suddenly, with little or no premonitory symptom or illness. On examination of the body the day after death, a large encephaloid tumour was found at the base of the brain, involving the chiasma of the optic nerves, and extending back as far as the pons Varolii; then entered the middle lobe of the brain, as high as the level of the lateral ventricle, on the right side, which it compressed, and nearly obliterated. The left side of the brain was healthy. The third nerve, on the right side, passed through the tumour; and the fifth nerve on that side was partially overlapped by it. No other nerves suffered by its pressure. This lady had an attack of measles three years previous to the development of any ocular symptoms. This attack was very severe, accompanied by delirium, strabismus, and dimness of vision; and although it was supposed she had entirely recovered from this illness, the author of this paper surmises the origin of the encephaloid disease may be referred to the cerebral inflammation which occurred at that time.

Mr. W. W. Cooper complimented the author of the paper on his diagnosis in this case, and remarked, that the diagnosis of the cause of amaurosis was often very difficult. He related the case of a young gentleman, who was attacked with symptoms of failing sight, without apparent cause. The right eye was at first affected, but the left soon became involved, and the patient was quite amaurotic. He eventually lost the senses of smell, hearing, and of sight. The diagnosis was tumour of the brain, but, after death, no tumour of that organ was discovered, but it was found in a softened state, and the optic sheaths were full of a soft matter. He also related the case of a man, who had amaurosis from cerebral disease, in which, the only symptoms of disease of the brain were, loss of memory, and a vacant expression of the face. There was no hemiplegia. He alluded to cases of amaurosis, in which there was no appreciable disease of the eye or brain.

Mr. C. Hawkins had brought down a preparation to the Society, under the impression that Mr. Dalrymple's was a case of amaurosis, dependent on disease of the brain, which exhibited no symptoms during life. In this, however, he was somewhat disappointed. In his (Mr. Hawkins') case, the patient was about twenty-six years of age, and was admitted into St. George's Hospital in September, 1843, being nearly blind from amaurosis, having just sufficient sight to find his way about. There were the usual symptoms of congestive amaurosis, with pain in the head and fever, but no other symptoms of inflammation. The pain in the head began twelve months previously, and increased at the expiration of six months, but left him before his admission into the hospital. Leeches, cupping, and blisters were applied, and sometimes it was thought he might get well, as there was occasionally a little amendment. After the symptoms of simple congestion, he became subject to fever and occasional pains in the head, until February; the attacks of headach were then attended by sickness, and disease of the brain was for the first time suspected. He had, subsequently, three attacks of fainting, with more pain, and in the beginning of March, he had a severe attack of pain, attended by fainting, stertorous breathing, and coma, which terminated fatally in three or four hours. The application of a seton had afforded some relief in this case. After death, the amaurosis was found to have been dependent on the presence of a cerebral tumour, no evidence of whose existence, with the exception of the amaurosis, had been exhibited, until three weeks before death.

Dr. Mayo related a case of amaurosis, which came on in a boy of fourteen years of age, of a "congestive constitution," who had had lung affection, and subsequently fulness of the head. These were treated and removed, and amaurosis came on. For this, mercury was administered and setons employed; the only benefit, however, seemd to result from the use of moxæ, but this was only temporary. The mercury at first seemed to do good, but it shook the constitution. The case was afterwards treated as one of cerebral disorder consequent upon asthenic causes. All remedies failing in giving relief, the patient was eventually cured by a total abstinence from animal diet for three entire years.

A member got up, and inquired whether Dr. Mayo always treated amaurosis with mercury.

Mr. Dalrymple said that amaurosis depended on a variety of causes, and no practitioner would think of treating all cases with mercury. In the case he had brought before the Society, it would have been little short of madness to have employed mercury; the patient required, and had administered to him, quinine and steel, and was placed on good diet, embracing porter and beef. Mercury was useful when symptoms of cerebral inflammation attended the disease. His object in bringing the paper forward was not to raise a discussion on so extensive a subject as amaurosis generally, but to fix the attention of the Society on this case, which was not simple amaurosis, but one dependent on cerebral disease, unaccompanied with the usual symptoms of that condition; for though at first there were some indications of cerebral mischief, they all disappeared after salivation, and never recurred, with the exception of occasional faintness, like the epileptic aura, and this was not well marked.

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A Case of Tetanus following a Lacerated wound of the cornea; with a Table of Cases of Tetanus which have occurred in St. George's Hospital since January, 1841. By George Pollock, F.R.C.S.

J. S——, aged thirty-three, was admitted into St. George's Hospital, under Mr. Keate, on the 10th of January, 1847. He had that morning received a cut from a gig whip on the left eye, which lacerated the cornea, dividing it through its entire thickness, and extending obliquely across from one margin nearly to the other. The aqueous humour had escaped, but there was no prolapsus iridis, and but little pain or chemosis. Goulard's lotion was applied, and an antimonial and aperient saline ordered every six hours. On the following day the lids were distended and tense, and there was great chemosis, the conjunctiva almost hiding the cornea; the pain also was great in the globe and forehead. Six leeches were ordered to the left temple, and warm fomentation. The above symptoms were still further aggravated on the following day, when several punctures were made in the upper lid, which afforded immediate relief. On the third day the leeches were repeated, and three grains of calomel, and half a grain of opium, was ordered twice in the day. On the sixth day, the visible portion of the cornea was cloudy; and on the seventh there was purulent discharge from the tense and projecting globe. On the evening of the same day, the muscles of the face on the right side appeared contracted, and the patient complained of stiffness about the jaws. On the ninth day, trismus was fully established, and the hemiplegic condition of the face had become more distinct. He had been blistered and cupped on the previous day. A puncture was made into the projecting globe, and gave exit to some foul pus. General tetanic symptoms subsequently supervened, and he died on the following morning, an ineffectual attempt having been made to affect him with the vapour of ether. On examining the body, the vessels within the cranium seemed to be con-

gested; as were those of the mucous membrane lining the larynx and pharynx. The liver and kidneys were also gorged with blood. The globe of the affected eye was completely disorganized, its different component structures being scarcely at all distinguishable. The author considers the above case interesting from its extreme rarity, as he is unaware of any record existing of a similar lesion producing corresponding results. The apparent paralysis of the face he also regards as an interesting complication, and it was unexplained by the post-mortem examination. The irritation and distress occasioned by the attempt to administer the vapour of ether were such as to forbid perseverance in this endeavour to relieve the patient's frightful sufferings. In the tabular view which the author gives of ten other cases of tetanus admitted into St. George's Hospital since 1841, it appears that only two recovered. Seven of the fatal cases were traumatic, and the symptoms of the disease declared themselves within three weeks of the receipt of the injury, with one exception. In four cases the brain was rather congested, and in one there was softening of the spinal cord. The author remarks, that no satisfactory conclusions can be drawn from the treatment of these cases, both opium and Indian hemp having proved uncertain and unsatisfactory remedies.

Mr. STREETER could but regret that a paper on so important a disease as tetanus should be read at so late an hour as to prevent discussion. [It was just ten o'clock.]

The PRESIDENT observed that he wished for discussion, and would continue the meeting as long as the Fellows were disposed to keep it up.

Mr. STREETER would then direct attention to the statement in the paper that the cornea was insensible, and to the well-known fact, that injury of the fifth pair of nerves at its origin, was followed by destruction of the cornea. In the case just related, the converse of this had taken place. An injury of the cornea had been transmitted inwards, and had led to tetanus—a disease apparently of the cerebral parts of the nervous system. He thought all these instances of the reciprocal influences which undoubtedly existed between the central and the peripheral parts, should be most carefully studied, for the purpose of throwing light upon the physiology of the nervous system, and with the hope of contributing somewhat towards the establishment of a more successful treatment of this distressing, and hitherto intractable, disease, than surgeons had as yet devised.

Mr. BOWMAN suggested, that the destruction of the cornea just alluded to, might arise from inflammation set up in consequence of the loss of that closing power of the eyelids which was essential to the protection of the eye, and not from injury to its inherent nutritive power.

Mr. STREETER had not alluded to the slow destruction that arose from chronic inflammation, but to the more rapid sloughing of the cornea which followed injury or disease of the fifth pair at its origin, or in any part of its course. An instance of this, he believed, had been related by Mr. Stanley, in the *Transactions* of the Society. And he himself had ventured to diagnose during life, that the cause of paralysis of the portio dura, in a particular instance, was disease within the skull, involving the common origin of the fifth and seventh pairs, because sloughing of the cornea set in shortly after the paralysis of the facial muscles, and an examination after death proved this diagnosis to have been correct.

Mr. DALRYMPLE objected to a common origin being assigned to the fifth and seventh pair, and imagined Mr. Streeter must have meant to allude to the experiments of Magendie. The tetanus, in this instance, seemed to him to be referable to the violent secondary attack of inflammation of the globe, and the extension of irritation to the ciliary nerves, rather than to the primary injury of the cornea. With reference to the sensibility of the cornea, he believed it possessed it, and branches of the ciliary nerves had been stated to have been traced to it by Continental anatomists.

Mr. BOWMAN expressed his concurrence in these remarks.

Mr. LEE believed that a correspondence in time existed between the infliction of injury and setting in of the tetanic symptoms, and that interval which elapsed between local phlebitis and the occurrence of the general symptoms of contamination. Was there any analogous poisoning of the blood produced?

The PRESIDENT closed the meeting by observing that the number of papers compelled their being read occasionally at a later hour than might seem advisable; otherwise they could not be read at all; and at the last night only their titles could be given—a course of proceeding by no means satisfactory to authors who had been at the trouble of preparing papers.

## MEDICAL SOCIETY OF LONDON.

MONDAY, MAY 17, 1847.—MR. DENDY, PRESIDENT.

Dr. MARSHALL HALL read a paper on

### THE CONVULSIVE AFFECTIONS OF INFANTS AND CHILDREN.*

The author began by alluding to the dangers attendant on infantile convulsion, to its consequences to mind, limb, and life, and to the possibility of idiocy, or liability to epilepsy, being its result. He then made reference to the causes, forms, and effects, of such convulsions, and the mode by which they are induced; and then proceeded more particularly to consider them. He dwelt especially on

1. *The terms employed* to designate certain forms and symptoms of them; and on one especially, laryngismus stridulus, which the author contended was no more a disease than cough was a disease, or "any other symptom of disease was a distinct disease." He said, that laryngismus was not always stridulous, but depended on the same causes, whether it was, or was not so; the most dangerous forms of it were those which were noiseless. He would associate this symptom, which was certainly one of great peculiarity and danger often, with contraction of the hand, which he would call chirismus, and with that of the foot, which he would style podismus; the term sphincterismus, too, might be applied to spasm of the sphincter ani, or neck of the bladder. "Let the termination in *ismus* be used only to designate a symptom, and that of a purely nervous or convulsive character."

2. *The predisposition* to convulsive affections, and laryngismus more especially, was very marked. The latter had been known to affect a whole family. The cause of such predisposition is obscure: was it hereditary? was it the effect of locality, or emanations from the soil?

3. *The Causes.*—No irritation of the cerebrum or cerebellum could *immediately* produce muscular spasm, as experiment had shown again and again. But irritation of the membranes of the brain might excite it, as appeared from an experiment which he had performed, and recently detailed. Irritation of the medulla oblongata, or medulla spinalis, produced the most frightful spasms. The incident nerves, when affected at their origin in the cutaneous, mucous, or other tissues, were the most frequent source of the attacks. The condition of the gums in teething, gastric, or intestinal disorder; matters retained in the lower part of the alimentary canal; the atmosphere itself, especially when north, east, or north-east winds prevailed; perhaps certain vapours;—these were all insisted on as being intimately connected with the production of convulsion, or that form of it called laryngismus. Strabismus, or the spasmodic condition of the hand or foot, might arise from teething, &c.; but the larynx was very apt to be affected by the north or east winds, or other conditions of the atmosphere. He also associated laryngismus stridulus with undue excitability of the spinal centre.

4. *The Influence of Sleep.*—He alluded to the frequent occurrence of convulsions at this period, chiefly epilepsy. There was congestion of the nervous centres then; probably unusual excitability of them. Altogether, it produced a state favourable to convulsive seizures.

5. *Cerebral Diseases.*—On this the author forcibly insisted. He referred to the consequences of inflammation, tubercular granulation, or tumour, and effusion at the base of the brain; and also to the congestion of pertussis.

6. *Excited Reflex Actions.*—By far the greater number of convulsions were of a reflex nature. Laryngismus was most effectually avoided by removing every exciting cause of reflex action. He would chiefly guard against *four* causes of such action: first, irritation of the trifacial nerve, which took place in teething; second, that of the pneumogastric nerve; third, irritation of the spinal nerves; and fourth, the effects of the atmosphere upon the larynx, under certain circumstances. The organs affected in a convulsive seizure were precisely those which its pathology would lead us to expect—the larynx, the sphincters, &c. The author then called the attention of the Society to certain bronchitic, hepatic, and renal symptoms, and to the condition of the urine—points which needed further investigation. He then dwelt on the effect of

6. *Emotion, passion*, and showed how great and important was the part which they played in the affections he was treating of; he enforced the necessity of bearing them in mind *fully* in certain cases; he showed that they often constituted the *real* and *only* objection to the use of the gum-lancet, which consequently should always be cautiously employed.

* The author has kindly consented to revise this valuable paper for publication in its entire form, in the next number of THE LANCET.

7. The effects of augmented excitability were insisted on. States of the nervous system, induced by mild electricity, were compared with those occasioned by disease. The results of increase of excitability were entered into—irritants then acted, which at other times would be inert. A change in the direction of the wind, even, was not without bad consequences. Strychnia induced a species of laryngismus. Emotion, hysteria, epilepsy, tetanus, hydrophobia, all affected the larynx in a special manner.

The author next described those affections of the cerebrum which were consequent on convulsions,—the congestion, the effusion, the occasional paralysis, the risk of idiocy, &c. He then passed on to the question of sudden dissolution, demonstrating how difficult it was to foresee it often, and stating how frequently it happened when the patient appeared in progress to recovery. It was the result of common asphyxia, but not rarely of what he had called secondary asphyxia, which he believed was closely dependent on the blood of the coronary arteries being unduly arterialized. The remedies of asphyxia should be enforced promptly in such cases of sudden death.

Some observations were then made on the diagnosis of convulsions, in which the transient, or permanent, or complicated character of symptoms, as the case might be, were all pointed out as modes of assistance in conducting the inquiry. The author drew attention to the post-mortem appearances, which varied as the disease was centric or eccentric, or according to the mode of death. There might be the results of inflammation within the cranium, or nothing found whatever but the appearances proper to asphyxia. Lastly, he made some practical observations upon prevention and treatment; as to the latter, insisting on an accurate diagnosis as an indispensable preliminary, on a due attention to the complications of the affection, on the necessity of bearing in mind all the varied forms of irritation, and applying the appropriate remedies without delay, on having regard to the state of the patient during the time of sleep, on protecting it from cold air, &c. And if he had shown the application of the physiology of the nervous system to its pathology, he had gained the object which he had in view in bringing the subject before the Society.

Mr. Hird considered that the profession were much indebted to Dr. Hall for his researches on the subject of infantile convulsions, and for his explanation in respect to those cases in which the brain was involved in the cause, and where it was not. He agreed generally in the views of the author, but should be afraid to lance the gums so freely and so often as Dr. Hall had recommended in some of his published papers. In the other plans of treatment recommended he fully concurred.

Mr. Barlow agreed fully with Dr. Marshall Hall as to the ill consequences of cold in laryngismus stridulus. In some cases, a keen wind was certain to bring on the paroxysm. In a case related by Dr. Hugh Ley, the first attack was produced by the application of cold to the head. He thought no one could contradict the correctness of the view which had been taken of the causes of the disease. He believed by far the larger number of cases were eccentric in their origin, and that depleting measures should never be used without much caution. Irritation of the trunk of the nervus vagus produced reflex actions, contrarily to what happened in the case of the nerves proceeding to the limbs; and he thought that in disease, spasm of the glottis, either with or without crowing, might occasionally be brought on by affections of the trunk of this nerve, giving rise either to direct or reflex closure of the glottis. In a case where Sir Astley Cooper tied the carotid artery, inflammation and suppuration extended upwards in the course of the nervus vagus, and there was a cough, like that of hooping-cough. Sir Henry Marsh, in his instructive paper on spasm of the glottis, had suggested irritation of the origin of the pneumogastric as a cause of the affection; but the state of parts far remote from the nervous centres was mostly at fault. He had never been able to associate enlargement of the bronchial or cervical glands with the disease by way of cause and effect, as Dr. Hugh Ley had done in a work which would ever be consulted for its abundant information in regard to the malady. In two cases he (Mr. Barlow) had found it connected with hydrocephalus; in another, which he had examined after death, with bronchitis; in a fourth, which was fatal, he thought that the last paroxysm had depended on over-feeding. In the country—he meant the country properly speaking—the disease was acknowledged to be rare; and even in the crowded districts of towns he thought it rarer than was supposed. Out of 6879 patients who had been admitted at the Children's Infirmary since Jan. 1st, 1846, there were only seven cases reported of this disease. In three cases he had observed the paroxysm produced by the act of drinking—a fact of interest, viewed as an addition to those phenomena which connected laryngismus with the convulsive actions, of which it was certainly one. He would ask Dr. Hall if he had observed this fact.

Dr. Theophilus Thompson remarked, that in the majority of obstinate cases of laryngismus stridulus, hydrocephalus was either present, or threatened to develop itself. Sometimes convulsions were the result of simple irritation; in other instances they originated in inflammation.

Dr. Clutterbuck thought that the brain was always involved in cases of convulsions, and that it suffered at these times from inflammation. The brain was a complicated organ, and various parts of it performed various functions. He agreed in the treatment recommended by the author.

Dr. Reid did not find that dampness of the atmosphere was a cause of laryngismus; on the contrary, the affection was rare in damp localities. He had some doubts respecting the prejudicial influence of a north-east wind in these cases and mentioned two instances in which it had no such bad effects. He had never seen a case during the time the infant was suckling.

# Foreign Department.

## French Periodicals.

### *Means of Recognising the Presence of Morphia in Cases of Poisoning by that Substance.*

This method is detailed in the *Gazette Médicale*, as proposed by M. Mermu. The solid matters ejected from the stomach are first to be washed with water, slightly acidulated with acetic acid. The product of the several washings is to be mixed with any liquids which can be collected. If one has liquids only at his disposal, these are to be mixed with the water, acidulated as above. In either case, the resulting mixture is then to be heated, and afterwards filtered; the residue to be evaporated to dryness, and treated with boiling alcohol, to separate the animal matters. To the alcoholic liquid, previously filtered, some tincture of gall-nuts is to be added—the tincture being made of 125 parts of alcohol with 250 parts of coarsely powdered gall-nuts; and the whole to be let digest fifteen days, which will precipitate the little animal matter dissolved by the alcohol, and the combination of tannin and morphia thence resulting will remain in solution.

The liquid is next to be filtered, mixed with a small quantity of distilled water, and then a solution of gelatine to be added in excess, in order to decompose the tannate of morphia. The morphia having gone over to the gelatine, the tannin with which it was previously in combination becomes dissolved by the spirit. To separate the precipitate of tannin and of gelatine, it is necessary again to filter; and when the alcohol is evaporated, the morphia will be left, which may be recognised by its particular tests.

### *Luxation of the Humerus into the Infra-spinous Fossa, complicated with Fracture of the Glenoid Cavity; reduced Twelve Days after the Accident.*

The case is contained in the *Annales de la Société Medico-Chirurgicale de Bruges.* Dr. Janssens, sen., aged fifty-eight, fell down so that the weight of his body was thrown upon his elbow, the arm being separated from the trunk. He was able to get up, remove his coat, and retire to bed; but at the end of a few minutes, upon wishing to turn himself, he experienced, in the shoulder-joint, a sensation, as if the articular surfaces were displaced, the shoulder not having partaken in the movement of the rest of the body. A physician who was called in, observed that the shoulder was naturally round; that there was no prominence of the acromion, nor depression beneath it; that the axilla was free, and without any swelling in it; and that the elbow could be brought to the side; and the axis of the arm was not deviated from. The patient could move the limb forwards, and even to the distance of a foot outwards from the trunk; but it was impossible for him to carry the hand forwards to the front of the body, or to perform any rotatory movement with the humerus. Moving the limb produced no pain nor crepitus. The physician concluded that it was but a contusion of the shoulder, and in this opinion M. Janssens, jun., concurred. Leeches were applied, but without affording relief.

Twelve days had elapsed; the sufferings had diminished, but no movements were executed by the limb; the elbow was

applied to the side, and the hand pronated. M. Meyer, at this time, saw the patient, and on comparing the two shoulders, concluded that there was a displacement of that one which had received the hurt. The patient himself, now, indeed, detected a rounded tumour, lodged in the infra-spinous fossa, and also a considerable prominence of the coracoid process. It was, moreover, remarked, that the anterior portion of the upper part of the right shoulder was flattened; that the axis of the limb, when compared with the other, was directed from without inwards, and slightly from before backwards. A dislocation beneath the spine of the scapula, being determined to exist, reduction was at once attempted, which was effected in less than a minute, by drawing the limb downwards and forwards, but no sooner was the extension withdrawn than the displacement reappeared, attended with an evident crepitus, noticed by all who were assisting.

The scapula was examined, and M. Meyer found towards the neck of this bone, an unusual degree of mobility, which led him to believe a fracture to exist, either of the glenoid cavity or of the entire neck. Reduction was again set about, pressure being exerted, by one hand, on the head of the bone displaced from its cavity, and traction being at the same time exerted on the arm above the elbow. The apparatus of Dessault, for fractured clavicle, was immediately applied, care being taken to place a thick graduated compress in the infra-spinous fossa.

Two days afterwards the apparatus was removed, and M. Meyer found that the parts had preserved their respective relations. A starch bandage was substituted in the place of the apparatus of Dessault, which was allowed to remain for forty-two days. The patient eventually recovered the free and regular use of his arm.

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*Hydatids of the Lower Lip.*

Dr. Heller, of Stuttgard, has seen five cases in which acephalo-cysts were developed in the lower lip, and always on its inside. The causes of this affection are unknown; in two cases it was attributed by their patients to their having bitten the lip. It appears first as a small and hard lump, which rapidly increases, so that in one month it may attain the size of a cherry; it gives rise to pain, deformity, and difficulty in moving the lip. The hydatids are seated immediately beneath the mucous membrane, and are transparent. The largest Dr. Heller has seen was of the size of a nut. If one succeeds in removing them without opening their cavity, they are found to be made up of a rounded vesicle, full of fluid, transparent as water, and with a diaphanous and tender wall. The only means of curing this affection consists in the extirpation of the cyst, and this must be total, otherwise it will reappear; hence, as a precautionary measure, nitrate of silver may be applied after the removal of the tumour.

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*Internal Strangulation of Intestine.*

The *Archives Générales de Médicine* details the following case, as reported in the *Annali Universali di Medicina* by Dr. Biaggini:—A boy, aged fifteen, went from his home to an adjoining town to take part with his family in a religious procession. He was a well-made and habitually healthy boy. Having been occupied in the ceremony for several hours, he felt a great desire to go to a water-closet, but owing to the difficulty there existed in leaving the place where he was, and in finding the necessary conveniency, he made an effort to resist the natural want. Whilst yet combating against Nature, a strong and extremely cold wind sprung up, which rendered him very cold. After this, and a period of five hours' suffering, he determined to make his way out of the crowd. Presently, on attempting to empty the rectum, he was surprised to find it impossible to do so, and he was taken by his parents to a house to lie down. Fomentations and injections were employed, the former bringing away some hardened fæces; nevertheless, the symptoms remained the same for two days—a tympanitic state of the belly, continual vomiting, and acute fever—in short, there were all the symptoms of internal strangulation. The belly was resonant on percussion above, but dull below the umbilicus. All the remedies employed were ineffectual, and the patient died ten days from that on which the illness commenced.

*Autopsy.*—The peritonæum, both in its parietal and visceral portions, presented traces of very intense inflammation, while its cavity enclosed a considerable quantity of serum, and the intestines were glued together, at points, by recent bands of adhesive lymph. The adhesions were carefully destroyed, and then it was found that the distended state of the intestinal tube, which existed in the upper portion, and was marked during life by the tympanitic state, suddenly ceased at the lower extremity of the ileum. At the latter point, too, a tumour was discovered, formed by the twisting of a loop of intestine, and covered by constricting bands. Below this tumour, all the large intestines were so constricted that they had but the diameter of the bowel of a cat. By carefully removing the bands overlying the tumour, their origin was discovered to be from a rent in the mesentery above the cæcum; and through this rent a loup of intestine, about eight inches in length, had made its way and become strangulated. The strangulated portion was twisted on itself, and firmly fixed in its place by the bands spoken of as covering it. The mucous membrane of the intestine was rather injected, and at the strangulated spot presented numerous arterial vascular arborizations.

The case is interesting, first, on account of the cause of the strangulation being a rent in the mesentery; and secondly, on account of the primary apparent cause of the entire mischief.

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*A new Vesicular Worm (Entozoon) found in the Brain.*

This discovery, if, indeed, it be one, is reported in the *Gazette Médicale* by M. Fredault, interne à l'Hotel Dieu. It was met with in a patient at the Salpêtrière, a woman, eighty-four years of age, of a lymphatico-nervous temperament, and thin, and who was seized suddenly with the symptoms of cerebral apoplexy. She lost her consciousness, and also her sensibility, for pinching and pricking caused no pain. There was complete relaxation, and a puffing out of the right cheek; the respiration was rather frequent; the pulse small, and almost insensible. For some months it had been observed that she had but an indifferent power over her arms; but her gait was straight. Neither had there been any complaint of a fixed pain in the head; in short, nothing had been noticed to lead to the idea that there was cerebral mischief of long standing. The attack came on, as stated, suddenly. Venesection was practised, but no blood was procured. Vomiting was induced, and sinapisms were applied to her lower extremities. She expired in a few hours, without having regained consciousness.

On a post-mortem examination, the sub-arachnoid cellular tissue was found enormously distended with serum, in which numerous round or ovoid bodies were floating, semi-transparent, and about twenty in number; whilst several others were entirely or but half imbedded in the grey matter of the brain, but with which they had no adhesion. The ventricles contained serum, but this was devoid of hydatids. The hydatids, when examined, had the appearance of small, whitish, vesicular bodies, semi-transparent, and of a spherical or ovoidal figure; whilst their surface was smooth, or presented curved lines, or even, in some cases, bud-like processes. Their diameter varied from three-thirteenths of an inch to five-thirteenths, and even to seven-thirteenths. On opening one of these minute vesicles, a small oblong body was found adherent to it, and surrounded by a milky liquid.

The vesicle consisted of a thin and transparent pellicle, offering considerable resistance to tearing, smooth internally and externally, except at some points on the outer surface, which, in some individuals, appeared raised and velvety. The adhesion between the included being and the inner surface, was firm and strong, so that the enclosing membrane would tear more easily than a separation could be effected. Under the microscope, the membrane appeared made up of very fine fibres, and was rendered more transparent by the action of acetic acid. The enclosed liquid had the characters of serum: it contained some membraneous debris, resembling very much those of the vesicle, and, besides these, some round transparent globules, nearly of the size of blood-discs, which seemed to possess a nucleus.

The enclosed animal was of a yellowish-white colour, longer in one direction than in the other, being in one, from $\frac{3}{13}$ to $\frac{4}{13}$ of an inch, in the other, from $\frac{2}{13}$ to $\frac{3}{13}$. It seemed to consist of two portions, one adherent and slightly ovoid, the other not so broad, but double the length of the preceding, and freely floating in the surrounding fluid medium, which contained albumen, and the globules above indicated. The free extremity was rendered very evident, by being tipped with black. The entire animal was made up of a thin membrane, white and fibrous, presenting transverse or circular folds at the point—the neck—where the slender tail-like portion joined the more dilated and rounded one. A small narrow pedicle, apparently continuous with the enclosing sac, attached the animalcule. The tegumentary wall of the entozoon enclosed a whitish matter, globular, but without traces of organization; and this was met with alike in the expanded body and elongated tail.

The free extremity, marked by the terminal black point, was there furnished with a circle of minute hooks, and four sucking discs, the whole supported by interlacing fibres, enclosing a black, amorphous matter, consisting of granules, and which effervesced on the addition of an acid. The hooks were directed with their points outwards, about twenty-four in number, and having the black pigment spoken of at their base, which is marked by a tuberosity. M. FREDAULT believes, from their presenting the appearance of a double contour under the microscope, that they were hollow.

[But, does not this arise from their being round, for so a very fine round thread of glass will appear, owing to the refraction and interference of the rays of light passing through it.

M. Fredault believes that they reproduce by buds, since he found several of the vesicles with buds on their surface, although, it is true, they contained but a single individual. Not being able to identify them with any form of the entozoa known, although analogous to the cysticercæ, he has named them, *trachelocampulæ*.

Respecting the influence of cerebral entozoa on life, the author refers to several cases narrated by different observers, in which such animalcules were found in the brain, and concludes, that individuals thus diseased ordinarily perish from a cerebral affection, and which has the characters of apoplexy, of that form of it known as serous apoplexy; that the serous effusion may take place suddenly, as in the case above detailed, or more slowly, as in a case given by MONGEOT, of a young woman who died after having suffered from violent pains in the head, loss of memory, extreme vertigo and sensibility of the retina, and in whom numerous hydatid cysts were found after death.

## British Medical Journals.

### SIMPLE TREATMENT OF PROLAPSUS ANI.

In the same journal, Dr. HAKE gives a description of a method of treating this painful affection. The plan has the recommendation of economy and entire success. Originating with a patient, he is allowed to describe the practice, as follows:—

"Take a piece of sponge four or five inches long, an inch and a half wide, and half an inch thick—the more elastic a bit you can find the better; roll this, in a damp but not wet state, pretty tightly, so that the roll, if relaxed, would be ready to spring back into its full length, and it will then make a roll of some little substance round, but still soft; and its length, when thus rolled, will of course be an inch and a half. Apply it then lengthwise to the anus, so that it may be pressed, about the centre of it, quite home and firmly to that part. Taking care that it may remain so, stretch a length of adhesive plaster, about fourteen inches long, and three and a half wide, more or less, straight across the nates, rather low down, and contrive so that while the plaster adheres on one side, you press the other side closer to its opposite before you fix the length finally where it is to remain. Then sit down, at first gently upon it, and it will become very firm and fast as long as the plaster is good. I need not say that these two pressures constantly going on do the work capitally, and without any inconvenience worth speaking of—I mean, the two pressures of the roll of sponge always striving to unwrap itself, and the cross-band of adhesive plaster always keeping it from doing so by holding the nates sufficiently close together to hinder it. The working is really perfect when a little use and management has got a person into the way of it. But to facilitate matters, I will set down a few observations, at the risk of being tedious and more particular than I need be.

"I never put this on until that time of day when I am going to be standing about, or to take exercise, whether walking, riding, or driving; but it should be put on then for all of these. In the evening, I take off the plaster, but leave the sponge in its place, where it has got by that time so firmly fixed by gradual spreading and swelling, that there is no danger that anything short of a great exertion will loosen it, and it is of course more comfortable to do without the plaster when it is not wanted. The sponge should be washed in cold water every time it is taken off, and in cold weather the plaster should just cross the fire before it is put on; in moderately warm weather it will adhere of itself, especially if it is sat upon for half a minute. The same plaster is better the second day than even the first, and will do very well the third day—this where economy is an object.

"Wash the parts where the plaster goes every morning, or oftener, with cold water, or water and vinegar; wash them well, and the skin will never suffer.

"If the plaster leaves something sticky behind it when it is taken off, rub it with a very little spirit of wine, and the towel will remove it.

"If there be an irritation about the anus, or gut that comes down, wash it with vinegar and water, and the relief will be wonderful, and that part of the evil soon cured. This wash cannot be too much praised for this purpose, for piles, and for the like. I leave it for you to say whether something might not be dropped upon the sponge, or the sponge dipped in something which would promote a complete cure. What I have said is perfectly cleanly, secures exercise and comfort, and very gradually, I believe, tends to set things right again.

"The relief is, indeed, so perfect, and it is relief from such suffering, that, without a bit of braggadocio, I do think no sufferer from this malady would feel that he could be grateful enough for being brought acquainted with the treatment I have described, though its perfect management will require a little experience at least, and perhaps some advice at first."

### EFFECTS OF ELECTRICITY IN OVERCOMING THE STUPOR PRODUCED BY THE INHALATION OF ETHER.

"M. DUCROS states that the phenomena produced by the vapour of ether on chickens and pigeons last from seven to eight minutes; but if these birds, when thus under the influence of ether, are submitted to the action of electricity by placing them on the isolating stool, and allowing a current of positive electricity to pass into them, they recover from their insensibility in about thirty seconds. If they are placed on the electric conductor, they are aroused in ten seconds; and if they are placed at the extremities of the conductors, and thus made to receive electric shocks, their vigour is instantly restored. When submitted to the action of the simple apparatus of Clarke, the electro-magnetic current is equally instantaneous in effecting their restoration. The influence of negative electricity, instead of abridging the insensibility, appears to prolong it."—*Comptes Rendus*, and *Medical Gazette*.

### ON POST-MORTEM SOFTENING OF THE STOMACH.

Dr. BUDD having stated the differences of opinion as to the nature of the softening and perforation which are sometimes found, after death, to have taken place in the stomach, from the time of Hunter, who attributed the lesion to the action of the gastric juice, to Louis, who believed it dependent on disease, seeks thus to reconcile these differences:—

"The reason, apparently, is, that the change in question varies in frequency and degree with many circumstances,—with the time of year, with the heat of the room in which the body is kept, with the circumstances of death, and with the previous state of health,—so that the observations of one man did not tally with those of another; what one found frequently, another, whose observations were made in different circumstances, found but rarely. The variable and disturbing circumstances were not considered, and each man naturally distrusted observations that appeared to be contradicted by his own.

"No one seems to have observed this change so frequently as Hunter; but the truthfulness of Hunter's mind, and the simplicity and candour even of his statements, prevent us from supposing that in this respect he was guilty of any exaggeration. The fact is, that the solvent powers of the gastric juice require a certain temperature, and increase as the temperature increases, from the lowest point at which they act at all to the temperature of the blood,—the temperature at which they act in the living body. Hunter's observations were probably made during a hot summer, when, by reason of the high temperature, softening or digestion of the stomach after death was unusually frequent. During the past summer, which was a very hot one, my attention was casually drawn to this subject, and from the middle of May to the middle of August I carefully examined the stomach in all the bodies that were opened in the King's College Hospital. In several instances the mucous membrane in the great end of the stomach was completely destroyed, and in a very large proportion it had been clearly acted on, more or less, by the gastric juice. I renewed my observations in October, but the change, in a striking degree, at least, was then much less frequent."—*Medical Gazette*.

One circumstance which greatly influences this occurrence is here omitted—viz., *age*. It is much more frequently found in the young than in the old.

THE LANCET.

LONDON, SATURDAY, JUNE 5, 1847.

THE members of the PARLIAMENTARY COMMITTEE appointed to inquire into the state of the law relating to the Practice of Medicine and Surgery, assembled, for the first time, on Monday last, at two o'clock, in Committee-room No. 2.

The objects for meeting on that occasion were, to select a *Chairman*, to determine the *days of sitting*, and to consider on *the course* to be adopted with reference to the *taking of evidence*.

There were present on the occasion, Sir R. INGLIS, Mr. DENNISTOUN, Lord SANDON, Mr. MACAULAY, Mr. HAMILTON, Mr. BOYD, Col. T. WOOD, Sir JAMES GRAHAM, Mr. LASCELLES, and Mr. WAKLEY.

On the motion of Mr. WAKLEY, seconded by Lord SANDON, the Right Hon. T. B. MACAULAY was appointed to the Chair. The Committee then resolved, that the days of meeting should be *Monday* and *Friday* in each week, at twelve o'clock; and after a short discussion, it was determined, that the first evidence taken should be received from the opponents of the Bill, the three London Corporations—namely, the College of Physicians, the College of Surgeons, and the Society of Apothecaries.

Beyond all question, this was the best course to adopt. It presents, apparently, the surest opening for success; and should it be found practicable to adjust the differences with these hostile corporations, there is no reason why the Bill may not be enacted into a law in the present session of Parliament. If the evidence of the opponents of the measure prove to be of an important nature, which we do not expect that it will, then it would be absolutely necessary, and only an act of justice to the friendly corporations, and to the petitioners in favour of the Bill, that *they* should be heard, that their case should be fully and completely stated and developed. The examination of the *friends* of the measure, *in the first instance*, would only be a waste of time, and render a protracted inquiry absolutely necessary.

When this evidence *against* the Bill has been taken, the Committee will have to determine whether the objections are sufficiently important to require witnesses to be called from the Scotch and Irish universities, and other bodies of petitioners who are in favour of the measure. Assuredly a better mode of proceeding could not be adopted. It is the one which offers the best chance of a speedy success. Should the Committee report in favour of the principles of the Bill, when only the *opponents* of the measure have been examined, its ultimate fate could scarcely be doubtful. The leading propositions of the Bill are for securing throughout the kingdom a system of equality in *medical education*—a system of equality in *medical examinations*—a system of equality in the payment of fees for *diplomas*—a system of equality in the enjoyment of *rights and privileges* for qualified practitioners throughout all parts of Great Britain and Ireland—and then, a system of *registration* for qualified practitioners, thus separating them from the detestable and plundering quacks. When, we say, the monopolists have been heard, and they only, should the Committee then report *in favour* of the Bill, without deeming it necessary to call for any further testimony, the success of the measure would, we believe, be certain, *in the present session of Parliament*.

While the cause of the profession is in progress before the Committee, we would again urge on our professional brethren the necessity of not relaxing in their exertions as regards petitioning even for an hour—that labour should be continued with unabated energy. In every petition the conduct of the monopolizing corporations in opposing the Bill should be condemned; and at the same time, Parliament must be told that the governing authorities of those corporations are self-appointed, and that there exists no sympathy between them and the vast mass of medical practitioners. In the greater number of these corporations the profession have hitherto found their chief obstacle to success. Yet the Council of the "NATIONAL INSTITUTE," looking merely to placing their own worthless selves at the head of an additional corporation, pray for another charter — ANOTHER OBSTACLE. The time, therefore, has arrived, when it becomes the duty of medical practitioners to pray that an *additional* medical corporation *be not established*. The grant of a charter to such men as compose the Council of the "INSTITUTE" ought to be condemned by anticipation. These persons are now unmasked. Two years since, it was thought by some that the language which we employed with reference to that body was unjust; and on that occasion we became the object of no little censure, because we happened to see somewhat farther and more deeply than many of our neighbours. But in the present universal recognition of the character, conduct, and aims of the ghostly Council of that splendid association which they wilfully destroyed, we find an ample reward for the services which we rendered to the medical practitioners of this country at that juncture.

THE "Arsenic Prophetess," the "Witch of Whipton," to whom we formerly devoted an article, has made a final reappearance. By a letter which appears in the Exeter papers, it appears that the indefatigable Dr. ELLIOT, not content with exposing every falsehood and deception connected with the immediate scene of knavery and credulity upon which the Exeter mesmerists played their parts, has brought evidence all the way from Jerusalem, which gives a final and disgraceful discomfiture to the actors in this business. It will be remembered that the Arsenic Prophetess, Mrs. BIRD, made a mesmeric prophecy of the existence of poison in her stomach, and foretold that on a certain day the arsenic would be rejected by vomiting. It will be remembered, also, that vomiting took place according to promise, and that Professor GREGORY, of Edinburgh, Mr. PARKER, M.R.C.S., Mr. LUXMOORE, county magistrate, and Mr. JANSON, president of the Exeter Philosophical Institution, produced a pretended chain of evidence, which professed to show clearly that arsenite of lime had been in her stomach, had been vomited, and had been detected by chemical analysis in the rejected contents of the stomach. The hypothesis upon which all these wonders were accounted for was, that her former medical attendant, Dr. MACGOWAN, had given her liquor arsenicalis and lime water, and that an insoluble arsenite of lime had been formed, which remained many years in the woman's stomach. The following extracts, submitted to Dr. MACGOWAN, who now resides at Jerusalem, by Dr. W. H. ELLIOT, offer a truly mesmeric specimen of lying for a present

purpose, and of spotted slander directed against an absent physician:—

"1. 'Her then medical attendant (Dr. Macgowan), from whom Mrs. Bird received the greatest kindness and attention while under his care, frequently himself brought medicines in his pocket for her; but whether that containing *liquor arsenicalis* formed any part of them, we have no means of ascertaining.'—Luxmoore, *Zoist*, Jan. 1847, p. 558.

"2. Mr. Parker says, in a letter addressed to Herapath, 'Since I had the pleasure of seeing you, I have ascertained from my patient, Mrs. Bird, that at the same time she was taking solutio arsenicalis, she was taking frequent doses of lime-water and milk;' and adds, 'yesterday I met my other patient, who was taking lime-water and arsenic, prescribed by the same physician nearly about the same time, since it only shows that the physician was in the habit of prescribing that treatment for his patients.'—Parker.

"3. 'We know that the solution of arsenic was persisted in till the teeth were loosened; the mouth turned black, and even a large portion of the jaw-bone caused to exfoliate.'—Janson.

"4. 'The above sufferings had been treated by one bleeding, one cupping, leeches, and repeated salivations. She was under salivation for twelve consecutive months.'—Parker, *Zoist*, Jan. 1847, p. 517."

The answer of Dr. Macgowan is a direct contradiction of every one of the statements of Messrs. Luxmoore, Parker, and Janson, and is so conclusive, that since its publication they have been unable to answer a word. He says,—

"1. I never conveyed to Mrs. Bird, in my own pocket or by messenger, any preparations containing arsenic. Mrs. Bird never received *any medicines from me except through my prescriptions*, which were, I believe, all dispensed by my respected friend, Mr. Knott.

"2. I never ordered the patient liq. calcis (lime-water) and milk at the same time with liq. arsenicalis.

"3. I never, at any period of my attendance on Mrs. Bird, observed such effects as those described by MM. Janson, Luxmoore, and Parker, as having been caused by arsenic.

"4. The patient was not kept salivated by me for twelve consecutive months. Salivation formed *no part of* my treatment of the case."

The profession of medicine is fortunate in having men like Dr. Elliot and Mr. Fosbrooke springing up from time to time to defend it against the knavery of quacks, and the dishonesty of the unworthy among its own members. Dr. Elliot has, in obtaining a written denial from Dr. Macgowan, of Jerusalem, turned his last stone, and completed the evidence against the Exeter mesmerists. He has nobly done his duty, and the result ought to be a stimulus to other medical men to investigate any mesmeric wonders that may be paraded before the public to the detriment of the profession. Let them, as Dr. Elliot did, bring the touchstone of truth and logical examination to bear upon the imposture, and exposure will follow, as in the present case. As it is, one more heroine of *The Zoist* is satisfactorily proved no better than she should be. We shall see the next addition of the late Harveian Orator to his collection. It must be an extraordinary moral phenomenon, who shall prove herself worthy to be added to the list of female adherents, which begun with an Okey, and which, for the present, ends with a Bird.

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We again introduce the subject of Mr. Osborne's certificates, with a view to place still more strongly before the profession the impossibilities of time and place which they present. The first impossibility is involved in the contradictory testimony of Mr. Boddington and Drs. Williams and Hutchinson, and Messrs. Wright and White, of the Nottingham General Hospital. We need only place them in juxtaposition to show how directly they contradict each other, for several months of the time of which it is said he was attending the hospital. The eighteen months of hospital practice, which commenced October 26th, 1841, could not have terminated till April, 1843; yet on the 8th of December, 1842, Mr. Osborne became, according to the letter subjoined, the assistant of Mr. Walter on the 8th of December, 1842, and so continued until the September of the following year.

*Certificates, which show, that during nine months, from December, 1842, to September, 1843, Mr. Osborne was both assistant to Mr. Boddington, of Chesterfield, twenty-six miles from Nottingham, and diligently attending the medical and surgical practice of the Nottingham General Hospital!*

LETTER FROM MR. BODDINGTON TO MR. FOSBROOKE.

"Chesterfield, Oct. 26th, 1846.

Dear Sir,—In answer to your note of this morning, I beg to say that Mr. John Henry Osborne was an assistant of my late partner (and not of Mr. Hall) from the 8th of December, 1842, until the 1st of September, 1843.

I am, Sir, yours truly,
W. E. Boddington.

J. E. Fosbrooke, Esq."

"General Hospital,
near Nottingham.

These are to certify that Mr. John Henry Osborne hath diligently attended the practice of medicine and surgery in this hospital for eighteen months, as physician's pupil, from October 26th, 1841. Witness our hands, this 20th day of May, in the year of our Lord, one thousand eight hundred and forty-five.

Physicians { R. S. Hutchinson. / J. C. Williams.
Surgeons { W. Wright. / G. M. White.
G. Levick, Sec."

The discrepancy is so marked that there can be no doubt the examining bodies ought to have applied to the medical officers of the Nottingham General Hospital for the truth of the matter. We can see no escape from the plain imputation of falsehood or fraud on one side or the other. Where was the imposture? Who are the guilty parties?

The next contradiction, equally involving falsehood and fraud, arises out of the following letters and testimonials. Mr. Osborne could hardly have been acting as assistant to Mr. Blagden, of Long Clawson, in Leicestershire, and attending surgical lectures and hospital practice at one and the same time. Who will be believed, Mrs. Blagden and Mr. Sibrey, or Messrs. Lyon, Hannay, and Lawrie? It seems hardly possible to conceive any explanation of such opposing facts as are here testified to. This matter is of more importance than the attendance at Nottingham, for it affects our entire medical system.

*Certificates, which show, that during the entire year, from November, 1844, to November, 1845, Mr. Osborne was acting as assistant to Mr. Blagden, of Long Clawson, in Nottinghamshire, and attending surgical lectures and hospital practice in Glasgow!*

"It is hereby certified, that Mr. John Henry Osborne attended my lectures on surgery at the Medical School, Portland-street, Glasgow, from the 1st day of May, 1844, to the 31st day of July, 1845, and that this course included sixty lectures. W. Lyon."

"We hereby certify that Mr. John Henry Osborne very regularly attended the surgical practice of the Glasgow Hospital, from the 1st day of November, 1843, to the 20th day of July, 1845.

J. A. Lawrie,
A. J. Hannay.

20th July, 1845."

"I laid before Mr. Blatch a certificate from Mrs. Blagden, of Long Clawson, in the county of Leicester, to the effect, that Mr. Osborne was assisting the late Mr. Blagden from Nov. 4th, 1843, until Nov. 2nd, 1844."—*Mr. Fosbrooke's letter.*

"I have heard him (Osborne) repeatedly say, that he had not attended any lectures, except, perhaps, some of Mr. Caunt's, previous to his going to Glasgow."—*Mr. Sibrey's letter.*

We next insert, by way of contrast, the triple contradiction which lies betwixt Mr. Osborne, sen., the Rev. Mr. Burder,

and Dr. KNOX, late of Edinburgh, and to this we must beg an attentive consideration on the part of our readers.

*Certificates, which show, that in November and December,* 1839, *Mr. John Henry Osborne was in three places at one and the same time—namely, attending Dr. Knox's lectures in Edinburgh, receiving his education at the Nottingham Grammar School, and serving an apprenticeship with his father at Nottingham; and which further show, that during one year and a half in* 1837 *and* 1838, *he was commencing his career at school, and terminating his apprenticeship with his father; and which still further show, that he went to school till Christmas,* 1839, *or one year and a half after the completion of his medical apprenticeship!*

"I hereby certify that Mr. John Henry Osborne served an apprenticeship to me, from May the 1st, 1833, till the 1st of May, 1838, during which time he had very extensive opportunities of witnessing medical and surgical practice, and also numerous cases of midwifery, under my care.

(Signed) JOHN OSBORNE,
Surgeon.
May 28th, 1844."

"Free Grammar School,
Nottingham,
July 27th, 1846.

I hereby certify, at the request of W. Watts, Esq., M.D., that John Henry Osborne was admitted into this School on the 30th of January, 1837, and left at Christmas, 1839, as appears from our school register.

W. BURDER, M.A.,
Clerk, Master of the Free Grammar School."

(1.)

"It is hereby certified that Mr. John Henry Osborne attended my lectures on anatomy and physiology at the School of Queen's College, Argyle-square, Edinburgh, from the 4th day of November, 1839, to the 30th day of April, 184⁰, and that this course included 140 lectures.

R. KNOX, M.D.
July 1st, 1840."

(2.)

"It is hereby certified that Mr. John Henry Osborne attended my anatomical demonstrations at the School of Queen's College, Edinburgh, from the 4th day of November, 1839, to the 1st day of May, 1840; that this course included 100 dissections, and that he carefully dissected during the same period.

May 1st, 1840." R. KNOX, M.D.

Since the power of ubiquity cannot be allowed to Mr. J. H. OSBORNE, we must examine which of these three certificates is the true one, as only one of them can possibly be true, unless we suppose a miracle. In the first place, there is no reason to doubt the testimony of Mr. BURDER, or the evidence of the school register. In the next, if we believe his father's certificate of apprenticeship, he must have been between eleven and twelve years of age when the indenture commenced, and between sixteen and seventeen when it was completed; and we must believe, that as a boy, of from eleven to sixteen years of age, he was so precocious as to have enjoyed "very extensive opportunities of witnessing medical and surgical practice, "*and also numerous cases of midwifery!*" A boy of sixteen at a midwifery case must certainly have been a singular spectacle! But more than this: Mr. OSBORNE distinctly declares that this indenture was an imposition, framed in order to bring Mr. OSBORNE under former and easier regulations of the College; and he distinctly states, that "the actual indentures were "drawn up by Mr. ROBERT SCULTHORPE, the deputy-clerk to the "Nottingham bench of county magistrates, and were executed at "the residence of Dr. JOHN CALVERT WILLIAMS, Nottingham, in "the spring of the year 1840." This would be a natural time for the commencement of his apprenticeship. He left school "at Christmas, 1839." He was indentured "in the spring of 1840." Nothing can be more credible. But, at all events, if it be not so, Dr. J. C. WILLIAMS, one of the physicians who is accused of certifying to his diligent attendance at the Nottingham hospital, while he was living twenty-six miles distant, can come forward and depose to the untruth of Mr. FOSBROOKE's assertion. Thus there are reasons for believing that the certificate of apprenticeship was a fraudulent document. We now come to the testimonials of Dr. KNOX. All the evidence against the correctness of the certificate of apprenticeship tells with double force against the truth of Dr. KNOX's certificate, and there are, besides these, the testimony of Dr. WILLIAMSON, Dr. KNOX's demonstrator in 1839 and 1840, of Dr. LONSDALE, who examined Dr. KNOX's register for 1839-40, and of Mr. SIBREY, OSBORNE's acquaintance and companion, all tending to prove that he was not in Edinburgh at all during the time specified in the certificates from Dr. KNOX; and in addition to even this, there is the direct testimony of Mr. FOSBROOKE, which shows that he was actually not apprenticed at Nottingham until after the time at which these certificates would show him to have been attending lectures and dissections in Edinburgh. Dr. KNOX says, that OSBORNE commenced attending lectures on the "4th of November, 1839;" while Mr. FOSBROOKE states that he was only apprenticed "in the spring of the year 1840." We are minute about these certificates from Dr. KNOX, because they really constitute the gravest part of this extraordinary case. If it can be shown that youths at school, before they have actually commenced their apprenticeship, can obtain certificates of attendance on lectures, and that these certificates are allowed to pass unchallenged by the examining bodies, why then, there is an end at once of all security and fair play to the diligent student, the laboriously educated practitioner, and the public; and diplomas and licences from the examining bodies must fall immeasurably in their value: they can, in fact, be no proof whatever of regular medical education and professional proficiency. According to the letter of Mr. WILDE, the legal adviser of the College of Surgeons, Dr. KNOX admits that the certificate is actually signed by himself, so that there is no suspicion of forgery on the part of OSBORNE. All the suspicion which attaches to this part of the case consequently lies at the door of Dr. KNOX.

On referring to Mr. KEATE's letter, in the last LANCET, it will be seen that Mr. KEATE writes as a member of the Council of the College of Surgeons, and of the Court of Examiners, and makes use of the following words to Mr. FOSBROOKE:—"If you can point out any means whereby we can convict the professors of falsehood, I am sure the Court will be very ready to take measures to check so evil a system."

As soon as Dr. KNOX had admitted the genuineness of his signature, the means of conviction in his case were obvious enough. The Rev. Mr. BURDER might have been appealed to; Mr. SCULTHORPE, whom Mr. FOSBROOKE maintains to have drawn up the real indenture; Mr. THOMPSON, of Nottingham, with whom he is asserted to have been living as assistant in 1840, might all have been called upon for evidence in a court of law, if need were, which would have shown plainly enough the truth or falsehood of Dr. KNOX's two certificates. Nay, the College of Surgeons ought to do so now, if they have any sincere desire to vindicate the honour of the members of the College. The suspicions of the case are sufficiently grave, and warranted by such evidence as to render this the bounden duty of the College.

But the attention of the examining bodies ought to be directed to all the parties concerned in this apparently nefarious transaction. With another case, in which it is proved that a diploma was obtained by barely twelve months' study and attendance upon hospitals and lectures; with the fact that at Glasgow, the place in which the chief portions of the testimonials in OSBORNE's case were obtained, advertisements are openly placed in the public papers offering bribes to the teachers for false certificates of attendance on lectures; and with the evidence adduced by Mr. FOSBROOKE in support of his case, the College of Surgeons and the Society of Apothecaries, if they did their duty, would at least forthwith address the different lecturers and hospital physicians and surgeons concerned, and

demand an explanation, under penalty of refusing their testimonials for the future. We are utterly at a loss to conceive how, having exerted themselves in the case of the Taunton pastry-cook, who obtained his diploma by a twelve-months' curriculum, they can refuse to move in the case of OSBORNE, in whose schedule there are only nine months' attendance on lectures free from the grave suspicion of fraud. We have been informed, on credible authority, that the Council, aroused by the exposures which have been made during the past year, have lately consulted legal opinions as to their possessing the power to expel members who have conducted themselves unworthily, and in defiance of the oath taken upon entering the College. No doubt, powers of expulsion ought to exist, and ought to be exerted. Members who have acted in a manner unbecoming the dignity of their calling, or who have obtained their diploma by false pretences, ought to have their names expunged from the College lists. Up to the present time, the only expulsions of this kind have been, the three celebrated chirurgical knights, who were knighted by mistake, or something worse; and lastly, this chirurgical confectioner, J. D. BLAKE. Truly the number might be very much increased, to the great honour and comfort of the profession.

THE Council of the Institute, driven ignominiously, by an universal reprobation, from their advertised objections to the MEDICAL REGISTRATION BILL, dated May 3, have issued another proclamation, bearing date May 27. In their advertisement, No. 1, they objected to the Bill,

"That it would give increased facilities for practising medicine to the chemists and druggists which the interests of the public require should be suppressed or controlled."

These "increased facilities" (!) were, the summary trial and punishment of all parties practising medicine without the possession of a certificate of their being on the Register as legally-qualified practitioners. We give this clause of the Bill (21) upon this subject entire, as the answer, one which must be convincing to every honest mind.

"And be it enacted, that any justice of the peace acting in and for the county, city, or place in which the offence has been committed, or any magistrate appointed by virtue of an Act passed in the second and third years of the reign of her Majesty Queen Victoria, intituled, 'An Act for regulating the Police Courts of the Metropolis," or one of the justices of peace courts of Scotland, may hear and determine *any complaint charging any person with practising medicine without a certificate as aforesaid*, on the oath of one or more witnesses, or by the confession of the accused party, and shall award the penalty or punishment herein provided for such offence. And in every case of the adjudication of a pecuniary penalty under this Act, and of non-payment thereof, it shall be lawful for the said justice or magistrate to commit the offender to any gaol or house of correction within his jurisdiction, for a term not exceeding *one calendar month* when the sum does not exceed *forty shillings*, and for a term not exceeding *three* calendar months when the sum does not exceed *ten pounds*, the imprisonment to cease on payment of the sum due."

In the advertisement, No. 2, the Council of the Institute break new ground. They now object that—

"Fourthly,—The 27th Clause provides as follows:—

"'That nothing in this Act contained shall extend, or be construed to extend, to prejudice or in any way to affect the trade or business of a chemist and druggist in the buying, preparing, compounding, *dispensing*, and vending drugs, medicines, and medicinable compounds, wholesale or retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business *in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act.*'

"Thus, should the 'Registration Bill' become law, every chemist and druggist would be exempt from the operation of this law, and from any penalty whatever, provided he can show that he carries on his business, not as the business of a chemist and druggist was carried on before the passing of the Act of 1815, but as it is conducted at the present day. The members of our profession can form their own opinion as respects the chemists and druggists, whether they do or do not practise both at the counter and by visiting patients at their own houses."

Now, we will merely remark of the clause here quoted, that it is an exact copy of the clause in the Act of 1815, relating to chemists and druggists. If the conduct of chemists and druggists is different at "the present day" from what they were "before the passing of the Act of 1815," what a censure is this upon the conduct of the Society of Apothecaries, of which the Council of the Institute is but the mouth-piece? Armed with their Act, the whole responsibility of the illegal difference between the chemist of this day and that "at the counter and by visiting patients at their own houses," lies at the door of this Society. We give the clause of the Apothecaries' Act of 1815, which relates to chemists and druggists.

"Provided always, and be it further enacted, that nothing in this Act contained shall extend, or be construed to extend, to prejudice, or in any way to affect the trade or business of a chemist and druggist, in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinal compounds, wholesale and retail, but all persons using or exercising the said trade or business, or who shall hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business *in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act.*"—Clause 28.

Thus it will be seen that the Registration Bill, like the Act of 1815, provides only for the carrying on of the "trade and business" of the chemist and druggist, and not "counter and visiting practice;" that they are to be allowed to pursue, as heretofore, not any illegal practices, but "the trade or business of a chemist and druggist in *the buying, preparing, compounding, dispensing, and vending drugs wholesale and retail.*" Yet, though these facts are patent to all, the Council of the Institute insult the common sense of the profession by asseverating, in one advertisement, that the Bill gives "increased facilities" to the practice of medicine by druggists, and in the second, that were the Bill passed, "every chemist and druggist would be exempt from the operation of the law." What will advertisement number 3 set forth? Surely

"The force of falsehood can no farther go."

## MEDICAL REGISTRATION COMMITTEE.

EDWIN LANKESTER, M.D., F.R.S., CHAIRMAN.

THE Committee still continues its labours. During the past week they have received numerous communications from various parts of the country, cordially approving of their proceedings. Objections which had been published by corporate monopolists were brought before the last meeting: as these objections were evidently intended to mislead, and, if possible, prevent inquiry into the real merits of the Bill, the Committee determined on issuing the following advertisement:—

"The Committee beg once more to call the attention of the Medical Profession to Mr. Wakley's Registration Bill itself, and earnestly entreat that they will not be misled by garbled statements as to its details. It has been stated, by interested parties, that this Bill 'does not provide for uniformity of education;' but the Committee would call attention to Clause 23, in order to refute this charge. In the second place, it is asserted that this Bill will permit chemists and druggists to act as medical practitioners. The Committee deny this, and refer to Clause 14 of the Bill, which states, that if any person

'shall act as a physician, surgeon, or apothecary, in any part of Great Britain or Ireland, without being duly registered,' such person shall, on conviction before any magistrate, forfeit and pay a sum not exceeding five pounds, &c. The Committee feel convinced that no legal sophistry could interpret this clause as one that would permit the chemist and druggist to act in the capacity of a medical practitioner. By Clause 20, also, it is provided that every unregistered person who shall pretend to be either physician, surgeon, or apothecary, or shall take any name implying that he is registered under this Act, may be convicted before any magistrate in a penalty of ten pounds."

A Sub-Committee, consisting of Messrs. J. D. Jones, M. K. O'Shea, and Ed. Bowman, members of the National Institute, appointed on Thursday last, presented the following Protest, signed by sixty-three members of that body. The Sub-Committee stated, that having had only three clear days to collect names, their numbers were but small; but they had no doubt, such being the unanimous opinion of those who had signed the Protest, that hundreds of signatures might be added; and they hoped that all members of the Institute who agreed in the justice of the Protest would immediately give them authority to add their names by addressing them at the Freemasons' Tavern immediately.

"We, the undersigned, members of the National Institute of Medicine, Surgery, and Midwifery, take upon us thus publicly to repudiate the Address published by the Council of that body, against the Medical Registration Bill now before Parliament, having neither been asked nor consulted upon the merits or demerits of the measure. Also, to deny the right of the Council to issue an Address of such paramount importance to all its members, without endeavouring to elicit their views upon the subject. If they possessed the means of knowing the individual opinion of the body for the election of the Council, they surely possessed the same means of ascertaining their views upon a measure where they one and all were so deeply interested.

"Feeling that the Council had, by its precipitancy, pledged itself to oppose a measure, the success of which the members at large were most favourable to, we are anxious that the members of the legislature, and more particularly the Committee now sitting in the House of Commons, should know that the opposition of the Council of the National Institute is not that of its members.

"John Dalston Jones, 1, Queen's-road, Dalston; Michael Keating O'Shea, 17, Mount-street, Bridge-road, Lambeth; Edward B. Bowman, Middleton-road, Dalston; Edgar Cockell, Junior, Queen's-road, Dalston; James Edward Mathew, Church-cottage, Beauvoir-square; Esquire Dukes, Acton-place, Kingsland-road; George Gould, 19, Kingsland-crescent; George West, 2, Hackney-road-crescent; William Grimwood King, 7, Thurlow-place, Hackney-road; James Smart, Cambridge-heath, Hackney-road; George Frederick Giles, 4, Clifton-place, Hackney; William Callender Tidy, Cambridge-heath, Hackney; Henry Gervis, Triangle, Hackney; William Huxtable, Wells-street, Hackney; Edward Larwill Humphries, Courtney-terrace, Kingston; Frederick Canet, Holly-street, Dalston; John Chambers, Trafalgar-place, Hackney-road; J. E. Pattison, Brunswick-place, Islington; Henry Charles Robinson, Caledonia-place, Pentonville; Peter Mageniss, Hamilton-place, New-road; Charles Packer, 12, Pitfield-street, Hoxton; Wm. P. Baker, Bow; William Bayes, Angel-terrace, Pentonville; James Self, Mile-end-road; Wm. Garbutt Taylor, Enfield; William Kelso Wright, North Brixton; James Townley, Harleyford-place, Kennington; David Taylor, Harleyford-place, Kennington; Henry Meredith Townsend, 75, Newington-causeway; Wm. Hay, 23, Park-square, Leeds; Richard S. Penkivil, Sampford Peveril, Tiverton; John Augustus Lloyd, Bath; Edward Parker, Rickdale, Liverpool; Thomas Inman, Liverpool; Wm. Hitchman, Cirencester; James Holmes, Cirencester; Edw. Jas. Shearman, Rotherham; Frederick Geo. Wm. Muller, Haswell, Durham; John Christie Seeham, Durham; Wm. E. Coyte Bishop, Easington, Castle Eden, Durham; Robert Fidler, Northumberland-street, Liverpool; Henry W. J. Ellis, Crowle, Lincoln; P. S. Ellis, Crowle, Bantry, Yorkshire; Joshua Barlow, Fairfield-street, Manchester; W. Briggs, Manchester; Samuel Beecroft, Hyde, Manchester; Jonathan Shaw, Hyde, Manchester; William E. Grindley Pearse, Marsham-street, Westminster; W. H. Cooke, York-road, Lambeth; R. L. Hooper, London-road, Southwark; Wm. Eales, 23, Parliament-street; Fred. Tucker, Ryde, Cheshire; William Tucker, Cheshire; Robert R. Clay, Wandsworth-road; Alexander M'Gregor, South Hetton, Durham; Wm. Philson, Hitching, Herts; George Leany, Maidstone, Kent; Wm. Bird Herapath, Bristol; George John Parker, Bristol; J. P. M'Donald, Bristol; Robt. M'Pherson, Bristol; Jas. S. J. G. Parsons, Bristol; Edward Evans, Stones-end, Bow."

The following letters are specimens of the answers received by the Sub-Committee to applications made on the subject of the Protest, from gentlemen whose names appear on the list of the Institute; the Sub-Committee have no doubt that there are a great number of gentlemen similarly situated:—

"GENTLEMEN,—I should feel great pleasure in allowing you to append my name to the Protest, but I think I cannot consistently do so, as, although I appeared in the list of members of the National Institute of Medicine &c., I have not paid the annual subscription required, and, under all circumstances, I do not think I ever shall pay it, consequently I have no claim to be considered a member of that body.

I am, Gentlemen, yours truly,

Lincolnshire, May, 1847. M. FRANKS.

To Messrs. Jones, Bowman, and O'Shea."

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"GENTLEMEN,—I this morning received your letter, enclosing a Protest against the Council of the National Institute of Medicine &c., opposing the Registration Bill now before Parliament, for my signature, and in reply, beg leave to say that I was a member of the National Association of General Practitioners, but have never subscribed to, or considered myself a member of, the present Institute. I think I, therefore, cannot sign the Protest fairly; moreover, I have been quite as much disgusted with previous acts of the Council, as with the present opposition to Mr. Wakley's excellent Registration Bill. Approving as I do of it, I lost no time in sending a petition for presentation to our excellent county member, Mr. Evans, with an earnest request that he would support the Bill in his place in Parliament.—I have the honour to be, Gentlemen, your most obedient servant,

Derbyshire, May, 1847. JOHN NICHOLSON, M.R.C.S.E.

To Messrs. Jones, Bowman, and O'Shea."

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## SELECTIONS FROM THE PETITIONS

### IN FAVOUR OF THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL, AND AGAINST THE CONDUCT OF THE CORPORATIONS IN OPPOSING THE MEASURE.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

The humble petition of William Mark Powell, residing at No. 2, Claylands-place, Clapham-road, in the county of Surrey, member of the Royal College of Surgeons of England, and member of the London Society of Apothecaries, showeth,—

That your petitioner is anxious that the Medical Registration and Medical Law Amendment Bill, now before your honourable House, should be enacted into a law, for the following reasons:—

That the medical profession of this country is composed of members licensed by different medical institutions having different standards of education and efficiency; that of these members, some are licensed by the English colleges, some by the Scotch, and some by the Irish. That all these said members practise as apothecaries in England and Wales, though none but those holding the diploma of the London Society of Apothecaries have a legal right to do so. That the London Society of Apothecaries have not only totally failed in maintaining the privileges of their members, which are constantly invaded by persons holding only the diploma of the Royal College of Surgeons of England, and by the licentiates of Scotch and Irish institutions, but that they have also failed to protect the public from the evil practices of uneducated quacks, possessing no diploma whatever, who infest London and other large towns, to the great scandal of the high art of medicine, and to the great suffering of their unfortunate victims—a crying evil, which the London Society of Apothecaries, in a certain Address, published by their authority, and bearing date 10th December, 1846, deplore, but confess to be out of their power effectually to amend, from want of funds and a more summary power of proceeding against offenders. That, therefore, a compulsory Registration, which shall at once distinguish the qualified and educated practitioner from the unqualified and ignorant pretender, and a power of summary

punishment for the latter vested in the magistracy, are imperatively called for to protect the interests of humanity. That, in your petitioner's opinion, all members of any British medical institution, fully qualified by law to grant degrees in medicine, have a moral right to exercise their art in any part of her Majesty's dominions—it being a manifest absurdity, that he who is a lawful practitioner of medicine in one part of her Majesty's realms should not be the same in another part. That your petitioner believes that it would be for the advantage of the medical profession that all its members should be formed into one compact body by the legalization of the practice, as apothecaries, throughout the United Kingdom, of the members of the Royal College of Surgeons of England, and of the Scotch and Irish colleges, who are acknowledged to be, in moral and scientific attainments, fully equal to their brethren licensed by the London Society of Apothecaries; that such a procedure would go far to remove much of that jealousy and dissension which disgrace them as a body, lower them in the estimation of the public, and thereby greatly impair their usefulness. That an apprenticeship of five years is a lamentable waste of time to the student, though your petitioner is of opinion that it would be advisable that he should pass the first eighteen months or two years under the superintendence of a qualified medical practitioner. That it is most devoutly to be prayed for, that the secretary of state should have full power to supervise the proceedings of the medical corporations of this country; that such supervision must necessarily introduce order and system, and with them justice, into the councils of the London corporations, which, being invested with irresponsible power, have with impunity trespassed upon the rights, and insulted the feelings, of the great body of the profession throughout the land. That your petitioner is of opinion that the present system of examination is very defective, and views with pleasure the provisions of the Medical Registration and Medical Law Amendment Bill to render them what they ought to be—practical. That, to the disgrace of the medical profession, and to the shame of medical corporations, which have made no systematic attempt to crush such a monstrous evil, there do exist qualified medical individuals, who, by various disgraceful publications and practices, bring great scandal and disrepute upon the noble science of medicine; that, to meet this dire evil, such a stringent power as provided for by the sixteenth clause of the Medical Registration and Medical Law Amendment Bill is absolutely necessary to the well-being and respectability of the whole profession, and is not at all to be dreaded by any honourable mind.

And your petitioner, convinced that the Bill now before your honourable House, will prove eminently useful to the medical profession and to the public, earnestly beseeches that it may be without delay enacted into a law.

And your petitioner, as in duty bound, will ever pray.

WILLIAM MARK POWELL.

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## PETITION OF THE SURGEONS OF CIRENCESTER.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned Members of the Royal College of Surgeons of England, residing at Cirencester, in the county of Gloucester, showeth,—

That your petitioners view with regret the opposing course taken by the governing corporations to the Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland, now before your honourable House. That it is the opinion of your humble petitioners, that the said colleges &c. (an irresponsible few) are endeavouring to hold to themselves, as heretofore, an usurping and monopolizing power, for their own selfish and exclusive interests, without regarding the best interests of the profession or public. That the above corporations (particularly the College of Surgeons to which they belong) are seeking to perpetuate a corrupt system of management, which recent events have made but too manifest. That your petitioners consider the provisions of the Medical Registration Bill so just and equitable, securing to all legally-qualified practitioners in the United Kingdom equal rights and privileges, that they fervently hope the said Bill will, without delay, be passed into a law in the present session of Parliament.

And your petitioners, as in duty bound, will ever pray,

WILLIAM HITCHMAN.
DAVID RUCK.
EDWARD R. BOWER.
JAMES HOLMES.

*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.*

The petition of George Leney, residing in Maidstone, Kent, Member of the Royal College of Surgeons, and Licentiate of the Society of Apothecaries of London, humbly showeth,—

That your petitioner has observed, with much satisfaction and gratitude, the introduction of a Bill, by the honourable member for Finsbury, for the Registration of the Legally-Qualified Practitioners in Medicine, Surgery, and Midwifery, and for the punishment of unqualified and ignorant pretenders. Your petitioner considers the opposition of the medical corporations to be factious and detrimental to the public, as well as to the legally-qualified practitioners, whom it is the duty, but not the interest, of those corporations to protect. Your petitioner therefore hopes, that your honourable House will not consider those corporations to represent the feelings and wishes of the great body of British medical practitioners, but only those of a small and favoured portion. Your petitioner trusts that your honourable House will disregard those representations, and pass the Bill into a law during the present session of Parliament.

And your petitioner will, as in duty bound, ever pray,

GEORGE LENEY.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Henry Smith Palmer, Member of the Royal College of Surgeons of England, Licentiate of the Society of Apothecaries, London, showeth,—

That your petitioner is of opinion, that the Bill introduced into your honourable House, for the purpose of registering all legally-qualified members of the profession of medicine and surgery, is eminently serviceable for removing those evils by which the science of medicine has been so long surrounded. That, under the existing laws, no protection is afforded to the educated practitioner, by any of the present examining bodies. That the profession is now most grievously oppressed by the most unlimited quackery, whose disgusting and filthy advertisements are blazoned forth in every journal, on the one hand, and the continual practising of the druggists, on the other. That the Society of Apothecaries have never endeavoured to suppress the one or the other, in a manner at all calculated to benefit the profession. That your petitioner is of opinion, that all the provisions of the Medical Bill are of a just and equitable character, securing to all members of the profession equal rights and privileges; and that your petitioner fervently hopes that the said Bill will be speedily passed into law.

And your petitioner, as in duty bound, will ever pray.

HENRY SMITH PALMER.

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*To the Honourable the Commons of Great Britain, in Parliament assembled.*

The humble petition of Henry Crowhurst Roods, Member of the Royal College of Surgeons of England, residing at No. 67, Great Russell-street, Bloomsbury, showeth,—

That your petitioner hails with satisfaction the introduction to your honourable House of a Bill, intituled "The Medical Registration and Medical Law Amendment Bill," for the registration of the qualified medical practitioners of the United Kingdom, and for altering and amending the laws relating to the medical profession. That your petitioner has carefully read the several clauses of the said Bill, and he is humbly of opinion that the said Bill, if passed into a law, would be highly acceptable to the great body of medical men of the United Kingdom, and prove advantageous both to them and the public generally. Your petitioner therefore humbly prays that your honourable House will pass the same into a law with all convenient expedition. Your petitioner, moreover, having heard that the aforesaid Bill is opposed by the Council of the Royal College of Surgeons of England, and by one or two other corporate bodies, begs to remind your honourable House that the above-named Council is practically self-elected, and does not, in the opinion of your petitioner, represent the opinions and wishes of the members of the College generally. Your petitioner therefore humbly prays that the petitions of the said Council may be viewed by your honourable House simply as conveying the opinions and prayers of the individuals whose names are attached thereto; and that your honourable House will not attach undue importance to the representations of the said Council, under the erroneous impression that they represent the opinions and wishes of the members of the College. Your

petitioner being fully persuaded that the enactment of the "Medical Registration and Medical Law Amendment Bill" would prove a boon to the profession, and a benefit to the public at large, earnestly entreats your honourable House to pass the same into a law in this present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

(Signed) HENRY CROWHURST ROODS.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of James Edward Hebblethwaite, residing at Thornton, near Bradford, Yorkshire, Member of the Royal College of Surgeons of England, and Licentiate of Apothecaries' Company, showeth,—

That your petitioner views with great regret the opposing course taken by the governing corporations to the Medical Registration Bill and Medical Law Amendment Bill now before your honourable House. That it is the opinion of your humble petitioner that the said Colleges &c. are endeavouring to hold themselves, as heretofore, an usurping and monopolizing power for their own selfish and exclusive interests, without regarding the best interests of the profession or public. That the above corporations are seeking to perpetuate a corrupt system of management, which recent events have made so manifest. That your petitioner considers the provisions of the Medical Registration Bill so just and equitable, securing to all members of the profession equal rights and privileges, that your petitioner fervently hopes the said Bill will, without delay, be passed into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

JAMES EDWARD HEBBLETHWAITE.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Thomas Pope, residing at Cleobury Mortimer, Salop, general practitioner upwards of fifty years, Member of the Provincial Medical and Surgical Association from its commencement, showeth,—

That your petitioner, deeply impressed with the importance of the Bill for the Registration of Legally-Qualified Practitioners in Medicine and Surgery, and into the Laws and Charters relating to the Practice of Medicine and Surgery in Great Britain and Ireland, fervently hopes that your honourable House will not let the present session pass without making the said Bill the law of the land. No man in her Majesty's dominions knows the requirements of the medical profession more than the talented editor of THE LANCET; which publication has so much tended to the advancement of the profession as to entitle him to the gratitude of the nation at large. This organ wisely advocates the Bill, as does the *Provincial Medical and Surgical Journal*, and your petitioner believes, nineteen-twentieths of the profession generally; and its only opponents are a few interested members of the medical and surgical corporations.

And your petitioner, as in duty bound, will ever pray,

THOMAS POPE.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Robert Brockman Newhouse, residing at Bampton, Oxfordshire, Member of the Royal College of Surgeons of England, showeth,—

That your petitioner has examined with great care and attention the provisions of a Bill now before your honourable House, entitled, "A Bill for the Registration of Qualified Medical Practitioners, and for remedying the Law relating to the Practice of Medicine in Great Britain and Ireland," and your petitioner firmly believes, that if such Bill were enacted into a law, it would prove to be a measure of justice to the profession, and one of great utility to the public; that, after nine years of study, and a large expenditure of money, your petitioner passed his examination at the Royal College of Surgeons, and obtained his diploma. That your petitioner cannot but view with disgust and dissatisfaction the conduct of the several Presidents and Councils of the London Corporations in opposing the progress of so just and desirable a measure as that at present before your honourable House. That your petitioner prays that the rights of all legally-qualified practitioners may be placed on a just foundation, and that the public may possess the means, by a compulsory system of Registration, of distinguishing those persons who have been regularly educated in the science of medicine, from others who are mere pretenders to a knowledge of that science. Your petitioner considers that a very grievous injury is inflicted upon those members of an honourable profession who have complied, at a great cost, both of time and money, with the provisions of the law, and the regulations of the Colleges and Examining Boards, but who are now left without adequate protection in the exercise of the duties of their profession. That your petitioner is decidedly of opinion that the enactment of the "Medical Registration and Medical Law Amendment Bill," such as now before your honourable House, would provide an adequate remedy for the grievances under which he is now suffering, and earnestly implores and entreats your honourable House to enact that Bill into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray,

(Signed) ROBERT BROCKMAN NEWHOUSE.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Hayes Kyd, residing at Harefield, in the county of Middlesex, Member of the Royal College of Surgeons of England, and Licentiate of the Society of Apothecaries of London, humbly showeth,—

1. That whereas the practice of medicine and surgery has ever been of the greatest service to mankind, in the mitigation of human suffering, the cure of disease, and the consequent diminution of contagion and mortality. 2. That therefore, in the humble judgment of your petitioner, it is highly incumbent upon the legislature of this country, by effective measures of Parliament, to raise the character, and preserve the integrity, of a profession, whose services are so important and essential to the nation. 3. That by establishing, upon a judicious and enlightened basis, the profession of medicine, and by regulating the practice of the said profession by definite and legitimate distinctions, with respect to qualified and unqualified persons, a great benefit will, in the first place, be conferred upon the public, to whom a security ought to be afforded against the designs of ignorant empirics, whose malpractices have ruined the health, and frequently destroyed the lives, of their credulous and numerous victims. 4. That in order to accomplish this primary reform, it is essential that an efficient method be adopted, by which the public may be enabled to discriminate between the legitimate practitioner and the unqualified pretender. 5. That such purpose can be effected only by a comprehensive enactment of the legislature, which may afford to the Government the means of practically ascertaining the qualifications of all persons practising the said profession. 6. That the Bill recently introduced to your honourable House, by the honourable member for Finsbury, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," appears to your petitioner, after due deliberation upon its details, fully adequate to the above purpose. 7. And inasmuch as the said Bill contains other salutary provisions for the advancement of medical education, and the moral discipline of the profession, your petitioner therefore humbly conceives, that it will prove beneficial alike to the profession and the public—affording to the former a just protection from the practices of fraudulent impostors, and to the latter a sound assurance of obtaining the benefits which must result from a higher cultivation of medical science. 8. Your petitioner cannot but consider that the opposition to this Bill, which has been manifested by the Royal College of Physicians, and the Royal College of Surgeons, of England, has been prompted by a partisan spirit, and by selfish considerations. But your petitioner humbly trusts that your honourable House will not suffer such motives to countervail the broad principles upon which the present Bill is founded, or even to interrupt its progress; but that the said Bill may pass into law during the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

HAYES KYD.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned practitioners of medicine and surgery, of the borough of Ludlow, in the county of Salop, showeth,—

That your petitioners have carefully examined the Medical Registration Bill now before your honourable House, and that we are decidedly of opinion that it is the most compre-

hensive measure that has yet been brought forward for the improvement of the medical profession, and that it is therefore of the greatest importance that it should meet with the sanction of the Legislature. Your petitioners have observed, that it is proposed to refer this Bill to a Select Committee of your honourable House, and they feel quite satisfied that there will be no difficulty in showing to any Committee that may be chosen how greatly the proposed Medical Registration Bill will tend to benefit the public, and promote the respectability of the medical profession, as well as to produce and consolidate that honourable feeling which ought to exist amongst the members of this acknowledgedly liberal and highly useful profession. Your petitioners are further convinced, that if it should please the Legislature to sanction it, the Medical Registration Bill will not prevent any necessary salutary reform being effected in the arrangements of the present licensing bodies or corporations; but, on the contrary, that it will be the first grand step towards securing a thorough and satisfactory plan of education and qualification for the medical profession at large. These being the humble, but sincere, sentiments of your petitioners regarding this Bill, we humbly beg that it will be the pleasure of your honourable House to pass it into a law during the present session of Parliament.

And your petitioners, as in duty bound, will ever pray.

DAVID BELL, M.D.; RICHARD VALENTINE, M.R.C.S. Eng.; EDWARD HENESY, M.D.; HENRY WALKER, M.D.

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*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned members of the National Institute of Medicine, Surgery and Midwifery, residing in Liverpool, showeth,—

That your petitioners have viewed with much pleasure that a Bill is now introduced into your honourable House, intituled, "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," as your petitioners feel satisfied that if passed into a law it would tend materially to benefit the medical profession and public generally. Your petitioners cannot but express their surprise and regret that the Council of the National Institute should oppose this Bill, as they consider such opposition to be a direct breach of faith towards their members, and they would therefore respectfully urge upon your honourable House not to regard the voice of the council as that of the members.

That your petitioners most sincerely and anxiously hope that the said Bill may be passed into a law in the present session of Parliament.

And your petitioners will ever pray.

JOSEPH B. BARROW, 18, Moira-street; WILLIAM LAWRENCE COCKS, Mount Pleasant; JAMES BRUCE, M.D., 58, Nelson-street; THOMAS INMAN, M.D., 16, Rodney-street; CHARLES BUTLER GREATREX, 22, Moss-street; BENJAMIN BLOWER, 58, Stafford-street; HENRY HULME, 2, Moss-street; HY. S. TAYLOR, Prescot-street.

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# Correspondence.

## LETTER FROM MR. COYTE BISHOP.

*To the Editor of* THE LANCET.

DEAR SIR,—As stated in my note to you, which appears in THE LANCET of the 22nd inst., I wrote the same day to George Ross, Esq., secretary, requesting the removal of certain names from the list of members of the National Institute of Medicine, &c., and promising other secessions in a few days, in consequence of the strange resolution of the Council of the Institute to oppose your Medical Bill, on grounds which I conceived to be utterly at variance with their former published statements.

This proceeding of mine brought me an explanation from Mr. Ross of the real (or *intended*) meaning of the resolution, and also an assurance of the unaltered opinions and intentions of the Council on the subject of medical reform.

My answer to Mr. Ross was to the effect, that I was quite satisfied with the "explanation," and was also in accord with the Council as to the objections raised by them against certain *parts* of the Medical Bill; but at the same time, I pointed to the *plain English* of the resolution, as admitting but of *one* construction, the one given by yourself and a numerous class in the profession.

As the explanation given was satisfactory to myself and friends, we agreed to remain members of the Institute for *future* operations, in case your Bill should unfortunately be defeated; but at the same time I have assured the Council of the Institute, that although we remain members of the association, we shall in no degree relax in our efforts to further the success of the Bill now before parliament, and that every member of the Institute with whom I am acquainted would have been better pleased had the Council applied the whole moral force of our confederacy to oppose, in committee of the House of Commons, such clauses of the Bill as appeared to be objectionable.

Your own honourable conduct, in offering to meet before the committee the various objectors to the measure, ought in itself to have disarmed all such blind and headlong opposition as is offered by the various corporate institutions of the metropolis.

As my very plain-spoken attacks on the Council of the Institute are published in THE LANCET of the 22nd inst., this explanation of my conduct will be necessary to set me right with them; for it appears that I was wrong in taking the *plain* and *literal* meaning of the published resolution as the basis of my opposition.—Yours very faithfully,

Durham, May, 1847. WILLIAM EDWARD COYTE BISHOP.

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## THE AGE OF MANUALS.

*To the Editor of* THE LANCET.

SIR,—I think your correspondent "Justitia" has assumed a title, to which, in the instance of his communication to the last LANCET, he has but little claim. He has, in my opinion, done injustice to the high attainments of the recently appointed examiner in comparative anatomy and physiology to the London University. There are few who have done more to disseminate sound views in physiology, or who take a more comprehensive view of the whole subject, than the gentleman alluded to; or whose applications of comparative anatomy in elucidating the science of physiology are more apposite and philosophical — and this I presume to be the main object in in troducing comparative anatomy into the examination.

As to the "Manual," it is by no means the pap-like composition for physiological infants to which such works have been compared, but an admirably written treatise, embracing all the leading facts and doctrines of the science of which it treats—a work well spoken of by all who have taken the trouble to read it. "Justitia" has probably never done so, but has been misled by the title—one not at all appropriate (according to the meaning we are accustomed to attach to it) to several publications which have of late been issued in the same form and by the same publisher. With the qualities I have mentioned, there are few who would be likely to give a more practical or useful examination in physiology—or one more nearly what it should be for a medical degree, than the gentleman appointed by the senate of the university. It is from no feeling of a personal nature I write this, but simply from being

Liverpool, May, 1847. AMOR JUSTITIÆ.

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## PRUSSIC ACID OF THE PHARMACOPŒIA, AND OF SCHEELE'S STRENGTH.

*To the Editor of* THE LANCET.

SIR,—It is with no wish to perpetuate painful recollections that I refer to a late melancholy event, which has already served as a text for many severe lectures both to prescribers and dispensers. But I am anxious, before the excitement occasioned by the accident has quite subsided, to call the attention of the profession to one point which has scarcely been noticed in connexion with this affair; although it has been repeatedly brought before them, unfortunately to little purpose, under less impressive circumstances. It has been frequently remarked, as a matter deserving severe censure, that the prescription which led to the fatal result, contained two ingredients for which there existed no authorized or generally recognised formulæ.* But there was a *third* ingredient, which comes, to a great extent, under the same category —namely, *Scheele's prussic acid:* which, nevertheless, is daily prescribed by our *regular* physicians and surgeons. As prussic acid has for eleven years found a place in our autho-

* It is true that formulæ for both these preparations are found in a few English works, selected from foreign pharmacopœias and hospital formularies; but they are not recognised by the practitioners of this country; and, in fact, none of them are those intended by the prescriber in the present case, and employed in his private dispensary.

rized Pharmacopœia, and as the College has been careful to define very exactly the strength of the preparation, I am at a loss to conceive what motive can induce practitioners to prefer an acid of no *determinate strength, and for which no authorized formula exists.* The enormous difference in the strength of Scheele's acid, as found by the late Mr. Everitt, in samples procured from first-rate establishments in the metropolis, was long ago pointed out; and although the repeated publication of the fact may have led to an approximation towards an average strength, the variation is still considerable. And, indeed, if any standard strength for Scheele's acid were fixed by authority, what advantage would accrue, either as regards the convenience of the prescriber or the safety of the patient, from recognising the two preparations? Is the dose of the pharmacopœial acid so inconveniently bulky that a more concentrated preparation is required? Or is it more difficult to apportion the dose of a preparation containing two per centum of absolute hydrocyanic acid, than of one containing twice or thrice the quantity?

The fact, however, is, that the preparation sold as Scheele's prussic acid is of no determinate strength; the process which bears his name yields a variable product, and there is no standard fixed by authority, or by universal consent, to which it might be reduced. To save your space I assume the truth of this statement; but am prepared with ample evidence if the proof is required. It is easy to conceive, under these circumstances, how fatal accidents may occur, from a change of dispenser, or from a fresh supply of acid; and in such a case, who would be responsible for the result?

Another question suggests itself—what is the duty of an apothecary or dispensing chemist, who receives a prescription in which Scheele's acid is ordered? I reply, let him, in this case and in all similar ones, apply to the prescriber for information as to the precise strength of the preparation intended to be used. It is true that this may involve, not only much trouble and great loss of time, but a risk of alarming the patient, and perhaps of offending the physician. But it is not only the method in which the dispenser will most faithfully fulfil his important trust, but the general adoption of which will most effectually check such irregularities on the part of the prescriber.—I am, Sir, very respectfully yours,

A Quondam Dispensing Chemist.

## ON THE NECESSITY OF TRYING TO RETURN MEDICAL MEN AS MEMBERS OF THE HOUSE OF COMMONS AT THE COMING ELECTION.

*To the Editor of* The Lancet.

Sir,—On throwing my eye over the Parliamentary Register, I find amongst the representatives of the people, officers of the army and navy, a host of barristers, and of merchants, solicitors, and jobbers, but only a single member of the medical profession, Mr. Wakley, for Mr. Hume cannot be considered actively as such. Hence the legislative neglect of our professional rights,—hence the ruin of the public health. I should respectfully suggest that a committee be formed in London for the purpose of assisting, by pecuniary means, the return of medical candidates, without reference to their general politics, at the ensuing election. In Ireland, the return of half a dozen could be effected. Dublin does not forget her Dr. Lucas, or Ireland her Dr. Currie, the real father of Catholic Emancipation. Dublin (city), Athlone, Sligo (town), Carlow, Galway (town), would, if sued, give us medical M.P.s. The venality of the bar has disgusted the constituencies. Let 10,000*l.* be raised, and we shall have for England, Scotland, Wales, and Ireland, twenty members of the medical profession returned. Carmichael for Dublin, Dr. Grattan for Kildare, Dr. Gray, Dr. O'Reilly, &c., men with independent fortunes, but whose duties to their families would prevent their spending their private resources on electioneering. Billant, remember, Sir, the physician so distinguished at "La Charité," has for years ably and honestly represented his native district of Angouleme in the French Chamber of Deputies. Dr. Garth, the accomplished poet, sat in Parliament, and was court-physician. Unless the profession now make a stand, we are lost as a liberal art. In the committees for conducting the Oxford University election, not a single M.D. or M.B. is to be found. The church and bar wish to degrade us to a trade. Shall we let them? Surely a conservative M.D. would throw them an Oxford graduate and a political traitor over, in this university, such a man, for nstance, as Dr. Robert Graves, or Dr. Maunsell.—Sir, your obedient servant,

May, 1847. Medicus.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions in favour of the Bill, received for Presentation by Mr. Wakley, M.P.:—*

Henry Gervis, Hackney; Henry Crowland Roods, Great Russell-street; Erasmus Stone, junior, Wentworth, near Rotherham; Charles Long Allwork, Maidstone; J. W. Kimpton, Stadhampton; R. S. Nightingale, formerly Resident Surgeon of the Liverpool Eastern Dispensary; D. Sinclair, Halstead, Essex; John Craig, Liverpool; Charles J. Pinching and Philip H. Harper, Gravesend; Stephen Couchman, Dentist, Mansell-street, Goodman's Fields, (and for alteration of the 27th Clause;) Thomas Pope, Practitioner for upwards of fifty years at Cleobury Mortimer, Salop; Medical Practitioners of Hull, (forty-three signatures;) John Lilley and Frederick John Lilley, Wisbech; Richard Tuthill Massey, M.D., Dublin; Richard Steele Perkins, Chirk, Denbighshire; Jas. Edw. Hebblethwaite, Thornton, near Bradford; J. P. M. Smith and George Geree, Brighton; W. Mainwaring, M.D., Bournemouth, Hants; E. M. Tearne, Northern Hospital, Liverpool; Thos. B. Gildersleeves, Liverpool; Michael J. M'Cormack, M.D., Rathmullen, co. Donegal; Medical Practitioners of Tunbridge, Kent, (three signatures;) Joseph Henry Shorthose, Medical Student, Tunbridge; Medical Practitioners of Whitby, (three signatures;) Hayes Kyd, Harefield, Middlesex; Members of the National Institute of Medicine, Surgery, and Midwifery, residing at Liverpool, (eight signatures;) Edwin Such, Ratcliffe-terrace, Goswell-road; John Geo. Musket, Hampton-terrace, Hampstead-road; C. M. Aldridge, Upper Seymour-street, Euston-square; Alfred King, Gray's-Inn-lane; Henry Hayman, Margaret-street, Cavendish-square; Patrick A. Boyle, Drummond-street, Euston-square; James Whicker, Acton-street, Gray's-Inn-road; Charles A. Cunningham, M.D., Sidmouth-street; Thomas A. O'Flaherty, M.D., Upper Gower-street, Bedford-square; Edward Fletcher, Rydon-terrace, City-road; Frederick Heald, College-place, Camden-town; William Collins, Park-street, Camden-town; J. M. Strachan, Dollar; J. M'Donough, Clapham; Dr. S. Edwards, Bath; T. C. Westlake, Andover; Luther Owen Fox, Broughton; Anthony Alsop, Bolsover; Dr. E. I. Shearman, Rotherham; the President and Council of the Shropshire and North Wales Branch of the Provincial Medical Association, and of the Resident Medical and Surgical Practitioners of Shropshire, in public meeting assembled; R. M. Wavell, Newport, Isle of Wight; Edward Coyte Bishop, with four petitions procured by this indefatigable gentleman from—1. Wm. Scott, Thornley, Durham, Member of the National Institute of Medicine and Surgery, &c., one of the Medical Officers to the Easington Union; 2. John Christie, Seaham Harbour, Durham, Member of the National Institute of Medicine, Surgery, &c.; 3. Dr. Wm. Mullar, Haswell, Durham, M.D. Edinburgh, Member of the National Institute of Medicine, Surgery, &c.; 4. James Mackie, Heighington, Durham; Richard T. Smith, Islington; J. Hunter Lane, M.D., New Bond-street, Westminster; S. Edward, M.D., Bath; Joshua Rowbottom, Adwich, Manchester; A. B. De Lisle Allen, Tottenham-court-road; E. J. Blyth, Princes-street; Thomas Young, St. George's Hospital; Simon Caldcleugh, Charlotte-street, Bedford-square; Thomas Wise, Windmill-street, Tottenham-court-road; David Jones, Medical Student; John Grove, Wandsworth, Surrey; James Self, Junior, Mile-end-road, Stepney; A. P. Leak, Mile-end; C. W. H. Howell, Stratford, Essex; John Macmeikan, Stratford; Edward Vincent, Stratford; William Finer, Cambridge-place South, Kingsland-road; Robert Elliot, M.D., Denmark-hill, Camberwell; William Elliot, M.D., Stratford, Essex; George Smith, Windmill-street; John Davies, Brighton-place; E. W. Richards, Great Newport-street; J. Edward, Gray's-inn-road; G. Edmunds, Webber-street; Walter Jones, Fetter-lane; William Lambe, Bolingbroke-row, Walworth; Edward Unwin Berry, James-street, Covent-garden; William Williams, High-street, Islington; Thomas Armstrong, Medical Assistant; Alexander Bridge, Newington-Butts; Alex. Macnab, Tottenham-court-road; Charles Webb, Great Titchfield-street; John Foote, Tavistock-street, Covent-garden; John Owen, Queen-street; Hugh Davis, Queen-street; James Hay, Newgate-street; Elijah Dodd, Westminster-road, Lambeth.

*Petitions presented by other Members of Parliament.*

May 18th.—Frederick Milne, Shacklewell-lane.

May 20th.—President and Council of the Glasgow Medical Association; Henry Swift and Thomas Dawson, Renshaw-street, Liverpool; Thos. D. Hunter, Royal Crescent, Nottinghill; Philip Burrowes, St. Ann's-road, Notting-hill; S. Parker, Hammersmith; Charles Clark, Peel-place, Kensington; Wm.

Simpson, Bradmore House, Hammersmith; Arthur Hill Hassall, Norland Villa, Notting-hill; Charles Cobbe, Bedford-place, Kensington; Robert Barnes, Gloucester-terrace, Hyde-park, Bachelor of Medicine; Peter Mageniss, Hamilton-place, New-road, St. Pancras, Member of the National Institute, &c.; John Hall Davis, M.D., Russell-place, Fitzroy-square; Wm. John Preston, Upper Berkeley-street, Marylebone; Henry Whitworth, M.D., St. Agnes, Cornwall; James Orwin, Worcester; Medical Practitioners of Colne, Lancashire; Physicians and Surgeons residing in Preston, Lancashire; Henry Hamilton, Laugharne, Carmarthenshire.

May 21st.—Robert McFarlane, Byer's Green, Durham; Wm. Ainley, Bingley, Yorkshire; Christopher Bowes and Sons, Richmond, Yorkshire; Legally-qualified Surgeons at Towcester, Northamptonshire.

Total number of petitions presented on or before May 21st, 531; signatures, 966.

May 28th.—C. M. Rigg; John Fenton; William M'Kee; J. H. Handyside; John Thomson; George Trocddell and others; W. H. Ellis; Thomas Hodson; John Bird; William Derry Pearse and others, for modification. Referred to the Committee on Medical Registration, &c.

June 2nd.—John Penkivil and James M'Clay; Physicians and Surgeons residing in the Counties of Northumberland and Durham; Caernarvon; J. P. Smyth; T. Massey; F. B. Garty; Hugh Vallance; S. Osborn; G. Fowler; W. K. Wright; W. Morris; S. F. Scarnell; Hugh Donaldson; E. Chabat; B. Swete; J. Townley; T. B. Chaldecott; T. M. Hammond; G. M. Perry; R. N. B. Mathews; T. O. Duke; T. Remington; H. Churchill; J. Leach; J. C. Ferrier; R. Christie; J. R. Unwin; B. Evans.

*Petitions against the Bill.*

May 20th.—John Thomson, Physician, 31, York-place, Edinburgh.

Total number of petitions against, before May 21st, five; signatures, thirteen.

## House of Commons,

JUNE 2ND, 1847.

Mr. WAKLEY moved the order of the day on the Medical Registration and Medical Law Amendment Bill, for the purpose of postponing the motion for the second reading until Monday week. As so much anxiety prevailed amongst an immense majority of the medical profession throughout the United Kingdom as to the fate of the measure, he might be permitted to state, that the Committee assembled on Monday last, and after considering what would be the best mode of proceeding, had resolved, in the first instance, to take the evidence of the petitioners connected with the three London Corporations which had petitioned against the Bill. By pursuing this course he (Mr. Wakley) hoped that such an adjustment of the differences might be made as would enable the Committee to present an early Report to the House, and thus enable Parliament to proceed with the Bill without delay. Circumstances now existed which rendered it expedient that no time should be lost. That if a general inquiry were gone into respecting the laws relative to the practice of medicine and surgery in this country, and if a great number of witnesses were called from the Corporations, and from among the petitioners who were in favour of the measure, so much time would be occupied in the investigation, that it might become impossible to pass a Bill relating to medicine in the present session of Parliament. Mr. Wakley moved, therefore, that the second reading of the Bill should be postponed till Monday week.

Mr. B. ESCOTT said, that he wished to inquire of the hon. member for Finsbury, if it was his intention to press on the Bill in the present session.

Mr. WAKLEY said, most undoubtedly; but the whole subject was now under the consideration of the Select Committee, and he would necessarily be compelled, in a great measure, to shape his course according to the proceedings and decision of that Committee.

The motion was agreed to without opposition.

## Medical News.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted members of the Court of Examiners, on the 28th ult.—viz., Messrs. Daniel Badcock, Sheffield; James Robert Lane, Cranford, Middlesex; Charles Rouse Durell, Jersey; Joseph Thomas Clover, Aylsham, Norfolk; Thomas Poole Collier, London; Thomas Rhys, Penlline, Glamorganshire; Laurence Clarke, Longford, Ireland; William Pritchard, Abergavenny, Monmouthshire; Joseph Anthony Simons, London; Robert Davies, Llanrwst, Denbigh, North Wales; John Chamberlayne Inglis, Cape Breton, North America; and Benjamin Daniell, Hull. At the same meeting, Mr. Robert Hastings, a member of the Edinburgh College, passed his examination for full surgeon in the Royal Navy.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 27th May, 1847:—Charles Sproull, Deasyhill; Edward Dawson Allinson; William Henry Paine, Stroud, Gloucestershire; Henry Hides, Wisbeach, Cambridgeshire; Alexander Mundell Champnes, Slough; Edwin Younge, Walesby, Lincolnshire; Francis Henry Blaxall, Claydon, Ipswich; Henry Heath Corbould, London; Henry Stevens; Thomas Hobson, Kirkella.

GLASGOW ROYAL INFIRMARY.—The funds of this institution have just been enriched by the munificent donation of £3000, from the late Mr. John Shearer of that town, who died at the advanced age of ninety-five.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.—The anniversary meeting of the Association is appointed to take place at Derby, on Wednesday and Thursday, August the 4th and 5th. The Yorkshire branch will be held at Sheffield, on Thursday, the 10th ult. The committee appointed at Norwich for the management of the council fund for the present year have given notice that "The Council Prize," of £50, will be given for the best report "On the Cerebral Affections of Infancy."

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—The members of this Society celebrated its fifty-ninth anniversary, by dining together, at the London Tavern, Bishopsgate, last Saturday—Sir Charles M. Clark, Bart., the President, in the chair. After the usual public toasts, and the health of H.R.H. the Duke of Cambridge, the Patron, had been duly honoured, the Chairman gave "Prosperity to the Institution," but refrained from dwelling long on its value and advantages at a meeting of persons who were nearly all members, and therefore well informed of its merits. The good which it had done, and was still doing, required no other proof than the printed annual statement of affairs. He could not, however, help expressing his very great astonishment that this Society, the only one of its kind in the metropolis, doing so much good, and requiring only an annual subscription of two guineas, should contain less than 350 members. It was really difficult to find a reason for any qualified member of the profession neglecting to join it. The medical profession did much for the public, whether rich or poor; but mankind cared very little about the profession after the immediate relief of their own ailments. It behoved us, therefore, to help ourselves and each other. The objects of this Society were, avoiding all party questions and medical politics, to unite in relieving the widows and orphans who were in need. No pains were spared by the Court of Directors to carry out these objects, and administer faithfully the very simple laws of the Society.

Mr. PENNINGTON, V.P., proposed the health of the President, whose presence in the chair that day proved once more his zeal for the Society, and whose reception proved the esteem of its members, and of the whole profession.

Dr. GEORGE BURROWS, for the College of Physicians, expressed the warm interest taken by the college in the dignity and welfare of the whole profession, and his own gratification at the prosperity of this Society, which was devoted to the most useful and laudable purposes.

Mr. PETTIGREW returned thanks for the College of Surgeons, and declared his very great regret that this duty devolved upon him, through the absence of more influential members of that body, by whom, he must say, this Institution was not supported as it deserved to be.

Mr. BEAN, of Camberwell, for the Society of Apothecaries, announced the usual annual donation of fifteen guineas from that body, which also granted small annuities to the destitute amongst the widows of its own members.

Mr. WARE, V.P., returned thanks for the Vice Presidents, and lamented, that although the number of members had somewhat increased within twenty years, yet so far from the Society making due progress, it was, in fact, retrograding in proportion to the number of medical men practising within its limits. It once included about one-third of all those so practising; it now contains but 345 members.

Mr. JOHN HUNTER, the acting treasurer, returned thanks for the trustees and his brother treasurers. He called atten-

tion to the very large sum annually granted for relief, compared with the small amount of annual subscriptions. This was due, partly, of course, to the judicious addition of all life subscriptions and compositions to the capital stock, thus increasing the permanent income; but, mainly, it was due to the donations of the more liberal and opulent members, who, with a few friends to the Society who were not members, brought or sent their contributions to these annual festivals. It was from these sources that the means of large bounty annually rose to their height, and like the waters of the Nile, poured a flood of benevolence around.

The Secretary, Mr. Walsh, said, that his experience had proved to him what he had been unwilling to believe himself or to suggest to others—namely, that it was right to tease his friends into joining the Society; but he had found, on the one hand, that of the persons who had been so solicited, some had left their families to be greatly benefited by the Society, and others had become its strenuous advocates and liberal benefactors.

Mr. Cooper, of Brentford, quoted a case in point. This Society deserved the support of the whole profession.

The musical department was well conducted by Mr. T. Cooke, assisted by the Misses Williams, Mr. Machin, &c. Several visitors were present: Dr. Conolly, Rev. C. Clarke, W. Hunter Baillie, Esq., J. Tidd Pratt, Esq.; and donations were received amounting to about £150. A good list of Stewards was made up for next year, including the President, and a letter was read, announcing the intention of his Royal Highness the Duke of Cambridge, the Patron, to take the chair.

Annuity Fund.—A meeting was held at Northampton, on Tuesday, June 1st, among the friends and promoters of the plan of an annuity fund, devised by Mr. Daniel, of Newport Pagnell, which was respectably, although not numerously, attended. Mr. Daniel being called to the chair, the Secretary read a report of proceedings during the past year, from which it appeared that Mr. Daniel had received from all parts of the kingdom assurances of sympathy and aid. Nearly two hundred guineas have been forwarded to him, and it only remained for the meeting to decide that the "Annuity Fund" should be established, when the number of members will at once become considerable. Acting on the advice of a distinguished actuary, Mr. Daniel explained that for every hundred members four annuities of £25 per annum could be safely granted upon his plan, and it might be confidently anticipated that other forms of assistance, such as a cottage, &c., may hereafter be superadded to the annuity. Dr. Jepthson has munificently promised a donation of £100, and his example, it may be confidently hoped, will be followed by other rich professional men. Resolutions were passed to the effect that the Annuity Fund be established, and means taken to obtain at least a thousand members. Local secretaries are to be appointed in every town or district, and the medical press requested to urge upon the profession the propriety of contributing to this fund by every motive suggested by benevolence or prudence.

France.—The King of the French has appointed Baron Pasquier, who succeeds his father, his chief surgeon; and the vacant post of surgeon-in-ordinary is conferred on Dr. A. Pasquier, a surgeon in the artillery.

Brussels.—A donation has been presented to the city of Brussels, on the condition that an hospital be erected for 100 old and incurable cases of blindness. The donation with the required conditions has been accepted.

Hôpital la Pitie.—It is expected that M. Berard will be appointed surgeon-in-chief to this institution, made vacant by the death of M. Lisfranc, who, it will be recollected, died on the 11th ultimo, of malignant remittent fever.

Effects of Ether on Horses.—Mr. Henderson, assisted by Mr. Cherry, has performed several further experiments with ether upon horses, of which we must content ourselves with giving the results. They conclude that the quantity of ether necessary to induce insensibility is very large; and that to produce its effects speedily and with as little waste as possible, the stream of the vapour should be continuous. In one experiment in which there was a fault in their apparatus, 12 ounces of ether were consumed before etherization was produced. They believe that the effects of the ether are accumulative; and they noticed a striking difference in the nature of the action induced in several cases; thus, in two of the animals the greatest degree of violence was manifested, in the other two not the least. Such differences they would regard as explicable by the different degrees of development of the intellectual portions of the brain; and that where great irritability exists there would be an excess of sympathetic influence. They have noticed what has been reported by several observers, the striking violet-purple colour of the blood, and its non-coagulability. Lastly, their conclusion from their researches is, "that as a means of tranquillizing an animal so that an operation may be performed without resistance, ether is not strictly admissible; it would in all probability so act on the general system, as to have an injurious effect on the subsequent well-doing of the animal." In their experiments the constitutional effects of the ether were marked by the increased rapidity of the pulse, which rose from 40 to 60 and 70 during the experiment, but sank to 43 after it, remaining full but soft for some time.

## CORRESPONDENTS.

Mr. Wakley is under the necessity of entreating the indulgence of a great number of correspondents who ought to have received letters from him by post; but his time has been so completely occupied of late with public duties, which have pressed severely on his attention, that it has been utterly out of his power to engage in private correspondence. He trusts that this statement will be a sufficient apology to many friends who might otherwise conceive that they had been neglected.

*A Physician* will see that we have not neglected the Society for Widows and Orphans of Medical Men. The report of the dinner was too late for last week. We wish the Society every success, and would not willingly omit any opportunity of advancing its interests. Every rich man in the profession should become a subscriber, as a duty to his profession; every poor man should subscribe, as a duty to those whom he may leave at his death unprovided for.

*Omega* calls our attention to the violent language in which Dr. Morton disclaims all participation, on the part of Dr. Jackson, to the application of ether, as highly prejudicial to science.

*Dr. Dick's* request shall be attended to.

*Ether.*—Dr. Collyer, of Spring-gardens, impressed upon our attention some time ago, that his namesake should take up his responsibilities as well as his claims.

*Mr. Craig's* paper is under consideration.

*Che Sara Sara* may depend upon our impartiality.

*Mr. Bostock, Mr. O'Shea, Mr. Clarke, Mr. Bishop,* and many others, who are outraged by the conduct of the National Institute, are informed that we have received a large amount of correspondence on the subject, unanimous for its opposition to the Institute and its support of the Bill, and that we shall endeavour to publish a summary of it in our next.

*Scalpel* puts the following queries:—

"1. Can a man attend lectures and serve an apprenticeship at the same time?

2. If it can be proved that a man has been admitted to the examination at Apothecaries' Hall, and has obtained his certificate without having served an apprenticeship to a legally-qualified apothecary, will such licence be null and void?

3. If it can be proved, likewise, that the Society of Apothecaries knew that such a person had not served five years to a duly qualified apothecary, but nevertheless admitted him to examination, in direct opposition to the Act of Parliament, are they subject to any punishment as the law now stands?

4. Can a man be said to be legally serving an apprenticeship in England to an apothecary, whilst in attendance on lectures in Edinburgh?"

To these questions we reply, that now the Society of Apothecaries have discovered a power of indictment against other parties for infringing the Act of 1815, they may chance to discover that they themselves are again and again liable to indictment for breaking it themselves. We have always opposed the apprenticeship clause; but the Apothecaries' Society insisted upon it, fought for it, and now they ought to be *bound* by their own apprenticeship regulations.

*Medicus* would be able to register as M.D. Edin., and to call himself physician. The memorial of the College of Physicians, which we published some months ago, prayed for a new charter, and power to include within the College all British graduates, without examination, upon payment of the College fees. The position of Medicus and other Scotch M.D.s must depend on whether the College obtains the desired charter or not.

*Dr. Bence Jones* shall receive a private note.

*Dr. John Gardner's* case shall be published in an early number.

*** We have received "Further facts on the claims of Mr. Horace Wells to the discovery of the power of ether to produce insensibility to pain, by Mr. E. Warren, Boston, U.S.," and shall, if possible, publish them, either entire or in abstract.

Communications have been received from—Dr. Bence Jones; Vigilans; Mastigia; Mr. Henry Dunn, (Wakefield;) Mr. Bishop, (Easington, Durham;) Mr. S. H. Wraith, (Darwen;) Mr. R. M. Mavell, (Newport, Isle of Wight;) Dr. Edward Florance; Mr. Thomas Stokes, (Nailsworth;) Dr. Learman, (Rotherham;) Mr. Gervis; Mr. A. Waller; Mr. M. K. O'Shea; Mr. William Harding; Mr. J. S. Bostock; A Medical Student; Mr. W. Henry Smith; Dr. R. Dundas Thompson; Dr. Conolly; Mr. John Chippendale; Dr. Henry Bennet; Scalpel; Dr. Goodfellow; An Outraged Member of the Institute; Mr. C. Clark; Mr. Butcher, (Dublin;) Mr. J. W. Smith, (Finsbury;) Omega; Medicus; Dr. R. H. Collyer, (St. Helen's, Jersey;) Mr. Craig, (Paisley.)

# Hooper's Inspissated Juice, or Soft Ext.

TARAXACUM.—The following statement is given by John Allan, Esq., Surgeon, Epsom, respecting a case in which he gave this Extract by the advice of Dr. Prout:—

"Hooper's Ext. Taraxacum, when mixed with water, displays the same *milky appearance* which it had in the state of *fresh juice*. In doses of thirty to forty grains, three times a day, it has been followed by a free secretion of bile from a liver which had long been in a very torpid and almost palsied state, and had not been moved by mercurials to the extent of ten and fifteen grains, three times a day, and other means, *including Taraxacum procured elsewhere.*"

FLUID EXT. TARAXACUM.—This preparation does not become impaired by age or climate, and is, in consequence, admirably adapted for a warm climate, or when a supply for a lengthened time is required. Dose, a dessert-spoonful.

SUCCUS TARAXACI PRÆP.—The expressed juice of Taraxacum, concentrated from the tops when in flower,—a very efficient preparation. Dose, two teaspoonfuls.

LIQUOR TARAXACI.—Dose, a dessert-spoonful.

ESSENT. SARZÆ CO.—Prepared in a similar manner to the Ext. Taraxacum. A dessert-spoonful is equal to half a pint of the Decoction.

LIQUOR TARAXACI ET SARZÆ.—A valuable combination, containing the active properties of Taraxacum and Sarsaparilla, suitable for home or Continental use. Dose, a dessert-spoonful.

Mr. HOOPER begs to thank the profession for the communications they have kindly favoured him with respecting these preparations, to which, since 1840, the year he constructed his apparatus for spontaneous evaporation, he has closely applied himself. The following letter is published with much pleasure:

"Peelwalls, Ayton, May.

"SIR,—I was advised by Dr. Prout, in February last, to use your 'Extract of Taraxacum,' and I am happy to inform you that its effect has been highly satisfactory. I had previously taken 'Taraxacum' from other parties, for some time, which greatly nauseated my stomach, without my receiving any benefit; your Extract, on the contrary, has had quite a different effect, for it has evidently improved the tone of the stomach, and has decidedly strengthened its powers of digestion. It appears to act favourably on the liver, and has almost rendered it unnecessary for me to employ aperient medicines; for ever since I took it, my bowels have been in a natural state, and entirely free from costiveness, with which I was formerly much annoyed. On the whole, I think I never used a medicine that I found so beneficial. Your most obedient servant, "JOHN DICKSON."

ESTABLISHMENT, 7, Pall Mall East.—LABORATORY, Great Scotland-yard.

*** Manufacturer of the DANDELION or TARAXACUM COFFEE and COCOA, as recommended and used by Drs. PROUT, JEPHSON, and others.

Mr. HOOPER has made some improvements in the Ether Inhaler, which he would be happy to show to any one that would favour him with a call.

ROYAL GERMAN SPA, QUEEN'S PARK, BRIGHTON.
UNDER HER MAJESTY'S ESPECIAL PATRONAGE.

# Struve's Pump-room and Promenade,

offering every facility for taking a course of Mineral Waters in precisely the same perfection and with the same benefit, as at the natural Springs, ARE NOW OPEN for the TWENTY-SECOND SEASON, and will close in November.

Struve's Waters are also sold in bottles; and orders are executed throughout the year by Struve and Co., Brighton; and by their Agents, George Waugh and Co., Chemists to the Queen, 177, Regent Street, London; and numerous other respectable houses in London and other towns, where a succinct account of the waters, and of their application, including the highest medical testimony, may be obtained gratis.

To the waters of Vichy, Salzbrunnen, Saratoga, Homburg, Kreuznach, Kissingen, Marienbad, Eger, Spa, Pyrmont, Pullna, Seltzer, Fachingen, &c., sold in glass bottles, are now added, in stone bottles, those of Carlsbad and Ems, with directions respecting their temperature.

STRUVE and Co. feel it necessary to caution the public against spurious articles.

# Drug Price Currents forwarded free of

Postage, on application, by Messrs. HEWLETT and GODDARD, Wholesale Druggists, 6, Arthur-street West, Upper Thames-street, near London Bridge, Removed from Hatton-garden; containing the Ready Cash Prices for Drugs and Pharmaceutical Preparations of the purest quality. Messrs. H. and G. solicit the attention of the Medical Profession resident in the Provinces, Infirmary Committees, Dispensaries, &c., &c., to the advantages attendant upon the above Price Current.

# Bass's East India Pale Ale.—Dr. Prout,

who has analyzed this ALE, in his work on Diseases of the Stomach &c., after condemning common ales, especially recommends this to weakly persons; and Dr. Marshall Hall, in his paper on Consumption, published in THE LANCET of the 20th of April, 1844, speaks of Bass's Pale Ale as the only stimulant admissible in the diet of persons threatened with symptoms of the incipient state of that disease. In excellent condition, in casks and bottles, at their agents, H. and G. BERRY and Co., 3, St. James's-street.

# Important.—To the Medical Profes-

sion.—HUXLEY'S CAOUTCHOUC ELASTIC STOCKINGS, KNEE-CAPS, ANKLETS, &c. &c., for Varicose Veins, Weakness, Fractures, Sprains, &c., have already secured the patronage of the most eminent Practitioners in London. HUXLEY and Co. earnestly solicit the favour of the Profession generally, applying to them for particulars, which are sent post free to any part of the kingdom. The superiority of this Stocking over every other for suppression of Varicose, &c., will be at once admitted on inspection. The opinion of the press is, that we have effected a final improvement in Surgical Stockings. They are drawn on, avoiding the annoyance of lacing, collapsing with a pressure equal and permanent in every part; their washing, durability, and cost, in addition to their decided efficacy, will ensure the immediate and continued patronage of the medical profession.—HUXLEY & Co., Surgical Caoutchouc Stocking Manufacturers, 5, Vere-street, Cavendish-square.

# Number One, Saint Paul's Churchyard.

—It is a well known fact, that the original cost of the finest CONGOU TEA is over thirty-nine taels, or 2s. 2d. per lb., which, with duty added, makes the cost to the merchant in this country, 4s. 4½d. per lb. for the finest Congou tea. We have, ever since we began selling teas at "Number One," sold this description at 4s. 6d. per lb. Hundreds and thousands of people have tried it, and can vouch for its strength and richness of flavour. Nobody ever finds fault with it, and it pleases everybody because it is both good and cheap.—DAKIN and Company, tea-merchants, Number One, St. Paul's-churchyard.

# The National Institute of Medicine,

Surgery, and Midwifery.

The attention of the Profession is hereby called to the following particulars relating to the "MEDICAL REGISTRATION BILL" now before the House of Commons:—

First,—By Clause 4, any person, who, *subsequently to the passing of the Bill*, shall obtain a Diploma, Certificate, or License, granted by any English, Irish, or Scotch University, College, or Society, or any Corporation legally entitled to grant the same, will be entitled to register. And by Clause 10, every individual having registered, will be entitled to practise all the branches of the profession.

Thus, supposing that this Bill became law, a Certificate from any College of Surgeons entitled to grant Certificates, however limited the education, or inadequate the examination, would entitle the holder thereof to practise in every branch of the profession, including Medicine and Midwifery; and a Certificate from any Apothecaries' Society, although the holder thereof shall have received no surgical education, and shall not have undergone any examination in surgery, will, nevertheless, entitle him to practise surgery, as well as medicine and midwifery.

Secondly.—The Bill does *not* provide for uniformity of education. It declares, by Clause 23, that "it is expedient and desirable that the qualifications" for testimonials should be uniform, "*according to the nature thereof*," throughout Great Britain and Ireland. The words in italics show, unequivocally, that, for the *future*, one standard of qualification will be required for Apothecaries,—another for Surgeons,—another for Physicians, although by the Registrar's Certificate all will be placed on an equality, and be alike entitled to practise every branch of the profession; and it is particularly to be observed, that the Bill will thus confirm the recent policy of the College of Surgeons in making a high standard of qualification for the *Fellowship*, attainable by a few individuals only, and a low standard for the *Membership*, the future, with the present Members of the College, constituting the great body of General Practitioners.

Thirdly.—The National Association of General Practitioners in Medicine, Surgery, and Midwifery, and the National Institute, by resolutions at public meetings, and by all their published documents, have at all times declared the expediency of legalizing, and placing upon an equality in one institution, *all qualified* members of the profession now in general practice. The sole, avowed, universally acknowledged, and approved object of this has been to secure the public interests, by obtaining for the General Practitioners, *in future*, a complete Medical and Surgical Education, and by preventing any individual practising the profession, *after* the passing of a measure of Medical Reform, except such who are thus by education fully qualified so to do.

Fourthly.—The 27th Clause of the Bill provides as follows:—

"That nothing in this Act contained, shall extend, or be construed to extend, to prejudice, or in any way to affect, the trade or business of a Chemist and Druggist, in the buying, preparing, compounding, *dispensing*, and vending drugs, medicines, and medicinal compounds, wholesale or retail; but all persons using or exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall, and may use, exercise, and carry on the same trade or business *in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used, exercised, or carried on by Chemists and Druggists before the passing of this Act.*"

Thus, should the "Registration Bill" become law, every Chemist and Druggist would be exempt from the operation of this law, and from any penalty whatever, provided he can show that he carries on his business, not as the business of a Chemist and Druggist was carried on before the passing of the Act of 1815, but as it is conducted at the present day. The members of our profession can form their own opinion as respects the Chemists and Druggists, whether they do or do not practise, both at the counter, and by visiting patients at their own houses.

The Council of the Institute trust that this commentary will for the present sufficiently explain the objections to the Bill, and render unnecessary any further public remarks until the Special Committee of the House of Commons have made their Report.

By order of the Council,
4, Hanover-square, May 27th, 1847. GEORGE ROSS, Secretary.

GREEN-GINGER WINE.

# Stivens' Original Green-Ginger Wine

has now obtained for itself a character for genuineness, superior to all other British Wines whatsoever, and is in daily increasing demand.

Observe the name, "JOHN STIVENS and Co." over the neck of each bottle.—May be had, wholesale, at the Manufactory, Bristol; Barge-yard, Bucklersbury, London; Duke-street and Henry-street, Liverpool; or, of respectable Shopkeepers in town and country.

# The Atrapilatory, or Liquid Hair Dye;

the only dye that really answers for all colours, and does not require re-doing, but as the hair grows, as it never fades or acquires that unnatural red or purple tint common to all other dyes.—BOTANIC WATER and BEAR'S GREASE. When the hair is becoming thin and falling off, the only effectual remedy, besides shaving the head, is the use of the two above-named articles, applied alternately—the Botanic Water to cleanse the roots from scurf, and as a stimulant, and the Bear's Grease as a nourisher.—THE NEW TOOTH-PICK BRUSH, thoroughly cleansing between the teeth, when used up and down, and polishing the surface when used cross-ways. The hair warranted never to come out.—The UNION and TRIPLE HAIR BRUSHES.—The DOUBLE ANTI-PRESSURE NAIL BRUSH.—The MEDIUM SHAVING BRUSH.—The RAILWAY STROP and POWDER.

The above new and elegant articles, in addition to a very extensive assortment of beautiful PERFUMES, are the sole MANUFACTURES and INVENTIONS of MESSRS. ROSS AND SONS, 119 and 120, Bishopsgate-street, London.

# PROCEEDINGS

OF THE

# CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.

*(Abridged from a Report in the "Morning Herald" of January 8th, 1847.)*

## An Extraordinary General Meeting of the Proprietors & the Assured of this Society

Was held yesterday, at the office in Great Russell-street, for the purpose of declaring a BONUS out of the Profits which have accrued from the general business of the Society during the five years ending June 30th, 1846. Amongst the Directors present were Dr. Moore, G. G. Babington, Esq., Rev. A. B. Clough, Thomas Davis, Esq., Oliver Hargreave, Esq., and Clement Hue, M.D.

Dr. MOORE having taken the Chair, Mr. PINCKARD, the Secretary, read the Report of the assets and liabilities; the former of which amount to 639,797*l.* 6*s.* 5*d.*, and the latter to 484,555*l.* 0*s.* 5*d.*, leaving a surplus of 155,242*l.* 6*s.*

The CHAIRMAN then stated that his colleagues had authorized him to lay before the Meeting the following Report:—

"In accordance with the Provisions of the Deed of Constitution, the Directors have called the present Meeting, for the purpose of laying before the Proprietors and the Assured the result of an Investigation of the Society's Affairs for the five years ending June 30th, 1846.

"On that day the Society had been in existence twenty-two years. An investigation of its affairs was made first in 1831, being seven years from the commencement; a second time in 1836; and a third time in 1841. The fourth investigation having been just completed, the Directors have now the gratification of communicating the result to the Meeting.

"In order to present a clear view of the progress of the Society, the Directors will proceed to exhibit the present amount of its Funds, together with their state at the last Quinquennial Division:—

"I. The Society's Income for the year ending with June, 1841, was 97,900*l.*; that for the year ending with June, 1846, 116,300*l.* Thus, notwithstanding the many deductions which are constantly taking place, on account of Policies terminated by death, or discontinued from other causes, there is an increase in the Annual Income of the Society to the extent of 18,400*l.*

"II. The amount of the Property of the Society, accumulated from the excess of receipts above payments, was, in 1841, 418,903*l.*, and in 1846 has reached 639,797*l.* Under the head of Payments are included considerable sums paid for the Purchase of Policies, and also to Annuitants, besides the amount which has become due from deaths and every other demand.

"III. After deducting the sum required to meet the liabilities of the Society, there remains a surplus of 155,242*l.*; while in 1841 the corresponding surplus was only 89,400*l.*

"This sum of 155,242*l.* has now to be dealt with, being the amount of Profit realized by the Society.

"In conformity with the Provisions of the Deed, one-half of the Profits is to be divided among the Assured for Life, and one-sixth part among the Proprietors; but in order to avoid inconvenient fractions, the Directors have resolved to recommend to this Meeting to divide the sum of 154,500*l.* This will apportion to the Assured for Life 77,250*l.*, and to the Proprietors 25,750*l.*, leaving one-third of the said Profit, amounting to 51,500*l.*, to be laid by and to accumulate as a reserved Fund.

"This Division will give to the Proprietors a Bonus of 5*l.* 3*s.* per share, and to the Assured a sum of 114,031*l.*, being the equivalent in reversion to the above amount of 77,250*l.*

"This sum of 114,031*l.* will be added to the Policies, and be payable at the death of the respective parties, and will form an addition equal, on an average, to more than 36 per cent. on the Premiums received during the last five years.

"It may be desirable, however, to remind the Assured that they have the option of having any one or more of the Bonuses to which they are entitled applied in reduction of their future payments of Premium.

"For the further information of the Proprietors, it may be mentioned that, by the Deed of Constitution, the Proprietors' Fund is not to accumulate by the addition of Bonuses beyond 50,000*l.*; all subsequent Bonuses being paid over to the Proprietors.

"The effect of that provision on the present occasion will be, that of the above sum of 25,750*l.*, 17,000*l.* will have to be added to the Proprietors' Fund, which will then have reached its limit, and the remaining 8750*l.*, being 1*l.* 15*s.* per share, will be paid to the Proprietors in cash at the end of March next.

"In estimating the amount of liabilities, it is important to observe that every Policy, together with all other risks, has been valued separately and with great care; that there has been no encroachment upon future profits; but that a mode of valuation has been adopted whereby a larger sum is retained to meet such claims as may arise than is usual with most other Offices. This will appear by the following examples:—

| Sums set aside as the value of a Policy for 1000*l.* | By Offices valuing by the Northampton Three per Cent. Table. | By the Mode adopted by this Office. | Difference in favour of this Office. |
|---|---|---|---|
| | £. s. d. | £. s. d. | £. s. d. |
| Effected at the age of 40, after 10 years . . . . | 152 3 7 | 158 8 5 | 6 4 10 |
| Effected at the age of 50, after 10 years . . . . | 197 17 3 | 215 2 0 | 17 4 9 |
| Effected at the age of 60, after 10 years . . . . | 282 7 5 | 326 3 0 | 43 15 7 |

"It is clear, then, that the prospects of the Policy Holders at future Divisions are most favourable, partly from the unusually large sum retained to meet claims, as shown above, and partly from the reserve of so considerable an amount as 51,500*l.*, out of Profits thus ascertained.

"These facts, which have operated to a certain extent in the diminution of former Bonuses, will undoubtedly contribute most powerfully *to increase* the amount of profits to be appropriated *to the Assured at all succeeding Divisions.*

"In confirmation of this view, the Directors need only remind the Assured of the statement made at the Division in January, 1842, that the two preceding Bonuses had averaged 22 per cent. on the Premiums; that the one then divided averaged 28 per cent.; and that the *future Bonuses were expected* to exceed that amount.

"The most sanguine expectations entertained at that time have been fully realized by the amount of the present Bonus averaging more than 36 per cent.; and on precisely the same grounds, the Directors conceive themselves entitled to assert, with additional confidence, that its farther increase from time to time is almost certain.

"The large and increasing amount of the Society's business, and the proportionate diminution of the expense of management, (which is now only 3½ per cent. on the income,) must also be taken into account in the anticipation of future Profits.

"The Directors have only to add, that they have instructed the Actuary to exhibit to any Proprietor or Policy Holder, or to any person *who may be desirous of Assuring*, the details of all the calculations, with a full statement of the assets and *liabilities and balance-sheets* of the Society."

So far as he (the Chairman) was concerned, any comment was unnecessary, for he believed the Report would speak satisfactorily both to the Proprietors and the Assured, (applause.) He would, however, just call the attention of the Meeting to a very distinguishing feature of the Institution, the economy of its management; which was not only well known to the proprietary, but to the public, (applause.) The Directors would be happy to answer any questions which might be put to them, or to attend to any suggestions which might be offered for the advantage of the Institution, (applause.)

Mr. FOWLER, after expressing his satisfaction at the explicitness and contents of the Report, said he would trouble the meeting with one or two observations. The sum of 155,242*l.*, which was announced to be the surplus arising from the profits, consisted, he conceived, partly of the reserve made upon a former occasion. If the Secretary could state how much of the amount referred to was composed of the reserve from the former bonus, the Meeting would be able to see more clearly the profit realized within the last five years.

# A Course of Lectures
ON
# THE PHYSICAL PHENOMENA
OF
# LIVING BODIES.

## DELIVERED IN THE UNIVERSITY OF PISA.

BY PROFESSOR MATTEUCCI, F.R.S.

(*Translated, for* THE LANCET, *by* S. J. GOODFELLOW, M.D. Lond., *late Physician to the Cumberland Infirmary.*)

## LECTURE II.

*Molecular Attraction.—Capillary Attraction.—Imbibition.*

EVERY one knows that a living body can only continue to exist, by introducing new substances into its system. These substances, for the most part solid, are transformed and reduced to a liquid state, by means of certain functions of the organism; under this form, they penetrate into particular cavities, from which, after undergoing other transformations, they are afterwards expelled. We have seen, in the first lecture, that the porosity of the tissues of living bodies allows them to be imbued and penetrated by the liquids with which they are in contact. We could not, then, give a satisfactory account of the phenomena of absorption and exhalation, without regarding the influence of capillary attraction, imbibition, and endosmose—phenomena which we already know to be exercised by inorganic bodies.

The importance of studying these two functions is so great, that I intend to devote the whole of this lecture to the examination of the purely physical phenomena of capillary attraction and imbibition, in order to make you able to judge what part they play in the functions of absorption and exhalation.

To confine myself to a simple announcement of facts, I will introduce here, under the form of propositions, the principal conclusions from the observation of capillary phenomena.

1st.—When a body is plunged into a liquid, the latter is either depressed or elevated, and, according to the one or the other, it presents, at the point of contact with the solid, a convex or a concave surface. In the first case, the body is said to be wet, as when glass is immersed in water; and in the second, it is not so, as when glass is placed in mercury.

2nd.—When two bodies are placed in a liquid, the latter is either raised or depressed between them, according as they have been moistened or not by the liquid, and it is necessary, for this, that the bodies should be so near to each other, as that the two curved surfaces formed by the liquid should touch. The elevation or depression of the liquid, above or below its level, is in an inverse ratio to the distance between the two bodies.

3rd.—If a glass tube, open at both ends, be plunged into a liquid, the latter rises or falls, and this effect is the more considerable, the smaller the diameter of the tube. If the elevation or depression which takes place in a cylindrical tube be compared with that between two slips of glass which are placed at a distance from each other, equal to the diameter of the tube, it will be seen that the elevation or depression in the tube is twice as great as that between the glasses. The liquid rises and adheres to the glass, or wets it; on the contrary, it is depressed in the tube, if the liquid is not capable of wetting it. In a tube of one millimetre* in diameter, water rises thirty millimetres, mercury is depressed thirteen millimetres.

It will readily be admitted, that capillary action must exercise great influence upon the functions of animal and vegetable tissues, if we reflect that the vacuities, the interstices, and capillary tubes of these tissues, are from $\frac{1}{100}$ to $\frac{1}{2000}$ of a millimetre in diameter.

4th.—The concave surface of the raised liquid, and the convexity of that which has been depressed, belong to an hemisphere, the diameter of which will be equal to that of the tube.

5th.—A drop of water introduced into a conical tube of glass, plainly resorts to its narrowest portion; a drop of mercury, on the contrary, is carried to its largest part.

6th.—The phenomena which have engaged our attention are entirely independent of the volume of the solid body which is plunged into the liquid, consequently the thickness of the walls of the capillary tube exercises no influence upon their action.

7th.—These phenomena take place freely also in air at ordinary pressure or when condensed or rarefied, *in vacuo*, and in any gas that we may select.

8th.—All bodies, of whatever nature, if they are capable of being moistened, furnish the same results.

9th.—For with the same liquid, and in the same tube, the elevation or depression of the column diminishes according to the temperature of the liquid.

10th.—The elevations and depressions are independent of the density of the liquid. Thus, if we represent by 100 the elevation of water in a tube, that of alcohol will be 40, that of the essence of lavender, 37, and that of a saturated solution of sea salt, 88.

11th.—Two bodies floating upon a liquid within a certain distance, are attracted towards each other, and unite, provided that both are capable of being moistened, or that both are not so. They appear to be repelled if only one be moistened. It is according to this principle that we explain the tendency of light bodies, which float on water, to be attracted towards the walls of the vessels which contain them.

12th.—Whatever be the height to which a liquid is raised, it never escapes at the upper aperture of the capillary tube. This is a necessary consequence of the result, which we have already stated. In fact, it will be sufficient to reflect that the surface of the liquid column in the tube is always concave, and this is why, if we add sufficient water in one of the arms of a capillary tube bent upon itself to make the surface of the column at first horizontal, and then convex, we find the surface of the liquid column in the other arm remaining always concave, and at a level more elevated than the first. Whenever the surface becomes *convex*, the force of capillary *depression* is exerted. You must not believe that the water which flows from a wick of cotton, saturated with this liquid, one end of which is held downwards, is occasioned by capillarity, because it is only necessary to suspend it horizontally, and the escape ceases.

I cannot enlarge upon these phenomena so as to give the theory, which falls entirely within the sphere of the highest mathematical analysis. The results of the observations which I have already cited are sufficient to prove that these phenomena depend upon that force which we term molecular attraction, or the force which is exerted among molecules, and ceases to act as soon as they are separated by the smallest distances.

To avoid all false application of capillary phenomena to the animal economy, we must not forget that a space completely filled with liquid is incapable of exerting any capillary action; that the action of a tube upon liquid is owing, less to the material of which the tube is composed than to the nature of the liquid with which its internal surface is moistened; and lastly, that it is never by the agency of capillary action that liquids escape at the superior opening of the tubes in which they are raised.

The phenomena of imbibition, of hygroscopicity, &c., are generally of the same nature as the preceding, and they depend upon the same force. A piece of sugar, a cotton wick, a tube of sand, cinders, or saw-dust, placed in contact with water, or with any other liquid which wets them, quickly draws the liquid through all their mass—that is to say, becomes saturated with them. This is also the case with certain tissues, cartilages, and tendons, which, if dried, and then plunged into water, regain, in a short time, all the properties which they possessed during life. This effect is produced by the water which they absorb. The same thing happens in the remarkable instance of the rotiferous animalcule, which is restored to life and motion when placed in contact with a drop of water. These phenomena of imbibition are also observed in the filtration of liquids. When a liquid holds in suspension some solid particles, we see them separate from it, and rest upon the filter, while the liquid soaks into its substance. When a drop of chocolate, or ink, falls upon cloth or filtering paper, it produces a dark spot, surrounded by a zone less deeply coloured. The same effect is observed when the blood is diffused in the cellular tissue under the skin; the serum is carried to the margin of the stain, and separated from the colouring matter.

Among the phenomena of imbibition, we must first consider the force of adhesion between the liquid and the surfaces of the solid particles, afterwards the action of capillarity, properly so called, seeing that in sugar, or a mass of sand or

* A millimetre is one-twenty-sixth of an English inch.

ashes, and in organized tissues, there certainly exist extremely minute cavities, which ramify in their interior more or less tortuously.

The phenomena of imbibition merit a more attentive study than they have hitherto received. I will give you the results of some experiments which I have made upon this subject with Professor Cima. I should have wished to do it at greater length. Some glass tubes, about two centimetres (about four-fifths of an English inch) in diameter, were filled with white sand, which had been passed through a very fine sieve. The extremity, which was plunged in water, was closed by a piece of cloth tied round the tube. The precaution was first taken of drying the sand by means of a water-bath, and then introducing it by the upper part of the tube, taking care not to shake it when full, in order that the mass of sand should not be unequally compressed. Six tubes thus prepared were plunged at the same time into six different liquids, of the temperature of 12° centigrade, (73° Fahr.) The action of imbibition continued to raise the liquids in the tubes for ten hours; it was rapid at first, but always proceeded more slowly, according as it approached the limits at which it ceased. Each tube was plunged about half a centimetre (quarter of an English inch) in the liquid, and care was taken to replace the fluid occasionally, so as to preserve a uniform depth in each vessel.

Subjoined is a table, showing the highest elevation attained by the different fluids. All the saline solutions were of the same density—10° of the aërometer of Baumé.

| | Millimetres. |
|---|---|
| Solution of carbonate of soda | 85 |
| Solution of sulphate of copper | 75 |
| Serum | 70 |
| Solution of carbonate of ammonia | 62 |
| Distilled water | 60 |
| Solution of marine salt | 58 |
| White of egg, mixed with an equal quantity of water | 35 |
| Milk | 55 |

This table shows how imbibition takes place in different degrees in various liquids. In thick solutions of gum, in boiled starch, or in oil, there is scarcely any imbibition. It is also very small in concentrated saline solutions, and in all those liquids which hold in suspension very minute solid particles. In the last case, imbibition produced a kind of filtration. This phenomenon of imbibition in solutions which contain very small solid molecules, suspended in the liquids, may be of great value for the purpose of appreciating the different properties of blood according to its density. In certain maladies, its density and viscidity are much diminished; and in these cases, serous infiltrations take place, such as are observed by the same causes from great losses of blood.

We shall presently find that alcohol, ether, water, and aqueous solutions, introduced into the stomach of living animals, disappear, but after different intervals of time; oil remains there a very long period.

It will, perhaps, be of some importance to compare alcohol at 36° Baumé, and distilled water, by means of tubes filled with sand, pounded glass, and sawdust. Witness the elevations that I have obtained:—

| Tube with sand. | Tube of pounded glass. | Tube filled with sawdust. |
|---|---|---|
| Alcohol, 85mm. | 175mm. | 125mm. |
| Water, 175mm. | 182mm. | 60mm. |

In examining these results, it is very evident that the alcohol is raised less than the water in the sand and in the powdered glass. This agrees with what took place in the capillary tubes.

I also plunged into water two tubes, the first of which contained double as much pounded glass as the second, with the following results:—

In the first tube, the water was raised 170mm.; in the second, 107mm. It is not easy to give an explanation of the relative heights in the two tubes; and yet it is natural that the water should rise higher in the tube which contained the double quantity, if we reflect upon the greater extent of solid surface for attracting the water, and to the much smaller diameter of the capillary cavities.

This phenomenon of imbibition is constantly witnessed, and under a great number of circumstances, in animal and vegetable tissues. These, being abundantly furnished with minute spaces and capillary tubes, very readily imbibe and absorb the solutions with which they are in contact. This is what takes place in the cellular tissue, and in the parenchyma of the lungs: the opposite effect is observed in the epidermis.

I have also made it a subject of investigation, whether any difference in the phenomena of imbibition is produced by temperature. Two tubes prepared with sand were equally plunged in water: the temperature of one was 55° cent., of the other, 15° cent. The results obtained were as follows:—

| | Elevation after 70 seconds. | Elevation after 11 minutes. |
|---|---|---|
| Tube at 55° cent. | 10mm. | 175mm. |
| Tube at 15° cent. | 6mm. | 12mm. |

The influence of temperature upon the degree of imbibition is, it will be seen, very considerable. It is also known, that in animals, absorption, either by the skin, or in the internal structures, is more active in proportion to the heat of the solution.

I am convinced that imbibition goes on with equal intensity when the surrounding air is saturated with moisture, and when it is dry. Another result, no less remarkable, is observed, that the imbibition of sand, ashes, and sawdust, goes on as well under the exhausted receiver of an air-pump as in the open air. No difference was perceived in the height of a column of water at the end of ten minutes; the only peculiarity observed was, that imbibition proceeded more rapidly *in vacuo* than in air in the first few seconds.

It may be asked, whether by the action of imbibition a liquid may rise to any height. It would appear, at first sight, that a column of sand, ashes, or any other powder, plunged at one end into a liquid, the level of which was always maintained, would carry the liquid to any height by the force of imbibition, till the whole column were saturated. In fact, if we consider separately the action of each of the layers which form the column, we may conceive that after the imbibition of the first layer in contact with the liquid, the particles of the layer immediately above it will take from the first part of its water, and that the first will again take from the fluid mass as much as it has lost. By repeating this reasoning for all the successive layers of the column, we may conclude that each of them takes the same quantity of fluid as if it acted alone; and thus, if we suppose the level of the water constant, the column, however long it be, ought to be entirely saturated. But experience does not confirm this reasoning: the fluid rises rapidly at first—then the motion slackens—and after gaining a certain elevation, it stops. This effect cannot be attributed to the evaporation which takes place in the higher layers of the column; for water rises in a column of sand to exactly the same height in an atmosphere saturated with aqueous vapour as in dry air. I am not able to account for this limit of imbibition, except by admitting the existence of little canals reaching along the whole length of the column of powder; and, in consequence, capillary action will intervene, as well as the adhesion of the liquid to the surface of the grain of sand.*

It is impossible not to perceive that imbibition plays a great part in the movement of the juices of plants, and in the phenomena of the capillary circulation of the blood of animals. In another lecture, we shall see that living plants and animals having some one part plunged into a saline solution, the presence of which is easily recognised by means of re-agents, are quickly penetrated by it throughout. It will be sufficient for me to mention the experiments of Hales, and those more recently made by Boucherie; the latter has seen a poplar, ninety-two feet high, absorb by the trunk, in six days, the enormous quantity of sixty-six imperial gallons of a solution of pyro-lignite of iron.

I will here relate the experiments made by Hales, to measure what he calls the force of aspiration of powdered bodies, and stems of trees—phenomena in which imbibition plays an important part. This experimenter furnished himself with a large tube of glass, closed at the upper end, and filled with ashes or with minium, reduced to a fine powder. A cork was fitted in the open end, in the middle of which a narrow tube of glass was fixed, three or four feet in length. This second tube was filled with water, and quickly inverted over mercury. The mercury soon rose, and gained an elevation of several inches. In one experiment, Hales saw it rise seven inches, which is equal to a column of water of eight feet.

If the tube, full of ashes, is replaced by the stems of a tree, or, better still, if the branch of a tree is tied to a glass tube, filled with water, and inverted over mercury, the latter will rise, as in the preceding experiments with the powders. Hales regarded this phenemenon as depending upon a force which he called the force of aspiration.

* Might not the force of gravity of the imbibed fluid counterbalance, in this case, that of imbibition?—Translator.

Here are some experiments which explain these facts in a simple and satisfactory manner. It is easy to show that the ascent of the mercury equally takes place in two tubes prepared like those of Hales, but yet differing from them, in having one tube filled with ashes, open at the top, and the other closed. And yet it must be observed, that this result will not be obtained if the column of ashes be short, or if this were less filled. I have also made the following observations with a similar apparatus to that observed by Hales. I fluted a tube of lead with clay, to that of glass containing the powder; by means of this I could easily extract the air which was above the ashes. At the moment when the column of mercury began to rise, I made a vacuum, and not only did the mercury not go down, but it even continued to rise. It is, then, indubitable, that the ashes form a partition above the column of water, which exactly performs the office of the closed tube. In fact, Hale's apparatus is a barometer. In another experiment, at the moment when the mercury rose, I covered the whole with the receiver, and made a vacuum; at that instant the mercury fell again entirely. I have witnessed the same phenomena, by substituting, for the tube filled with ashes, a stem of a tree, having leaves attached to it. If I introduce the superior part of this stem into a ball from which I have withdrawn the air, the mercury continues to rise; but, on the contrary, it immediately falls again if I form a vacuum on the vessel containing the mercury. We must conclude from this, that that which Hales called the force of aspiration, is merely the action of a barometer; that whether the column of ashes, or the leaves and trunk of a tree, form the upper closed part of a barometer, the water penetrates the ashes or the vegetable tissue, by imbibition, and the atmospheric pressure gradually forces up the liquid.

We must, however, remark a very curious fact which takes place when we use the branch of the tree, as in all the other experiments of Hales, that the column of water continues to ascend, which would lead to the conclusion, that the vapour of water is exhaled by the leaves without these ceasing to act as the closed tube of a barometer. It would appear that Magnus obtained the same result in closing by a membrane the upper part of the tube; and as already stated, the water continued to ascend; but it is probable that the phenomenon becomes, after a little time, less manifest, and ultimately ceases, in consequence of the disorganization which takes place as well in the membranes as in the leaves.

I will not leave this subject without relating some experiments made for the purpose of producing, by the simple play of the capillary forces, and of molecular attraction, the effects of chemical affinity. If we reflect, that a liquid, of whatever kind it be, is constantly raised to the same height in a capillary tube; that during the imbibition there is more or less evolution of heat, as the experiments of Pouillet prove; and what is more, that there is, according to Becquerel, a disengagement of electricity; and lastly, that capillary attraction is only exerted at very limited distances, and between the molecules of bodies,—we must admit that this force combines the principal characters of chemical affinity. We know the beautiful remark of Dobeirheiner, that when a mixture of water and alcohol is enclosed in a vessel, and exposed to the air, the water alone escapes. In this case the water is imbibed by the membrane more readily than the alcohol, and is dissipated by evaporation. Another fact, more conclusive, is that mentioned by Bergelius, that salt water, in its transit through a long tube of sand, flows away, more or less completely deprived of its salt. I have confirmed this experiment by means of a tube filled with sand, of about eight metres (twenty-six feet) in length, and I found that the density of the water, introduced at the superior orifice of the tube, was to that of the liquid flowing from it as 1 : 0.91; but I should add, that this difference of density is not constantly in this proportion, for after a certain time the saline solution is as dense at its exit from the tube as it was when introduced; which proves that the decomposition of the solution takes place during the first action of contact between it and the particles of sand. I obtained an opposite result by employing a solution of carbonate of soda, which I passed through a similar tube of three metres (ten feet) in length. The density of the liquid, after having traversed the layers of sand, was to that before its transit as 1,005 : 1.

These phenomena are very important, from their extensive application to some of the functions of living bodies, which cannot be entirely explained by the influence of capillarity and molecular attraction.

# Hospital Reports.

## ST. BARTHOLOMEW'S HOSPITAL.

MEDICAL REPORTS FROM THIS HOSPITAL.

By E. L. ORMEROD, M.B. Cambridge,
MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS; DEMONSTRATOR OF MORBID ANATOMY AT ST. BARTHOLOMEW'S HOSPITAL.

It is proposed, in the few following papers, to illustrate the various affections of the respiratory organs, which most commonly present themselves in the wards of St. Bartholomew's Hospital.

Croup is, beyond all others, the disease of the respiratory organs that is most rarely met with in this hospital, so rare, that none but doubtful cases could be brought forwards in illustration of it. Acute laryngitis is more common; as the result of accident among children, it is not uncommon in the surgical wards; and an instance of it, in the idiopathic form, in an adult, was supplied in Case 56 of these reports. The following case affords another example of the same disease:—

### ACUTE LARYNGITIS; TRACHEOTOMY; SUCCESSFUL TERMINATION OF THE CASE.

Case 57.—Eliza W——, aged twenty-one; admitted March 31st, 1847; Hope back ward. Thin, slightly made; face anxious, livid; skin cool; pulse 120, small, soft; bowels confined; tongue moist; sits up in bed, breathing with difficulty, (48,) with a loud hissing noise, scarcely able to speak, the supra-clavicular spaces forming deep hollows, on inspiration, and any attempt to swallow producing the most agonizing dyspnœa. This has been the case for two days.

*History.*—Married; delicate; the catamenia regular; had a similar attack six years ago, which was successfully treated by leeches. She is liable to cough, but has never had hæmoptysis. Ten days ago, she had an ordinary cold, with hoarseness, and having been shortly afterwards much alarmed by one of her acquaintance having been murdered, she attributes the present symptoms to that fright. Her symptoms have been gradually getting worse; for five days they have been very severe, but for the last two they have been extreme, and she has had no sleep.

On *Auscultation*, good but feeble respiratory murmur is audible beneath the clavicles, with good resonance on percussion; behind, respiration is feeble and sibilant, with here, also, good resonance on percussion; the fauces appear quite natural, neither swelled nor discoloured; pressure on the larynx gives great pain. She had just taken a large dose of purgative medicine; she was ordered to have twelve leeches applied to the larynx.—Half-past three P.M.: The leeches have given some relief; face paler, less dusky; breathing as hurried, but not as laboured, as before; she swallows a little more easily, but her agony is extreme when she swallows more than a sip at once, or whenever she coughs; she is evidently much weaker than she was at noon.

It was not thought safe to leave her. The trachea was opened by Mr. Skey, just below the cricoid cartilage; very little hæmorrhage took place; she coughed a good deal on the first introduction of the canula; and expectorated much tough mucus through it; her breathing was immediately much relieved by the operation. Ordered to have a blister plaster applied to the chest, to take fifteen minims of ipecacuanha wine, with one drachm of mucilage, out of half an ounce of distilled water, every other hour, and some linctus, to quiet her cough.

Eight A.M.—Has had half an hour's comfortable sleep since the operation; breathes easily through the canula, (36 to 40;) pulse 132, small and soft; three loose evacuations from the bowels, the last of a light-green colour.

April 1st.—Slept well during the night; face composed; respirations 30, easy; the supra-clavicular spaces being no longer depressed; pulse 120, small, without much power; bowels not open since yesterday evening, but she has a good deal of tenesmus; she has a little cough, with very free mucopurulent expectoration. The blister drew pretty well. Ordered, a saline draught with antimony, thrice a day.

2nd.—Good sleep through the night, by periods of about two hours, with equally long intervals: she swallows easily, though her mouth be so full that the fluid is running out at the corners; expectoration is quite free, the mucus looser. Ordered to continue.

3rd.—At six P.M. yesterday her breathing became oppressed; she had tickling and pain in the throat, which was only partially relieved by the canula being cleaned. At ten P.M.,

the symptoms returning more severely, the canula was removed, with their entire relief. This oppression of her breathing "was quite of a different kind" to that which she had suffered from before the operation. She had a little sleep during the night; pulse 96, soft, small; respirations 28; bowels once open; cough less troublesome. Ordered, five grains of compound soap-and-opium pill every night; leave off the saline with antimony.

4th.—Breathing more oppressed; respirations 36; face dusky; pulse 108, small, but sharper; the supra-clavicular spaces are again depressed during inspiration; on auscultation, rhonchus and sibilus, with very faint respiratory murmur, are audible throughout the chest in front. Ordered to return to the use of the saline with antimony, to have a blister plaster applied to the chest, and to be put on low diet.

5th.—She was kept awake by a patient in the same ward; tongue moist, cleaner; pulse 120, small, and soft; respirations 28, easier; the supra-clavicular spaces no longer depressed; she has free muco-purulent expectoration; bowels freely open, from a senna draught; the blister drew well. Ordered to continue.

6th.—Good sleep; respirations 21, easy, with a tracheal rhonchus at times; she swallows solids easily, has no pain anywhere, and very little cough; tongue clean and moist; pulse 84, small and soft.

On April 8th she was about the ward, speaking with rather a husky voice, and weak, but otherwise well.

On the 10th, she left the hospital, against Dr. Hue's wish; the wound closed, but not quite healed. She was seen again about a week after, speaking in her natural voice, and apparently restored to health.

The above case can scarcely be looked upon as presenting a fair illustration of the dangers and difficulties attending acute laryngitis and tracheotomy. The indications for treatment were unusually clear, and the effects of the bleeding from the leeches, which peculiar circumstances rendered it necessary to apply before the operation was resolved on, made these indications yet clearer. The relief from their application was not equal to the exhaustion which they occasioned. Her breathing, under ordinary circumstances, had certainly become more tranquil; but the existence of bronchitis, and the long-continued abstinence from food, made it necessary to take into consideration the effects of cough, or of any attempt at swallowing. Add to this, that though life was maintained by the imperfect respiration then going on, yet it was but just maintained, for the extremities were cool, and that state was rapidly coming on where danger was to be looked for, as well from the effects of long-continued imperfect respiration, as from sudden interruption of that process.

It cannot be a matter of indifference in such an operation, whether the patient lie quiet, or be struggling for breath. Every assistance, therefore, in this particular, was gained by the operation not being deferred till called for—in the middle of the night, perhaps—by some sudden emergency.

A good deal of doubt was thrown over the further treatment by the fact of her having just taken a large dose of purgative medicine; but the case proceeded favourably, the only incidents requiring any particular notice in its further progress being the symptoms which indicated that the canula was now acting as an irritant to the larynx, and demanding its removal on April 3rd, and the slight relapse which followed the omission of the antimony, and, perhaps, the use of a rather too nutritious diet on the following day. It seemed that the symptoms requiring the removal of the canula were those of general distress, with local irritation, rather than of oppression of the breathing.

Thus much for the case in itself. It has as high an interest in relation to others of the same kind, as an encouragement to the early performance of the operation—an illustration of the principles so well laid down by Mr. Porter, ("On the Surgical Pathology of the Larynx and Trachea," pp. 79 to 97.) To the remarks there made we would only urge, in addition, as naturally arising out of these two last detailed cases, the policy of adapting all previous local treatment to the possibility of the operation of tracheotomy being at some time required. It is worth considering how far cupping on the nape of the neck may be employed, instead of leeches to the region of the larynx and trachea, and blisters may be placed so as not to cause swelling of the parts through which the incision may have to be made.

But while there is so much encouragement to the early performance of the operation, there are certain drawbacks in the chance of danger, immediate, from the operation itself, and more remote, from the inflammation of the bronchi, which almost necessarily follows the direct admission of air into the trachea. But surely these two dangers are not to be put in comparison with the immediate danger they are intended to obviate, and the deaths from them both together would be far outnumbered by the deaths that would happen in the process of learning the exact period at which the operation is absolutely necessary to save life—to say nothing of the additional difficulties which would interfere with the performance of an operation under such circumstances. As far, too, as any exact period of a disease can be described, this period has been described for acute laryngitis, on which subject Dr. Cheyne's article, in the "Cyclopædia of Practical Medicine," is especially worth attention. Where the danger is so imminent, not to be measured by any prescribed period of time, but by the attendant himself sitting at the bedside, we must look for something more speedy in its action than either calomel or antimony, such as is only to be found in bloodletting. The published cases, and especially that of George Washington, clearly show that bloodletting is not the remedy for this disease; that in this, more than in any other, effects, not quantity, are to be considered in the abstraction of blood, and that when exhaustion ensues, disproportionate to the relief afforded to the difficulty of respiration, the sooner the trachea is opened the better.

On a case where the indications were so clear as in the above, it would be out of place to offer any remarks on the difficulty of diagnosis which may occasionally arise. We subjoin, instead, an illustration of another disease secondarily affecting the larynx, where, with many urgent symptoms, clearly the indications for tracheotomy did not exist.

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### SPASM OF THE GLOTTIS, CONNECTED WITH SOME ADYNAMIC AFFECTION OF THE PHARYNX.

Case 58.—Mary Ann J——, aged forty-five, admitted Feb. 26th, 1847, Hope Front ward. Short stature; face pale and anxious; body much emaciated; tongue moist and furred, the lips covered with sordes; bowels rather relaxed; pulse 120, small; has pain in the throat, and inability to swallow, of seven days' duration.

*History.*—A nurse; healthy; temperate; till her present illness quite fat; has been attending a lady who died of puerperal fever, in a house where all the inmates "caught sore throats." A week ago she had a rigor, not followed by any notable heat; the next day she had pain in the throat and behind the ramus of the jaw, with inability to swallow solid food, or even to speak, and slight cough. After three days the fauces were lanced, but no relief followed the operation.

Now her voice is very feeble and croupy; respirations 40; dyspnœa occasionally in severe paroxysms, so that she starts up and fights for breath; she cannot swallow solids at all, and fluids only by sips; the front of the neck and upper part of the chest is hot, red, and painful, and she cannot bear the least pressure on the larynx; the fauces are red and swelled. Ordered to take three grains of disulphate of quinine thrice a day. To have four ounces of wine, and two pounds of beef for tea, daily.

Feb. 27th.—No sleep from cough; slightly delirious during the night; respirations 36, still of a croupy character; she swallows easier, but still only by sips; pulse 114, small and soft; skin warm and perspiring. Ordered to continue; to have a blister plaster applied beneath the jaw.

Feb. 28th.—Good sleep; tongue with a brown fur, tip and edges red; bowels rather relaxed; pulse hardly perceptible; she swallows more easily.

There is little to remark in the notes of the next fortnight, the changes which took place from day to day being rather referable to her fatiguing herself in the fear of not recovering her strength speedily, than to any other cause. On March 16th it is remarked that she is very weak; her tongue is still furred; she has great pain on pressure of the front of the neck, especially on the right side; she cannot swallow wine, except it be very much diluted, because of the pain which it causes; and all solids are returned as soon as they have passed the throat; she points to the front of the neck as the place where they stick.

She continued under observation for about a fortnight more; when discharged, she had regained the power of swallowing, but she was still very pale and thin.

Now what was the matter with this woman? The circumstances under which the disease was caught—the extreme prostration and the rapid emaciation by which its progress was accompanied—would incline one at once to class it as an erysipelatous inflammation of a low type, affecting the fauces and the parts thereabouts. The slight swelling and redness

of the integuments of the neck favour this supposition. As to its situation, it seems probable that it began in the soft palate, and the parts of the pharynx within view; that it extended to the larynx, so as to cause great functional disturbance, if not actual organic lesion, of this part; but that the regular progress of the disease was down the pharynx itself; and thus, after the laryngeal symptoms has subsided, those referable to the pharynx and the upper part of the œsophagus continued, explaining the constant rejection of food after it had passed some way down that tube. This gradual extension also favours the belief that the disease was of an erysipelatous nature.

Thus much, I think, might be readily concluded from the case as it stands by itself; but all these inferences are strengthened, and much light is thrown on the essential nature of the disease itself, by a case which occurred at a rather later period, where a man was attacked with somewhat similar symptoms, and died rapidly, the treatment adopted being actively antiphlogistic—namely, by venesection and antimony. On examination after death, the sub-mucous cellular tissue of the pharynx was found infiltrated with pus, and the larynx and trachea were preternaturally vascular, though no exudation of any kind had taken place into them. The same kind of sub-mucous suppuration, though to a less extent, has been noticed in patients dying of other diseases during the past winter—a period marked especially by the frequent occurrence of diseases of an adynamic type.

Clearly, there were here no indications for performing the operation of tracheotomy; mere sudden spasmodic dyspnœa, whose effects pass off with the attack, can scarcely be a sufficient indication on which to undertake it, for it may depend on an aneurism of the aorta, or on the pressure of an enlarged bronchial gland on the end of the trachea. But should the operation be required, as may well happen by extension of low erysipelatous inflammation from the soft palate to the larynx, it needs hardly be said under what disadvantageous circumstances it will have to be performed, and how all ideas of treating the disease locally must give way to the simple indication of saving life, by whatever means that is to be effected. Fully believing that the case just narrated was similar in the essential nature of the disease to that the morbid appearances of which have been detailed, (namely, inflammation going on to suppuration,) as far as close observation of the patient could assure one, there seemed no doubt that any active antiphlogistic treatment would have been followed by death.

## Original Papers.

ON THE

# CONVULSIVE AFFECTIONS OF INFANTS AND CHILDREN;

By MARSHALL HALL, M.D., F.R.S.,

FOREIGN ASSOCIATE OF THE ROYAL ACADEMY OF MEDICINE OF PARIS; ETC. ETC.

(*Read before the Medical Society of London, May 17th*, 1847.)

I NEED not inform the members of this venerable Society that I have been for many years engaged in an investigation of the nature and physiological application of a certain principle of action and series of phenomena in the nervous system, which I have designated excito-motor and reflex, and limited to the spinal centre, with its associated incident and reflex nerves, exclusively of the cerebral and ganglionic systems.

But it *is* necessary to state that the subject of this investigation has a *practical* application to the diagnosis, pathology, and treatment of a certain Class of diseases, of which a tithe is not yet known.

It is a specimen of this application of physiological science to practice, to which I now beg to call the attention of this Society, the members of which will, I am persuaded, receive in good part the observations and suggestions which I am about to lay before them. It is lamentable to observe the general supineness of the profession in regard to improvements which require a little unbiassed attention—a profession, the objects and aims of which are so elevated and noble, but of which the welcome of new scientific truths must be admitted to be tardy, and the approbation niggard. In medicine alone, improvement is without recompence.

But science ought to be pursued for its own sake, irrespective of consequences, and the reward should be in the conscience. It is with these views that I beg, this evening to submit to this Society the following observations on the nature of the convulsive affections of infants and children;—observations which are the first—or amongst the first—of a series of contributions from *the Science of Physiology to the Art and Practice of Medicine.*

It has long been the habit of the indolent in our profession to decry physiology, and especially experiment. I will venture to affirm, that such persons are incapable of grasping the question I am about to discuss—viz., the nature, diagnosis, and treatment of convulsive diseases and of their effects. The greater part of this question is involved in the recent investigation relative to the excited reflex actions, and he who has not witnessed, or whose eye is not familiar with, these phenomena, as displayed in experiments, is utterly unprepared to comprehend, and to treat adequately, the class of convulsive diseases. Books cannot convey this knowledge. Books do not contain it. We have only to read the attempts to apply the principle of the excited reflex actions to practice, even by those who might seem to know something of the matter, to perceive the utter insufficiency of book-knowledge for this purpose.

No. He who would conscientiously perform his duty as a physician, in these affections, must submit to the drudgery, often fraught with pain, as well as toil, of reading the book of Nature. He must have both his eye and his mind tutored to distinguish between the effects of volition, the phenomena of emotion, and the reflex actions of the excito-motor power.

With an eye so tutored, there is no danger of mistaking the phenomena of convulsive diseases. All is plain, simple, useful. The practical physiologist, the physiological physician, sees, that strabismus, the contracted finger, the contracted toe, are one and the same kind of affection, in different parts of the muscular system; that the partial closure of the larynx, inducing laryngismus stridulus, and the total closure of the larynx, suspending the respiration; that strangury and tenesmus, are of the same nature, only seated in other and more vital or important organs; lastly, that the general convulsions of the face, and of the general frame, are still similar morbid phenomena, differing only in their degree of diffusion and intensity, and in being of centric origin. He perceives that it would be as unphilosophical and unreasonable to think and speak and treat of the condition of the larynx separately, and to view the case as one of partial paralysis, or of inflammatory action, as so to view the affection of the muscles of the eyeball, the fingers, or the toes, which differ in no respect from that spasmodic affection of the larynx, except in their less formidable import.

To the eye of the practical physiologist, and to no other, the *series* of symptoms in convulsive disease presents fearful, *excited*, *reflex* actions in the human subject. *He* sees how peculiar and specific they are in their character, and how peculiarly and specifically they are connected with the true spinal system, anatomically and physiologically. In a word, *he* alone possesses the secret cipher by which this mysterious page of Nature may be read. We might as well pretend to understand fever itself from books, as physiology, with its practical applications. Such is the nature of practical physiology; such the inconsiderate folly of those who, in the present day, as in the day of the immortal Harvey, decry wise, judicious, well-devised experiments.

The time is coming—though it may yet be distant—when the "mere practical man" will be viewed as the mere empiric, which he is, in fact; and when to know the nature and modes of action of the springs of life will be accounted the appropriate preparation for the investigation, prevention, and treatment of diseases.

If I wished to set forth, in the most vivid manner, the great reality and importance of the recent progress in our knowledge of the nervous system, and its influence on pathology and practice, I should appeal to the condition of medical opinion on the subject of the convulsive diseases of infants and children twenty years ago and at the present time. Cerebrum was confounded with spinal marrow; the sympathetic explained everything, and yet, as Professor Müller has sarcastically observed, nothing. Even recently, it has been a question whether the symptom termed laryngismus, though forming a part of a general convulsive or spasmodic affection, and being of a transitory character, be of the nature of paralysis or of spasm!

### § 1. *Subject of Investigation.*

There is no more terrific disease than infantile convulsion—none more deplorable in its consequences to mind, or limb, or life; for the little patient may remain an idiot, or a cripple, or the subject of future epilepsy, even should life be spared.

Well, then, does this theme merit the attention of this Society.

The first question which presents itself is—What are the causes or sources of infantile convulsive affection?—in what modes are such affections induced?

The second question is—What are the precise forms assumed by these convulsive affections?

The third—What are the effects of these affections on other organs?

The fourth—What is the diagnosis of the different forms of convulsive disease?

The fifth—What are the modes of prevention and treatment?

§ 2. *The Terms employed.*

Various terms have been employed to denote the various forms and symptoms of convulsive disease; and *one* especially has been so employed as to appear to give to one form of this affection a distinct existence and importance—I mean, that of *laryngismus;* and this has led to much confusion and error in treating of this affection.

It is, in fact, as if we were to treat of cough, or any other mere symptom of disease, as a distinct disease.

Laryngismus is a symptom of disease, often a very severe one, but still only a symptom. It has been further distinguished by the epithet *stridulus*, which, however, is unnecessary, if we be only well informed on the subject. There is only one kind of laryngismus, and this one is not always stridulous. In its worst and most dangerous form, indeed, it is a *silent*, because a complete, closure of the larynx.

The term laryngismus may be retained. Without intention on his part, the proposer of it chose a designation, which associates itself very appropriately with that of another partial form of convulsive disease—viz., strabismus. And other symptoms of convulsive affection may receive designations which will assimilate equally well together and with these; such are chirismus and podismus, for the spasm of the wrists, the hands, or the fingers, or of the feet or toes, or the carpo-pedal spasm, as these have been called; whilst the term sphincterismus may be used to designate the spasmodic affections of the sphincter ani, or neck of the bladder, assuming the form of tenesmus or strangury.

Let this termination in *ismus* be used only to designate a *symptom*, and that of a purely nervous or spasmodic or convulsive character.

Laryng*ismus* will henceforth be viewed merely as a symptom, as cough is a symptom, to be traced to its origin,—to the special disease on which it depends,—and will no longer be confounded with laryng*itis*, as I fear it still is by some practitioners.

A reform in nomenclature is at once the usual result of progress in medical science, and the efficient cause of improvements in the art and practice of medicine.

§ 3. *The Predisposition.*

The predisposition to convulsive affection, and especially to that form of it which has been designated laryngismus, is sometimes so marked, that all the children of a numerous family have been successively affected with this disease. Such an instance was published, by a father, in THE LANCET, in April, 1841. Such instances have been observed by all physicians of experience.

Whether this predisposition be hereditary, or be induced by external circumstances, has not, perhaps, yet been accurately determined. I suspect that the effects of *locality*, as a damp soil, has frequently constituted the predisposing cause of this affection, and that a total change of residence is as important as a corrective of this predisposition as a change of air has appeared to be in the actual attacks; and this both for the safety of the individual patient and that of future children of the same parents.

But I must also add that I have known the children of different branches of the same family to be liable to this affection, though their localities have been distant from each other.

§ 4. *The Causes.*

No irritation of the substance of the cerebrum or cerebellum can produce muscular spasm or contraction *immediately*. This fact is the result of all experiments on animals, and of all observations on the human subject. No disease, therefore, *limited*, in itself and in its effects, absolutely to the cerebrum and cerebellum, can be the cause of convulsion.

But irritation of the *membranes* within the cranium produces various muscular contractions—a fact which I ascertained in an important experiment, which I carefully detailed in the second series of my "Observations and Suggestions in Medicine," p. 64. No doubt *disease* sometimes acts as an irritant to these membranes, and produces its peculiar effects, or symptoms—a fact for which we are indebted, with the light which it throws upon diagnosis, to experimental physiology.

But it is when a source of irritation is applied to the medulla oblongata, or medulla spinalis, that the most energetic and frightful forms of muscular contractions, or of convulsions, are induced.

Lastly, when certain nerves connected with the spinal marrow, which I have designated the incident spinal nerves, are irritated, especially at the points of their origin in the cutaneous, mucous, or other tissues, various muscular contractions, now designated excited and reflex, occur. Excited through the medium of these incident nerves, the spinal centre sends forth its influence along certain muscular nerves specially associated with the former, and peculiar muscular actions ensue.

Infancy is the most excitable period of human existence, whilst it is exposed to its own peculiar sources of irritation.

Of these, one is the peculiar condition of the gums and of the alveolar processes which occurs during dentition. It is one of great vascular action and fulness, and of consequent tumefaction, and pressure on the dental nerves.

Another excitement frequent in the age of infancy is that arising from the condition of the stomach, in cases in which food has been given in quantity or quality not easy of digestion. The gastric acid is then secreted in undue measure, adding this source of irritation to that of indigestible aliment.

It is a singular fact, that the age of convulsive diseases is specially that of dentition, and of what I may term dubious diet. Dentition, as I understand the term, begins at birth, or even before; it is then that the tissues of the alveolar processes and cavities become the seat of augmented vascular action and nervous excitement, which do not cease until dentition is completed. I think it probable that many convulsive affections and their dire effects have their origin *in utero;* certainly many of the latter are congenital.

A third source of irritation is that which arises from morbid matters retained in the lower part of the alimentary canal, especially undue acidity, undigested food, flatus, scybala.

It is a well-known fact, that there is a greater mortality amongst children deprived of their nurse and natural food, and, as the phrase is, "brought up by the hand," than amongst children that are duly nursed. Whether this greater mortality depends on the greater prevalence of *convulsive* diseases is not so well determined. This is a question still requiring careful investigation.

It is difficult to determine the best kinds of food for infants deprived of the breast. Diluted cow's milk, but especially asses' milk, would seem the most natural, whilst the wholesomeness of *farinaceous* food is at least questionable.

A fourth source of excitement is that of the atmosphere, air itself, and especially of the north, east, or north-east winds; and perhaps certain vapours, or the exhalations in certain localities.

The influence of certain states of the external atmosphere is probably exerted on the incident nerves of the larynx itself, which are thus excited, so as to induce, through reflex action, partial or complete closure of that organ. How important, then, is it to protect the susceptible little patient from an influence so fraught with danger!

With this influence of inspired air may be compared that of water, or other fluids, given to drink.

It is especially in this manner that the cold, dry air of the north-east wind, or the cold, damp air of certain localities, inspired, or cold fluids taken into the pharynx, may act in inducing laryngismus, especially in the cases of undue susceptibility, whether hereditary or induced, which obtains in this malady.

It is precisely what is observed in *choking* from any cause. I know a patient in whom the larynx and pharynx are so excitable, that, for a long time, he has been unable to swallow cold water, or use even warm water, as a gargle, without laryngismus. A drop of water, or a particle of bread, falling on the rima glottidis, produces a precisely similar, but more severe, effect in all, i.e., laryngismus or even laryngismus stridulus.

The north or east wind, a cold and damp atmosphere, certain vapours in the atmosphere, &c., act on the unduly susceptible incident laryngeal branches of the pneumogastric nerve, and induce its *closure* by reflex action; the dashing of cold water on the face acts on the tri-facial nerve, with which are mysteriously associated in action, the muscles which *open* that

organ. How perilous, under such circumstances, the attempt to give the little infant *anything* to swallow!

Mr. Barlow observes—"I have seen four cases in which drinking brought on the paroxysm. Hot or cold fluid was more excitant than lukewarm. In one instance, the last and fatal attack was induced in this manner; in previous attacks there had been crowing; in this, the glottis seems to have been instantly closed, and convulsions and death speedily followed. In another, I observed that the attack was induced by sleep, excitement, pleasure, vexation, or the act of swallowing."

I have watched the effects of these causes, singly and combined, too carefully to doubt that they may, severally or together, produce or renew convulsive affections in infants. It is difficult to determine the specific action of each, but certainly, whilst strabismus, or the spasmodic contraction of the hand or foot, may arise from teething, and from gastric or intestinal irritation, the condition of the larynx is very apt to be affected by the north-east winds, or other conditions of the atmosphere, and the sphincters, by the contents of the rectum and perhaps of the bladder.

A little experience will teach us, in a case so involved in obscurity and doubt as to the individual cause, most carefully to avoid *all;* this conclusion is of the greatest moment in practice.

I think it highly probable, fifthly, that the occurrence of this convulsive affection may become associated with an augmented excitability of the spinal centre; and that it is from this cause, that the attacks are apt to be reproduced by causes too slight to produce such an effect originally. Hence, the modes of treatment found to be beneficial, should be continued carefully, *long* after the little patient *appears* to be well. This caution I also regard to be of great practical importance.

§ 5. *The Influence of Sleep.*

The condition of the nervous system, during sleep, is peculiar. It is not unallied to epilepsy, and hence, it often passes into epilepsy, and especially into convulsive affection, in infants. The influence of volition being withdrawn, or nearly so, the muscles of the neck and larynx, like the orbicularis, contract on the venous system distributed in the neck, and the breathing becomes audible; it also ceases to be rhythmic; and during its first and deeper stage, attacks of laryngismus, or other forms of convulsive disease, in infants, as of asthma or epilepsy in adults, are apt to occur.

In deep sleep, there is a low degree of laryngismus even, manifested by stertor or snoring.

During sleep, the nervous centres are congested. If we open the eye, the conjunctiva is often observed to be deeply suffused.

In this condition of the circulation, we need not feel surprised if undue excitability occur, and that a dream, or an excitant of reflex action, may add to the peculiar condition of the larynx and of respiration, which I have described, that which constitutes actual laryngismus.

§ 6. *Cerebral Disease.*

I have already stated, that no disease of the cerebrum, limited in its effects to this organ, can induce convulsive affection; for no irritation of the cerebral substance can produce muscular contraction.

It is only when, by its locality, it can irritate the membranes, the incident or motor nerves, or the medulla oblongata; or when, by its magnitude, it can produce compression of that medulla, that it can produce such effect.

Inflammation, or tubercular granulation or tumour, with serous effusion at the base of the brain, may act in the former manner; and effusion into the ventricles, or inflammation, or congestion, in the substance of the cerebrum, may act in the latter.

One source of congestion is the violent fits of cough in pertussis; another is equally the cause and result of general convulsion.

In all these cases the cause of convulsion resides within the cranium, and our attention must be directed to subdue morbid action in this cavity.

§ 7. *Excited Reflex Actions.*

In by far the greater number of cases the symptoms of convulsive affection are reflex actions. As stammering would scarcely exist without emotion, so laryngismus, for example, is most effectually avoided by avoiding *every* exciting cause of reflex action.

These causes are, as I have already stated, principally *four:*—

1. The irritation of the *trifacial* nerve in the gums and alveolar processes in dentition.

2. The irritation of the pneumogastric nerve by indigestible matters in the stomach.

3. The irritation of spinal nerves from morbid contents of the intestines.

4. The influence of the external atmosphere, under certain circumstances, on the incident branches of the pneumogastric nerve of the larynx, &c.

The influence of all these causes of reflex action is more or less *continuous;* and hence arises a peculiarity in their effects, which are more or less persistent. The strabismus, though not absolutely constant, frequently continues for a considerable period; and the chirismus and podismus are apt to assume a tetanoid character.

Some of the symptoms are, indeed, transient in their duration, as the laryngismus. This difference is explained on the principle of interference; the acts of respiration interfere with the tendency to closure of the larynx; at this age volition only slightly interferes with the closure of the fingers or toes; the laryngismus is therefore less permanent than the chirismus or podismus; but when the laryngismus *is* continuous, it induces a fatal asphyxia.

The convulsive affection would also seem to wear out the excitability of the spinal system—as is seen distinctly in certain experiments—and so to cease, although the exciting cause may not be removed, and no principle of interference exists.

Such being the character of these reflex actions, it is extremely interesting to observe what are the precise organs affected. These are precisely those which are bound, as it were, by the chain of special incident and reflex nerves with the spinal centre, and constitute the spinal system. The larynx, the sphincters, are special examples of this fact; as are, I believe, certain symptoms connected with the gall-ducts. The morbid actions of the muscles of the eyeball, of the fingers, of the toes, and in the general convulsion of the countenance, and of the general frame, obviously point out the special part of the nervous system first and specially affected, and the mode and character of the affection.

I appeal to my fellow-members of this Society, whether we were prepared to pursue the investigation of this momentous subject, before the recent views of the spinal system and its associated incident and reflex nerves with their special centre, and with their excito-motor and reflex modes of action, were laid before the profession. Whereas now, a case of convulsive disease, whatever its seat and form, is as intelligible to us as the simplest and best devised experiment, possessing the additional and almost tragic interest of an experiment replete with a thousand dangers on a human being, the object of the keenest affections, hopes, and fears!

I must now add that this malady has sometimes appeared to affect other branches of the pneumogastric nerve besides the laryngeal—viz., the bronchial, and the branches distributed to the minutest branches of the air-cells, the gastric, the hepatic, and the nephritic, inducing peculiar effects. These effects have not hitherto been duly traced. But I beg to call the attention of the members of this Society to the interesting topic. Bronchitic, gastric, hepatic, and renal symptoms, frequently form a part of this convulsive affection; the flow of bile is arrested; the urine is frequently affected with a deposit of the lithates. Are these cause or effect, or independent of the other phenomena?

Through this labyrinth, the knowledge we now possess of the spinal system can alone guide us. Like the stethoscope, it enables us to apply another, and, in this instance, a new and internal sense, to the investigation and diagnosis of disease.

§ 8. *Of Laryngismus specially.*

Without closure of the larynx — extreme laryngismus, and the consequent congestion of the nervous centres—there could, I believe, be no convulsion! This closure of the larynx must be complete, in the affection under consideration, as in all others, before convulsion *can* take place. Hence I have known the actual convulsion long warded off, by constantly and carefully watching the little patient, and whenever laryngismus was threatened, dashing cold water on the face. In this manner, too, the late Dr. Denman prevented the accession of puerperal convulsions in a case of the deepest interest, of which the details are given in his valuable work.

In pertussis, there is no convulsion, however violent the fits of coughing, until extreme laryngismus or closure of the larynx occurs.

In bronchitis, and in asthma, there is no convulsion, because there is no *laryngi*smus.

Laryngismus is the efficient cause of convulsion in epilepsy.

It is the first link in the fearful chain of symptoms in this fearful malady. To Mr. Barlow I am indebted for the details of a case of epilepsy, in which the extreme laryngismus and closure of the larynx was preceded by stridulous laryngismus, precisely similar to the crowing inspiration of infants.

It is laryngismus which destroys the patient in hydrophobia.

It is laryngismus which destroys the patient in the case of poisoning with strychnine.

The extent of the fearful influence of laryngismus in disease has not been appreciated in or by the profession. It is laryngismus which proves the cause of sudden death—which has occasionally induced dismay in the practitioner, and unjust reflections on the part of the patient's friends—in cynanche tonsillaris, and in scarlatina anginosa.

It was by merely witnessing the phenomena of strangulation in hydrophobia, that the late Dr. Physick, of Philadelphia, was induced to suggest the operation of tracheotomy in this dire malady—a suggestion full of promise, if, indeed, there be hope at all in this disease.*

Juster views of the pathology of epilepsy will at least prevent us from attempting to give anything, far less any irritant or excitant, as cold water, or sal volatile, in the fit of epilepsy. In epilepsy, as in the crowing inspiration of infants, extreme laryngismus is the cause of sudden death. When this does occur, it may be induced by the attempt to give even cold water. Mr. Barlow was recently informed of such a fatal event, arising from this very cause, acting in this very manner, in the case of a little patient on his list, at the Infirmary for Children.

I believe a tube worn in the trachea would render the attack of epilepsy impossible! Extraordinary idea.

### § 9. *Emotion, passion.*

Many facts lead to the conclusion that emotion and passion *act*, not through the cerebral system of nerves, but the spinal and ganglionic systems. Hence these affections of the infantile mind are the frequent cause of various convulsive affections, and especially of strabismus and laryngismus.

Hence, too, the importance of procuring a judicious, careful, and patient nurse, of excellent temper herself, and able to maintain a state of mental tranquillity in her little charge.

I have frequently observed a momentary strabismus when an infant is brought into the room, which ceased soon afterwards.

Under the same or similar circumstances, a momentary laryngismus also not unfrequently occurs.

External noises, disturbance of any kind, fretfulness and passion however induced, are the frequent cause of strabismus, or of laryngismus—this last sometimes, in its severest form, attended by asphyxia, and not free from danger.

The fear of this is the true and real objection to the use of the gum-lancet; otherwise there is *none*. The question must be resolved, in each individual case, by carefully watching its effects. I have often thought, that as a thermometer might be employed to determine the condition of the dental circulation, a lancet might be concealed, in a ring, or so as to have none of the formidable appearance of the ordinary gum-lancet.

But the objection which applies to lancing and scarification of the gums applies with equal force to the administration of medicine, enemata, and almost every kind of remedy.

There is ample scope in such cases for the judgment of the physician. The infantile mind must be cared for as well as the body; and whilst every cause of reflex action is carefully removed, every source of mental fret and irritation should be as carefully avoided.

It is at the moment of awaking, especially, that these precautions are most required. It is on awaking that every source of surprise, every noise, every cause of excitement, should be specially avoided; it is at this moment of repaired excitability that spasmodic or convulsive movements are most apt to be excited.

The important and extensive influence of emotion in exciting disease or its paroxysms, is still untraced. Amongst mental causes, it is emotion which induces insanity; it is not, for instance, the calculations, but the hopes and fears, of the speculator, which derange his reasoning faculty, and set imagination at fault. The paralysis agitans is induced originally, and throughout its course, by emotion. What an interesting topic for investigation!

* See the Life of P. S. Physick, M.D., by J. Randolph, M.D., &c., 1839, page 58.

### § 10. *Convulsion; Asphyxia.*

In the actual convulsion the larynx is closed with a forcible effort of expiration, the respiration being suspended; and there are violent actions of the muscular system—of the eyes, face, and general frame.

These muscular actions are rarely equal on the two sides of the mesial plane, and therefore the eyes, countenance, and general frame, are greatly distorted, and the aspect of the little patient is frightful.

The venous system of the head and face is greatly distended, (in epilepsy, in the adult, I have known this condition issue in ecchymosed spots,) and the countenance appears tumid and livid. The eyes, the lips, the tongue, and doubtless the venous and capillary systems of the cerebrum, the thymus, &c., partake of the same condition.

The aspect of the countenance is very different, according as the attack assumes the character of convulsion, or that of asphyxia; in the former it is livid and purple, with distention of the veins on the temple and forehead, and of the capillaries; in the latter it is livid and pallid, and cold and clammy.

These two conditions should be carefully distinguished, though they are doubtless more or less combined in every case.

The violent convulsion leaves a state of congestion of the cerebrum, with the danger of effusion, or actual effusion.

The state of asphyxia leaves the blood deteriorated.

### § 11. *Augmented Excitability.*

I will take the liberty of detaining the Society a few minutes whilst I state a few facts on the subject of augmented excitability in the nervous centre, in a certain class of diseases.

If a mild voltaic current be made to pass through the denuded and insulated spinal marrow, or lumbar nerves, in the frog, for ten or twenty minutes, and then be withdrawn, the lower limbs are thrown into a state of tetanoid spasm. This condition of the nervous centre or muscular nerve I have designated the *electrogenic*.

If, instead of affecting the nervous tissue in this manner, we place the frog in a dilute solution of strychnine for a similar period, the spinal marrow being divided near the occiput, we have again a tetanoid condition of the limbs.

These two tetanoid conditions are not, however, the *same*, or even similar: the first is permanent, and requires for its manifestation no excitant; the second is one of predisposition only, and exists only when induced by some external exciting cause; in the former, the electrogenic state is the excitant; in the latter, the strychnogenic condition, if I may use this term, is not an actual excitant, but only one of induced augmented susceptibility to other excitants.

I believe these two conditions exist in certain peculiar states of disease in the human subject, of which they are, therefore, the appropriate *types;* spinal acrachnitis, a spicula of bone irritating the spinal marrow, produces effects similar to the former; a lacerated cutaneous nerve, (inducing tetanus,) and a poisonous state of the blood, (in hydrophobia,) produces a condition similar to the latter.

All this is a deduction from experiment; I commend it to the attention of my brethren in the profession.

I now return to the subject of convulsive affections in infants.

The spinal centre becomes so excitable in some of the cases of this convulsive affection, that causes which have no influence, or no injurious influence in health, produce marked effects in the course of this malady.

I have already observed that the little patient, on being brought into the room in which the physician, a stranger, is waiting, generally or frequently manifests the effects of the slight emotion in a transient strabismus or laryngismus. The slightest fret of mind, or sudden start, produces a similar effect.

A mere change of room, or of locality, or of the direction of the wind, will often renew the malady, even when it has ceased for a time. On the other hand, "air and exercise" are the great antidotes to augmented excitability. Change of air, the exposure to the air when the weather is fine, are as essential as security against its inclemencies.

During the progress of dentition, it frequently happens that repeated attacks of this affection, in its varied forms, are experienced. It is, therefore, apt to be protracted through many months, indeed, until dentition is completed.

I fear that this excited condition may be protracted even through future years, and that the convulsive affection of the infant may lead to epilepsy in the adult. Fearful idea! The attacks

of this very epilepsy begin with a species of laryngismus,—an actual closure of the larynx,—and proceeds, in its own manner, to produce the general convulsion, and the other formidable effects of this dire malady.

It is singular enough, and the idea that this laryngismus belongs to a peculiar nervous system, cannot be repeated too often, that, in the excitability induced by strychnine, it is a species of laryngismus which is the peculiar symptom, when its effects are severe or fatal, in the human subject, or in the warm-blooded animal. In the extreme case it is, as in extreme laryngismus, instant asphyxia.

This laryngismus, so far from being peculiar as an affection of infants, is, as I have already stated, common to a whole class of affections of the true spinal system: emotion, hysteria, epilepsy, tetanus, hydrophobia; one and all affect the larynx especially; one and all produce a state of varied laryngismus. This affection of the larynx, therefore, instead of being a disease, or a symptom of disease, is a symptom denoting an affection of a certain nervous *system*.

The true idea of the morbid affection under consideration, as of tetanus itself, is that of an excitant or excitants, which first induce a state of augmented spinal excitability, or *erethismus;* then, various excited reflex actions; and thirdly, general convulsion.

Tetanus and hydrophobia consist in an induced spinal erethismus, the paroxysms consisting of augmented or excited spasm, from external excitants.

The infant under the influence of what I will designate the convulsive tendency, susceptibility, or erethismus, may therefore be *compared* to the patient affected by tetanus. The causes are similar,—irritated nerve, inducing spinal erethismus; and this, susceptibility to excited reflex actions; the effects are analogous—tetanoid affections.

Not dissimilar in nature is the state of things in the augmented excitability which is induced by strychnine, and which occurs in hydrophobia.

In the infantile disease, as in tetanus, the augmented susceptibility is indeed induced through irritated *nerve;* whilst in the effects of strychnine, and in hydrophobia, it is induced by a poison in the *blood* itself—important distinction in the pathology of this class of diseases, first pointed out in my New Memoir, published—if, indeed, it can be said to be published—in 1844. In both sets of cases, the disease consists in an induced augmented excitability of the spinal marrow, or *spinal erethismus* of the spinal marrow, whilst its paroxysms are the result of excited reflex action, until we arrive at general convulsion of the nervous centres.

### § 12. *Effect on the Cerebrum.*

Let actual convulsion once occur, and all is changed and complicated. It is no longer the spinal system only which is affected; the cerebrum has become congested, and effusion is threatened; and now double care is required to prevent the wreck of intellect or of limb, from the influence of pressure, or of counter-pressure, of the organ of mind itself, or of the tissues occupying the base of the cranium—the membranes, the trifacial and pneumogastric nerves, the medulla oblongata.

What a study for the physician enlightened by physiology! How extensive, how complicated! How are we to be guided through this labyrinth? By experiment. The tissues, to which I have referred, must be irritated and compressed, one by one, and the respective effects noted with the utmost care and attention; and the results must then be compared with the events witnessed in actual practice.

We may imagine what is the precise condition of the brain and of the medulla oblongata, and indeed of the interior circulation generally, by carefully observing the congested state of the veins, and of the capillary vessels of the *face*.

We should also carefully examine the condition of the *bregma*, or fontanelle: it is concave, plane, or convex, affording an index to the condition of the circulation, or it may be effusion, within the cranium.

### § 13. *Sudden Dissolution.*

Sudden death may take us by surprise at *any* period of convulsive disease.

This event may be of two kinds: the first is asphyxia, from extreme laryngismus; the second is what I have designated secondary asphyxia, and probably arises from the circulation of blood imperfectly arterialized in the coronary arteries.

Extreme laryngismus may occur quite unexpectedly amongst the first symptoms, or in the midst of such general convulsive affection as may have repeatedly taken place, and passed off without such apparent danger. If but a slight strabismus, or a slight contraction of the finger, remain; or even if all symptoms have entirely disappeared, fatal laryngismus may still occur, taking us by surprise, all having appeared well and safe.

I do not think we have any means of judging *when* this event is more likely to take place than usual.

Our prognosis, therefore, however justly tinctured with hope, should always be most guarded, in this class of maladies; otherwise our judgment will assuredly be sometimes painfully called into question.

The prevalence of a north-east wind appears particularly apt to induce laryngismus in its extreme form; and in this manner several cases of sudden death have occurred in practice nearly at the same period of time.

A fit of passion is frequently the immediate cause of closure of the larynx, and of dissolution. And though I never knew so disastrous an event to occur, I have often feared lest it might take place during the use of the gum-lancet; and it is precisely the real danger of exciting a paroxysm of convulsive affection, which is the real, and I may add, the sole, objection to the use of this important remedy.

In reference to such an event, Capuron remarks,—"L'enfant a été réellement suffoqué." Dr. Johnson, of Dublin, saw "a child in a state of asphyxia, caused by this disease, recovered from apparent death by the instantaneous application of artificial respiration."

In the case of threatening of asphyxia, the remedy is—*instantly* to dash cold water on the face and other parts of the general surface. The further treatment, in general, is that for *asphyxia*, especially the institution of artificial respiration. The thorax and abdomen should be speedily compressed, and then be left to the force of resilience, in order that inspiration, however slight, may follow. Frictions of the limbs, with pressure, directed upwards, should be used energetically.

The douche, the attempt at artificial respiration, the frictions, should be repeated and pursued, however apparently ineffectual, with *perseverance*.

Tracheotomy was suggested by Dr. Hugh Ley, and it was successfully performed by Dr. Johnson, in this emergency. On learning this afterwards, Dr. Ley added the following note:—

"I have made no essential alteration in my statement, that the grounds upon which I was originally disposed to advocate the propriety of the operation may remain upon record, and as a proof of the value of well-conducted physiological experiments in illustrating pathological facts, and suggesting remedial expedients. It is a reply to the maudlin sensibility, with regard to such experiments, too prevalent at the present time."—*On Laryngismus Stridulus*, p. 273.

The case of sudden death, in this class of maladies, is, however, not always mere laryngeal asphyxia. It is sometimes, as I have already stated, of that kind which may be termed secondary, or cardiac, asphyxia—a condition which arises from the frequent partial closure of the larynx, and consequent partial asphyxia. The blood is then not sufficiently oxygenated or decarbonized; and as in *all* morbid conditions of the *blood*, there is still more sudden death than in the worst extreme forms of laryngismus. The poisoned blood acts on the fibres of the heart, destroying their irritability. Death is instantaneous, and I fear there is neither time, nor hope, for remedies. Arrested respirations leave a few minutes; arrested circulation, scarcely a moment.

Sir Benjamin Brodie mentioned a case to me in which sudden death had occurred in a case of tetanus, after all tetanic symptoms had disappeared. The patient had been in a bath, and was dressing, saying that he was quite well! What was the rationale of this sudden event? Was it exhausted excitability? Does the same principle hold in the convulsive diseases of infants?

### § 14. *The Diagnosis.*

The diagnosis in the convulsive diseases of children is—

1. That of the kind or *origin* of the disease, and especially that between the *centric* and *ex-centric* affection.

2. That of the *form* of the disease, and especially that of the different, partial, and general convulsive affections; for it may be so partial as to consist of one symptom only, as strabismus laryngismus, or it may be general, and frightfully convulse every part of the muscular system.

In the *centric* affection there are generally pain, and cerebra symptoms, such as affections of the sleep, temper, and senses—wakefulness, fretfulness, intolerance of light and noise, and a peculiar contraction of the brow—from the beginning.

In the *ex-centric* affection, there is, at the first, no cerebral symptom; all the phenomena are spinal: general convulsion must take place before cerebral symptoms are observed.

The diagnosis between that part of this affection designated laryngismus, and laryngitis, is founded on two circumstances: 1, the transitory character of the symptoms in the former, and its permanency in the latter; and 2, the complication of the former with strabismus, chirismus, and other convulsive or spasmodic affection.

The same principles of diagnosis distinguish spasmodic laryngismus from any paralytic influence or compression of the pneumogastric nerve on the larynx, in which case there may be other effects of paralysis of the pneumogastric nerve, especially accumulated secretion in the bronchial tubes and pulmonary tissue, leading to cough and various "*râles*." The reality and the unbiassed diagnosis of this form of disease are still to be ascertained.

Laryngismus induced by bronchitis, or any inflammatory affection of the trachea or larynx, acting as an irritant on the incident laryngeal nerves, would be distinguished by the same absence of other spasmodic affection.

§ 15. *Post-mortem Appearances.*

The post-mortem appearances depend entirely on the nature and course of the disease.

If the case be one of those rare instances of affection of the cerebrum or its membranes, leading to irritation or compression of the medulla oblongata, intra-cranial incident nerves, or the membranes in which certain of these are embedded, the morbid appearances will be such as are usually found in these cases. There will be *cerebral* symptoms.

In one case the medulla oblongata was distinctly indurated.

If there have been repeated violent convulsions or fits of pertussis, we shall perceive cerebral congestion or effusion, and with this probably tumefaction of the *thymus* gland.

But in those cases in which no repeated general convulsions had occurred, and in which the little patient had died suddenly perhaps, no marked appearances of the nervous centres may be detectible. The disease in this respect, as in so many others, resembles asphyxia, or tetanus.

The condition of the gums and alveolæ, of the stomach, of the intestines, of the lungs, the liver, the kidneys, should be carefully examined; but of the morbid appearances in these nothing is known.

§ 16. *Prevention and Treatment.*

I now come to the last and most important topic of my paper—the prevention and treatment of convulsive diseases; to which, indeed, the views which have been given immediately lead, and in the course of which they serve as a torch to enlighten our path.

The first thing to be accomplished by the physician, as in all other cases in practice, is a full and accurate diagnosis of the disease, its form, its simplicity, or complexity; its effects; and especially whether there has or has not occurred general convulsion.

If the case be one of centric origin, which is the more rare, the original disease must, of course, be treated energetically. If it be of ex-centric origin, or reflex, which is by far the more frequent case, the excitant or excitants, whatever these may be, must be carefully sought out, removed, and avoided.

But, *as a rule*, in *all* cases, the influence of *all* excitants, *all* excitants of emotion, of reflex action, must be absolutely removed. For even in the centric affection, it may be undue excitability only which is induced, and the *attacks* may depend upon external excitants.

The augmented arterial action within the gums and the alveolar processes, must be subdued by deep, diffused, and repeated scarification of the gums, conducted with every precaution, to avoid excitement of a mental kind.

The stomach should be emptied forthwith. This may frequently be readily done by irritating the fauces with a feather, or the finger; or a dose of ipecacuanha may be given; and then such diet should be administered, according to such rules, as may prevent the presence and delay of undigested matters in the stomach. A new and healthy nurse, or asses' milk, given by means of the bottle, are resources of the utmost moment.

The intestines should be promptly washed out by means of ample enemata of tepid water, and they should then be kept well relieved, gently free indeed, by means of mild but efficient, aperient medicine.

I have great reason to suspect the existence of undue *acidity*, not only in the stomach, but in the course of the intestinal tube, in those cases; and I strongly recommend *antacid* aperients, such as a combination of the bicarbonate of potassa, and the carbonate of magnesia, in the proportion of one-fourth and three-fourths, in some proper aromatic or aperient vehicle, and repeated so as to produce the double effect of neutralizing the gastric acid and moving the bowels.

The next object is, to guard the little patient against every injurious impression from the external atmosphere. When the north-east winds prevail, or the air is cold or damp, the patient's bed should be snrrounded, at intervals of about one foot, by *three* distinct curtains or tents of gauze, or of net; the air of the room should be protected from partial currents, be well supplied with hygrometric moisture, and be maintained at a temperature of 65° Fahr.

Every mental disturbance must be avoided; the approach of a stranger, the administration of the gum lancet, and, not less, of medicine or other remedies, must be managed as carefully as possible.

The *sleep* should be *watched;* if it be disturbed by dreaming or starting, the infant should be gently awakened, and any sudden noise or light should be avoided; precautions necessary, indeed, at all times.

As stammering would scarcely exist without emotion, so the convulsive diseases of infants and children, especially those of ex-centric origin, would scarcely exist without emotion and excitants of reflex action; an aphorism of the utmost moment in practice, and admitting of great extension; for, in this respect, with the affection under consideration, chorea, the paralysis agitans, tetanus, and even hydrophobia itself, may be ranked, in some degree.

If laryngismus should exist and be extreme, the larynx being closed, water must be forcibly sprinkled on the face: the larynx is opened by the new excitant acting on other nerves and muscles, and inspiration is excited.

If apparent asphyxia have taken place, and this measure have been tried in vain, artificial respiration should be attempted; the chest and abdomen should be compressed, and the pressure should be suddenly removed, (I once witnessed asphyxia from this cause in a puppy. I applied my ear so as to examine the beat of the heart; the pressure induced expiration, and inspiration followed on its removal, and the puppy recovered.) Or the lips of the practitioner should be applied to the mouth of the infant, whilst its nostrils are closed and its trachea pressed against the œsophagus: in a word, every measure should be adopted to which we have recourse in other cases of asphyxia.

If general convulsion be threatened, or have occurred, every precaution and measure should be adopted which can protect the cerebrum from congestion and its effects: the alcoholic lotion applied to the head, leeches, cupping, mercurials, and purgative medicines, fomentations and warmth applied to the feet, &c., must all be employed with promptitude and energy.

The secretions must be attended to—the bile, the urine, especially. If the former be deficient, the use of warm water enemata should be doubly enforced. If the urine be affected with lithate deposits, the antacid aperients must be doubly enjoined.

The hydrocyanic acid, hyoscyamus, &c., may also prove useful.

§ 17. *Conclusion.*

And now, Sir, I beg to draw this paper to its conclusion. If I have, in the course of my observations, vindicated the importance and necessity of physiology—experimental physiology—to the practical physician;—if I have shown the value of the recent investigations into the nervous system, in the investigation, diagnosis, and treatment of diseases, I have fully attained the object which I had proposed to myself, in bringing this paper before you and my fellow members of this Society, and I beg to thank you for your kind attention to its rather lengthy details.

I will conclude by adducing the words of one of the most logical and eloquent writers in the English language:

"In proportion as any branch of study leads to important and useful results—in proportion as it gains ground in public estimation—in proportion as it tends to overthrow prevailing errors,—in the same degree it may be expected to call forth angry declamation from those who are trying to despise what they will not" (or cannot) "learn, and wedded to prejudices which they cannot defend. Galileo would probably have escaped persecution if his discoveries could have been disproved, and his reasonings refuted. The same spirit which formerly consigned the too powerful disputant to the dungeon or the stake, is now, thank Heaven! compelled to vent itself in railing, which you need not more regard than the hiss of a serpent which has been deprived of its fangs."*

* Lectures on Political Economy, by R. Whateley, D.D., Archbishop of Dublin.

I know not what treatment could have induced the learned author to write these words; but I venture to affirm that it was not more iniquitous than that which has been inflicted on the THEORY—of *hypothesis* there is none—which has guided me throughout the discussion set forth in this paper, which may be viewed as a specimen of what may be done for the whole class of the diseases of the nervous system.

The best, the only reparation, must consist in the publication of such an Essay as the present one, in which the value and importance of the doctrine are shown in its practical application to pathology and therapeutics. That doctrine—the doctrine of the distinct spinal system;—of incident and reflex nerves, in special conjunction with their spinal centre—the excitor nature; the reflex form of its actions—the special organs and functions under its control;—that doctrine—the anatomy and the physiology of the spinal system, has, in effect, become pathology and therapeutics! The nerves, the actions, the functions involved, are the same in health and in disease; an experiment has been made to present the type of a malady, and to teach us what we ought to do to succour our patient, when in extreme suffering, and in the utmost peril!

All this is depicted—placed before the eye itself—in the admirable plates which, thanks to Mr. Simpson, of Stamford, accompany my New Memoir, published, that is, printed and calumniated, (*technically*, "written down,"—see the *British and Foreign Medical Review*,) in 1844, which does contain something new, something which neither the preceding Memoirs, nor any other preceding book whatever, contains. Such is the power of calumny—for, in this respect, I am compelled to differ from the eloquent author whose words I have last quoted—that this Memoir is as if it were unpublished! The serpent, slander, is *not* yet "deprived of its fangs," and it is cold-blooded and long-lived, as well as venemous. I can only repeat my conviction that there are, in that volume, principles which will lead to great improvement in our practice, rejecting calumnious reviews.

I have pursued experimental physiology. I have applied the results to the mitigation of human suffering. I only wish the profession to receive my offering *in good part*,—and, *to examine for themselves*.

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ON THE

# STRUCTURE AND FUNCTIONS OF THE SYMPATHETIC NERVOUS SYSTEM,

AS DISTINCT FROM, AND INDEPENDENT OF,

# THE CEREBRO-SPINAL SYSTEM.

By T. SNOW BECK, Esq., M.R.C.S.E.

In a paper "On the Nerves of the Uterus," published in the *Philosophical Transactions* for 1846, I endeavoured to show, by anatomical details, that the organic fibres of Remak are true nervous fibres; that these organic or gelatinous fibres form a system of themselves, and constitute the true sympathetic system; that this system of gelatinous fibres is distinct in its anatomy, and, consequently, in its function, from the tubular or cerebro-spinal nervous fibres; that the tubular fibres are *all* derived from the brain and spinal cord, and that the gelatinous fibres take their origin from the ganglionic corpuscles of the different ganglia of the sympathetic; that although these two systems are frequently associated together, yet by careful manipulation they can be separated and are still distinct; that this association does not exist in the entire length of their course, but only in the middle portion, the two systems being separate from each other at their origin and at their ultimate distribution; that the complex plexuses in the abdomen and pelvis derive their complexity from the mixing and arranging of the fibres of each system in the due proportion previous to being distributed to an organ; that the amount of tubular fibres distributed to an organ was in direct proportion to the mental influence we were enabled to exercise over that organ; that those organs over which we could exert but a small amount of mental influence receive but few tubular fibres, and a large proportion of gelatinous fibres; and that the nerves distributed to the uterus are composed of a large proportion of gelatinous fibres, with a small quantity of tubular fibres; whilst those sent to the bladder and vagina contain a much larger proportion of tubular fibres; and those distributed to the skin and muscles of the perinæum are formed almost entirely of the tubular fibres, with a small amount of the gelatinous fibres.

I also endeavoured to show, anatomically, that the white cord communicating between the spinal and sympathetic nerves was not a root of the sympathetic nerve, but a branch of the spinal nerve sent inwards to be distributed to the viscera; that this internal branch of the spinal nerve was constituted similarly to other spinal nerves—viz., of tubular fibres derived from the anterior and posterior roots of the spinal nerves in equal proportions; that the grey cord between the spinal and sympathetic nerves is not a root of the sympathetic, but a branch proceeding from the posterior part of the ganglion, and chiefly distributed to the parts in the neighbourhood; that this grey cord is formed in a similar manner to other branches of the sympathetic—viz., of a large proportion of the gelatinous nervous fibre with a small quantity of the tubular fibre; that the splanchnic nerves are chiefly formed by the union of the internal branches of the intercostal nerves in their course of distribution to the viscera, and consequently could not be considered branches of the sympathetic properly so called; that the splanchnic nerves also contain a portion of gelatinous fibre derived from the thoracic ganglion of the sympathetic, but that these fibres are distinct from the tubular fibres although associated with them.

These anatomical details were unaccompanied by any physiological deductions, from the feeling that it was better to describe them as facts unencumbered by any arguments or theories, as the latter would readily follow if the anatomy was found to be correct. At the same time, the direct tendency of the details in question was to offer evidence of the existence of two distinct systems of nerves—"one composed of gelatinous nervous fibres having their origin at the different sympathetic ganglia; the other composed of tubular nervous fibres which arise in the brain and spinal cord;" each of these systems having their distinct physiological acts, and being subject to their distinct diseases.

From the intimate manner in which these two systems of nerves are associated together in the larger branches sent to the viscera; and from one system in its ultimate distribution to an organ becoming separated from the other, *i. e.* from the gelatinous fibre previous to its ultimate distribution becoming entirely separated from the tubular fibre; and, further, from the proportions of tubular and gelatinous fibre sent to an organ varying with the psychical influence we are enabled to exercise over that organ,—it is evident that their reciprocal influence upon each other must be considerable, that their separate physiological acts will be very difficult to trace; that the influence which each exerts in any disease must be equally difficult to appreciate; and that these difficulties will be increased by the varying proportion of tubular and gelatinous fibre which the different organs receive. However, it is not my intention to enter fully upon the discussion of these complicated questions at the present time, nor would I now have brought the subject forward, but for the very interesting and remarkable results which have followed the inhaling of ether during parturition, which results appear to admit of a ready explanation by considering the foregoing anatomical details. By means of the ether, the intimate association of these two nervous systems appears, as it were, to be decomposed, and the functions of each to be made manifest; the functions of the tubular or cerebro-spinal systems are placed in complete abeyance, whilst the functions of the gelatinous or sympathetic systems continue without alteration. But as it would be impossible, in this paper, to consider this action as applied to all the organs, I will chiefly confine myself to an inquiry, into its effects on the uterus.

In this country, perhaps the most generally received opinion of the action of the uterus is, that the contraction of the organ is caused by the reflex function of the spinal cord. It is supposed, that the incident or afferent nerves distributed on the uterus receive an impression which is conveyed by the spinal cord; and that a motor influence is sent from thence along the reflex or afferent nerves to the organ, and causes the contraction: this motor influence being propagated without the consent or knowledge of the individual. In support of this opinion, cases are quoted in which the fœtus was expelled after the respiration of the mother had ceased; and other cases are also brought forward, in which the action of the uterus continued unimpaired, although the female was afflicted with paraplegia. M. Ollivier mentions an instance of this disease, in which the parturition took place "tout à coup," and with so little pain to the mother, that she was only aware of the fact by the subsidence of the tumour in the abdomen, and the cries of the child, which were strong, and the child full-grown. M. Brachet mentions another case, in which he says, "I knew a lady who was the mother of three children, and who became paraplegic: the loss of sensation was com-

plete as high as above the pubis; the sensation during coïtion was lost, yet she became with child for the fourth time. At the end of nine months parturition appeared to commence; but in so vague a manner, that she only suspected it by the date of her pregnancy. The uterus could scarcely be felt to contract when the hand was applied to the abdomen, and there was no pain whatever. By the touch I recognised the same tension of the uterus, the orifice of which was open, and of a remarkable softness; the secretion of mucus was abundant. I left the parturition to nature for twenty-four hours, yet it did not progress. This lady, who had been very quick in her last two confinements, wished to have this finished, from the feeling that she would not be able to complete it without assistance. By some titillations of the neck of the uterus I endeavoured to provoke the contractions, but without effect; the soft organ admitted of being so much distended in every direction, that the orifice was completely dilated. The head of the child presented naturally. I pierced the membranes, and the water escaped by the contraction of the uterus; the head descended, and engaged in the superior aperture of the pelvis, from which it did not move. I endeavoured, during two hours, to produce a natural parturition, by titillating and piercing the uterus; but in vain; the contractions did not come on. With the forceps I succeeded in extracting a full-grown, living child. The uterus contracted slowly upon itself. During more than an hour I made frequent frictions, (on the abdomen,) but in vain, to produce the expulsion of the placenta, and was obliged to introduce the hand to remove it. It was only with an extreme degree of slowness that the uterus gained its ordinary volume."

In remarking upon these two cases, in one of which the action of the uterus was brisk and strong, whilst in the other it is considered slow and feeble, Dr. Marshall Hall says, "I may now ask, how are we to explain the discrepancy between the facts—apparently similar—observed? I think it probable, that as in the case detailed by M. Ollivier was *above* the origin of the cauda equina; and that of M. Brachet it was seated *below* that origin. In the latter case, the cerebral or connecting link between the incident and reflex nerves would be wanting, and the reflex functions would consequently cease!" Now, granting this supposition to be correct, and that in M. Brachet's case the reflex functions had ceased, how, then, are we to explain the action of the uterus? for, it continued, the child was born, the uterus contracted, and the woman did well. Even with this view of the seat of the disease there must have been some other influence in operation to produce the contractions of the uterus, for the reflex function is supposed to have ceased. To this it may be replied, the influence was small; the action of the uterus was slow, feeble, and imperfect, and incapable of expelling the child. But although this is assumed, there does not appear to be sufficient evidence that it was so. The lady only suspected she was in labour, from the date of her pregnancy—a most uncertain mode of judging. This, however, was confirmed by the tension of the uterus, felt when the hand was applied to the abdomen; also when examination was made per vaginam, by the orifice of the uterus being open, and by an abundant mucous secretion. Yet every practical accoucheur knows that this condition frequently precedes natural labour in a healthy woman for some days, and that these symptoms are only evidence of the premonitory stage of labour. And when we add to this that, from the wish of the patient, they only waited twenty-six hours for the occurrence of forcing pains, we may fairly question whether they waited long enough; or whether it was not a case which was hurried in consequence of mistaken data; but which, if left to itself, would have terminated without assistance. There does not appear to be any sufficient evidence to prove that the uterus was unequal to complete the expulsion of the fœtus, had they waited the time of many ordinary labours; whilst the absence of hæmorrhage, and other untoward symptoms, sufficiently show that contractions did take place.

We may thus reasonably doubt that this case affords any additional facts to the former—viz., that the action of the uterus can take place, and the expulsion of the fœtus be effected, without any pain to, or any cognizance of, the mother. Still it may be argued that the supposition as to the seat of the disease was incorrect, and that the disease being seated higher in the spinal cord, a small portion of it was healthy, and that the reflex actions took place through the small healthy portion. However problematical this might appear, there was no satisfactory evidence, until lately, to show that such reasoning would not apply. In many of the recent cases in which the inhaling of ether has been employed to relieve the pain of operations in midwifery, the whole of the functions of the brain and spinal cord, including also the reflex functions, have been annihilated for a time, and yet the action of the uterus went on as regularly and as vigorously as if all the functions of the nervous system were in full force. The eye becomes fixed; there is complete insensibility to pain; no reflex actions of the limbs occur; the muscles of the perinæum are in a very flaccid state, and offer no resistance to the birth of the child. In a word, all the most obvious reflex actions are in abeyance, and yet the contractions of the uterus goes on unimpaired. Such being the case, we cannot suppose that the reflex actions of the uterus alone continue, when all the most obvious reflex actions are annihilated. We must conclude that the action of the uterus depends on some other influence than that of the spinal cord.

Since the above was written, I have seen the following observations by Professor Paul Dubois, (The Lancet, March, 1847:) "The second question which presents itself for our examination is—Can the inhalation of ether suspend the physiological pain attending natural labour? and can it suspend the contractions of the uterus and abdominal muscles?"

These questions are not only of a vast experimental and physiological import, but they give rise to practical views, the value of which no one will be tempted to doubt.

The physiological point of the question is, to ascertain whether the stupifying action of ether on the cerebro-spinal axis, and the paralysis of the muscular system under the dependence of the latter, will extend or not to the uterine parietes. At this period, the question of uterine innervation is still an unsolved problem. Scientifically speaking, it stands thus:—The uterus receives its nerves, perhaps exclusively, according to Dr. Longet, from the system of the sympatheticus maximus nerve, on which, however, the spinal cord may bear certain influence, arising from the communications between the two, that an application of the forceps became necessary to help labour at a moment when the dilatation of the orifice could allow the operation to be performed without danger. Now, I will only say this, that if, in the alleged case, the orifice was dilated, that dilatation could not have taken place by any cause, but from the sole influence of the uterine contraction."

Professor Dubois further observes: "I must here subjoin a fact I have commonly observed throughout my researches on the action of ether in those special cases; it is the extreme apparent laxity induced in the muscular layers of the perinæum. With primiparæ even dilatation of these parts has been so rapid, that in those cases where parturition took place during the state of insensibility, the duration of which never exceeded fifteen minutes, the expulsion of the child has been painless; and we must note as worthy of notice, that one of these women bore a child weighing eight pounds, and that in her case, the perinæum was not damaged in the slightest degree. I must also make the important remark, that after delivery, the uterus in all the cases has constantly and immediately resumed the firm contracted state of its retracted parietes."

Professor Simpson remarks,—"In obstetric, as in surgical practice, the degree of insensibility produced by etherization, and its accompanying phenomena, differ much in different instances. In some a state of total apathy and insensibility seems to be produced; others move about, and complain more or less loudly during the uterine contractions, although afterwards, when restored to a state of common consciousness, they have no recollection of any suffering whatever, or, indeed, of anything that had occurred during the inhalation and action of the ether; others, again, remain quite quiet, and conscious of what is going on around them, and watch the recurrence of the uterine contractions, but feel indifferent to their effects, and not in any degree distressed by their presence; and in another class, the attendant suffering is merely more or less diminished and obtruded, without being perfectly cancelled and annulled." "Yet in all of them the uterine contractions continued as regular in their recurrence and duration as before the inhalation had begun."

From these facts I think we are justified in concluding—1. That the action of the ether is upon the cerebro-spinal nervous system. 2. That the reflex functions, in common with the other functions of the cerebro-spinal axis, is in abeyance. 3. That the action of the uterus continues unimpaired; and, consequently, 4. That the action of the uterus must depend upon some other influence than that of the cerebro-spinal system.

As I have already remarked, I have endeavoured, by anatomical details, to show the existence of two distinct systems of nerves—distinct at their origin—distinct at their termination, although associated together in varying propor-

tions in the tracts between their origin and termination. One of these systems being marked by the tubular nervous fibre—the cerebro-spinal system; the other being marked by the gelatinous nervous fibre—the sympathetic system. I have also endeavoured to show that the latter system furnishes "the chief part of the nerves supplied to the uterus. Although some tubular fibres accompany the gelatinous fibre from the hypogastric plexus, and are found in the uterine nerves, yet they are few in number, and appear to be far from forming the essential element of the nerves supplied to this organ." These anatomical inquiries agreeing in a remarkable manner with the results of clinical observation, and with the cases in which ether has been inhaled, appear to have no doubt that the uterine nerves are essentially derived from the gelatinous or sympathetic system. The small amount of tubular fibres derived from the cerebro-spinal system, which is found in these nerves, sufficiently accounts for the small amount of psychical influence which can be exerted over the organ, for the effect which is produced by mental emotions, and for the pain which is experienced during parturition. For if we could suppose a part which was exclusively supplied with the gelatinous fibre, then would we be unconscious of any actions which were going on in that part. The tubular fibres being apparently the only means by which a knowledge of what is passing in the body is communicated to the mind, so are they likewise the only means by which the feeling of pain is transmitted. Hence, according to the amount of tubular fibre contained in any nerve, so is the organ which it supplies subservient to psychical influence. This constitution of the nerves also explains the action of the ether, which, by paralyzing the cerebro-spinal centres, prevents all perception of pain which might be communicated to them by the tubular nerves; whilst it allows the gelatinous fibres to perform their proper function undisturbed.

The constitution of the uterine nerves being similar to the constitution of the nerves of the kidneys, liver, intestines, &c., it has been asked,—How is the difference in their functions explained? But I apprehend the difference to be more apparent than real. Whilst the functions of the uterus are more liable to disorder than the functions of other organs, still, when performed in a healthy manner, they are as little perceptible to the individual as the functions of the kidneys, of the intestines, &c. And it is only when disordered that they become objects of attention, but not more so than when either the kidneys or intestines are disordered. Even the pain experienced during parturition is not proportionally greater—i. e., if the relative bulk of the organs, and the amount of nervous fibre engaged in the process, be considered, than when the kidneys or intestines are attacked with painful affections. Nor does it differ in character from the pain experienced during the passage of a renal or biliary calculus—the pain of each ceasing as soon as the cause producing it is expelled.

Now, whether we appeal to minute anatomy, to physiological experiments, or to clinical observation, we will, I think, find that each and all will lead us to the same conclusion—viz., that the different viscera receive their nervous supply from a system of nerves, which, with the various ganglia from which they take their origin, form a system distinct from, and independent of, the cerebro-spinal system; and that the modifications of function which are observed in the different viscera, are clearly to be traced to the varying proportions of tubular fibres which they receive, associated with the gelatinous fibres. It is right, however, to mention, that most of the physiological experiments on the sympathetic system must be taken with great exceptions. They have been chiefly performed on the splanchnic nerves, which are essentially branches of the spinal nerves; on the cord communicating between the ganglia, which is composed of part tubular fibres from the cerebro-spinal system, and part gelatinous fibres from the sympathetic system; or upon the larger ganglia, which are collections of ganglionic corpuscles giving origin to the gelatinous fibre, and through which run tubular fibres from the cerebro-spinal system, and which, if irritated, will act in the same manner as spinal nerves. To these same sources of error must be attributed most of the opposite results which different experimenters have arrived at. In experimenting upon these different parts of the sympathetic, without taking into consideration its compound structure, some have been operating on the tubular fibre, and have obtained decided results, as in experimenting on the spinal nerves; others have been operating on the gelatinous fibre, and have obtained comparatively no results; but which is to be explained by reference to the different degree of excitability of the different fibres to the stimuli which was applied to them.

I need scarcely remark, in conclusion, that if this be the correct anatomy and physiology of the nervous systems, it will not only greatly modify our knowledge of nervous diseases, but exert a very marked influence over pathology in general.

Upper Marylebone-street, Portland-place.

# Original Contributions to The Lancet in Abstract.

## SURGERY—MATERIA MEDICA.

### *Oxide of Silver.*

Mr. Pedler, of Fleet-street, states that one of his assistants, in making a box of pills, each containing half a grain of the oxide of silver, with confection of roses, found it explode with great force whilst mixing on a slab—the shop being instantly filled with vapour, similar to that produced by the explosion of gunpowder. He expresses his belief that a similar result would attend its combination with any essential oil, and suggests that it should be ordered in combination with compound tragacanth powder, and aromatic confection, in powder.

Dr. Butler Lane, by whom the oxide of silver was originally introduced to the profession as a remedial agent, and to whom we have submitted Mr. Pedler's communication, expresses his fear that the oxide was not genuine, as he does not find that his preparation occasions any explosive result when mixed with confection of roses, though certainly a slow chemical action takes place, and the combination is injudicious. Oxide of silver should never be combined with any of the essential oils, for double decomposition is sure to ensue—the tendency of the oxygen and hydrogen to form water overcoming the slighter affinity which obtains between the oxygen and the silver on the one hand, and the hydrogen and the carbon of the oil on the other. The formula which Dr. B. Lane recommends for the preparation of the oxide of silver is as follows:—Dissolve four parts of the nitrate of silver in distilled water, and rather more than two parts of the hydrate of potash in a separate quantity, freeing it by filtration from the oxide of iron and other impurities. Mix, and let it stand for an hour, stirring frequently with a glass rod. The supernatant liquid will be a solution of nitrate of potash, the freedom of which from nitrate of silver may be ascertained by the taste, or by testing with hydrochloric acid, showing that complete decomposition has been effected—otherwise more solution of potash should be added. The fluid is then to be poured off, and the precipitated oxide of silver washed repeatedly with distilled water, until it is perfectly clear, and quite devoid of taste and alkaline reaction. The precipitated oxide is then to be drained on filtering paper, and thoroughly dried at a temperature of about 130° Fahrenheit.

### *Strangulated Inguinal Hernia.*

A Looker-on somewhat sharply criticises the details of Mr. Brown's case of strangulated inguinal hernia in the female, recently published in The Lancet. The first objection that he raises is to the description of the disease as inguinal hernia, it not having been stated whether it was direct or indirect; and then to the situation of the first incision, which is said to have been commenced an inch and a half above the ring, it being uncertain whether the internal or external abdominal ring was meant. The latter Looker-on supposes to have been intended; as, if the incision commenced about an inch and a half above the internal ring, its extent would have been unwarranted. The description of the extent, situation, and depth of the first incision he considers to be very loosely given, so that its absolute length, and the nature of the parts divided, cannot be clearly ascertained. The principal objection, however, which a Looker-on urges against Mr. Brown has reference to that portion of the operative proceedings in which the division of the adhesions between the intestine and the omentum, and the division of the stricture, were effected. A Looker-on first quotes Mr. Brown's description of the operation, as given in The Lancet, as follows:—

"'The fasciæ being divided exposed the hernial sac, which exhibited considerable vascularity, and was of a very dark-brown colour. As the hernia had existed so long, I anticipated there would be plenty of adhesions, and some difficulty in destroying them. I therefore did not think it prudent to divide the sac in its whole length, nor would it have been wise to have unnecessarily extended the incision over so large a portion of serous surface. A small opening was made immediately below the ring; but I could neither introduce the director nor my finger-nail beneath the stricture, intending,

as I have invariably done in an operation of this kind, to have divided the stricture directly upwards; so extensive and firm were the adhesions, that every attempt here was fruitless. The only alternative I had left was carefully to dissect and divide the stricture from without. So numerous however were the membranous bands crossing and intersecting each other, duplicatures having been formed between the protruded bowel and omentum, and so strongly were they all glued together, that whilst one of these remained undivided and undetached, the strangulation was not relieved, nor could the contents of the sac be returned;'" and then observes, "It would appear from this, that the first incision divided not only the skin, integument, adipose tissue, but also the several layers of fasciæ, thereby at once exposing the sac—a bold commencement certainly, and likely to be attended with the most fatal results, if universally adopted."

The reason assigned by Mr. Brown for not opening the sac in its whole length, on account of the extensive adhesions, is considered to be unsatisfactory by a Looker-on, who asks, "Would not these adhesions &c. have been more easily separated after a free incision in the sac? Would it not also have prevented unnecessary manipulation, as well as relieve the sac itself? Would it not, moreover, have given more free escape to any collections of fluid which might be present, or result from mischief which had been produced? We are further not informed if the omentum and intestine were adherent to the sac; nor do we know whether the sac was opened by the 'small opening made immediately below the ring;' and if the sac was not opened, how could the membranous bands &c. be discovered satisfactorily? It does not clearly appear that the extensive and firm adhesions between the intestine and omentum below, or even at the upper part of the sac, would be an effectual barrier to dividing the stricture at the internal ring, or in the canal, where the lower border of the internal oblique and transversalis muscles cross it; or even, which is much less frequent, if situated at the external ring; the stricture might be divided without opening the sac at any of these places." This a Looker-on says he conceives "to be the motive in dividing the stricture external to the sac, in order to obviate wounding the serous covering. Still this mode of operation would of course not relieve the strangulation in Mr. Brown's case, which was owing to the adhesions of the contents of the sac in the lower part."

## MEDICAL POLITICS.

### *Medical Registration Bill.*

Mr. Dunn, of Wakefield, while commending the several clauses of the Medical Registration Bill, takes occasion to draw attention to the injury inflicted on the profession by the club-system, and also mentions that several medical men in his neighbourhood meet and consult with bonesetters and other unqualified practitioners.

Mr. Illingworth objects to the admission, under the Medical Registration Bill, of those gentlemen who possess only the diploma of the R.C.S. to the enjoyment of equal privileges with the practitioner who also holds the licence of the Society of Apothecaries. He objects to the mere M.R.C.S., that he is, in the majority of instances, not possessed of the requisite medical knowledge for general practice, and contends that those only who have attended the requisite lectures &c. qualifying for examination at the Hall, should have the benefit of being included in the registration. Any other proceeding he considers would be unfair and objectionable.

### *The Apothecaries' Society and Unqualified Practitioners.*

A Licentiate of the Apothecaries' Company states that during the last three months he has made three several applications to the Company to prosecute an unqualified practitioner in his neighbourhood, to none of which has any answer been returned.

### *The City Drug Guild.*

We have received from Aliquis a very long letter, tending to show, that the power of licensing medical men to practise enjoyed by the Society of Apothecaries, has led to the system of charging for medicines, and not for professional assistance. He points out the notorious fact, that the charge of so much per draught, pill, or bolus, is essentially a false one; inasmuch as the market-price of the medicine is far below the charge price, which is intended to cover the requisite remuneration for professional assistance.

[The root of the mischief lies more deeply than in the foundation of the Society of Apothecaries. The custom existed before 1815; and were that Society to be destroyed at once, the charging for medicines instead of for professional advice would still exist. Patients ought to be instructed in the relative advantages and disadvantages of the two plans. Were this fairly and properly done, the ultimate decision cannot be doubted for a moment. In this respect a great change is even now gradually being effected; and because the change is gradual and steady, we have the more hope it will be permanent. It must, however, be borne in mind, that the public is a many-headed monster; and to influence it in this respect throughout the length and breadth of the land, will require the exercise of unrivalled patience and perseverance on the part of every individual practitioner; even then it is not impossible that the present generation must pass away before the alteration can be finally regarded as secured.]

### *Medical Men not Gentlemen.*

Mastigia states, as the result of his experience after twenty years' servitude as an assistant, that the majority of medical men do not treat their assistants in a gentlemanly manner, and that they are generally illiterate; and he refers this condition principally to the clause in the Apothecaries' Act requiring a lengthened apprenticeship. We fear Mastigia has been unfortunate in his employers; we are sure that the stigma he casts on the body of general practitioners is undeserved.

### *Medical Reform.*

Dr. Florance, late chief surgeon to a military hospital, after briefly detailing several instances of malapraxis, suggests that, "to abate this evil, an inspector be appointed in every district to inspect the cases; and over every patient's head, as in our military hospitals, should be a printed paper or form, where the medical attendant should specify the disease and treatment; and it should be enacted on every serious case of illness, that the patient should apprise the medical inspector; the latter to have the power to summon the practitioner before a competent jury, for any glaring case of incapacity, and they should have the power 'to strike him off the rolls.' If he practised afterwards, and was again guilty of maltreatment, the punishment should be transportation for seven years: thus making the physician, surgeon, and apothecary amenable to justice. With regard to the chemist, if any prescription were wilfully, or from incapacity, unfaithfully prepared, subject to the first glaring offence, to be summoned before a jury, and subjected to a heavy fine. After repeated instances of incapacity, carelessness, or dishonesty, by using adulterated drugs, &c., he should be struck off the rolls, and if convicted afterwards, sentenced to transportation."

*** Dr. Florance's scheme is Utopian in every sense of the word.

## Reviews.

*Thoughts on the Nature and Treatment of Several Severe Diseases of the Human Body.* By Edward J. Seymour, M.D., F.R.S., late Physician to St. George's Hospital. Vol. I. London: Longman and Co. 1847. pp. 260.

The subjects handled in the present volume are, Diseases of the Stomach, Gout, Mental Derangement, and Sciatica. The author states the object of his published "Thoughts" to be essentially practical. He says he placed himself, at their commencement, in the position of the student or young practitioner, and asked what would they wish to know upon the subjects he intended to enter upon? The book is the answer Dr. Seymour has written to this self-imposed question. As regards style, the reading is extremely easy and agreeable; there is the mixture of the classical and clinical, quotation and pathology, anecdote and therapeutics, repartee and prescription, which the elder physicians of the present day chiefly delight in, when they publish their lucubrations.

Under the head of Diseases of the Stomach, Dr. Seymour treats first of gastralgia, from the undue secretion of hydrocloric acid, with its treatment by antacids, the trisnitrate of bismuth, hydrocyanic acid, and aperients. He then passes to pyrosis, or over-secretion of fluid from the stomach, in which he advises, in the simpler forms, kino with chalk, premising

that, in severe cases, the epigastrium should be examined for fungoid disease of the stomach. Epigastric pain, from gall-stone, is next adverted to, and is followed by a detail of several cases of ulceration of the stomach, in the bleeding from which, we regret to say, a quack nostrum, Ruspini's styptic, is mentioned approvingly. The vomiting of hysteria, of phthisis pulmonalis, of pregnancy, of the iliac passion, or reversed peristaltic action of the whole intestinal canal, of tuberculated deposit in the peritonæum, of chronic dilatation of the stomach, of calculus in the ureter, of cholera, is described, and worked up with much able observation respecting diet, and the simulation of disease in hysteria. Acute and chronic inflammation, with the influence excited by Broussaism, on this department of medicine, are briefly described. In speaking of softening of the stomach, the hydrocephaloid disease of children is adverted to. Dr. Seymour suspects that this disease is that adverted to by Cruveilhier, as the softening of the mucous lining of the stomach, which occurs in infancy. He says:—

"I may be permitted to observe, that all these symptoms (mucous or bilious vomiting, burning thirst, sudden loss of strength, rapid emaciation, contracted features, dozing, interrupted by cries, slow pulse, cold extremities, &c.) accompany the very serious bowel complaints of infants, which used to be comprised under the name of weaning-brash. In such cases there is constant discharge of a pale-coloured fluid from the bowels, with a faint smell, resembling that of a poultry-yard. The little patient, in twenty-four hours from the commencement of the attack, becomes from a moderate plumpness like an aged creature. The thirst is incessant, and if the disease be not cured, the child dies with symptoms of what used to be considered effusion into the brain. It occurs principally in weakly children, ill nursed, or ill fed. This case has been *well*, and I think *first well*, described many years ago by Dr. M. Hall."—p. 68.

On the causes of softening of the stomach, Dr. Seymour does not offer a decided opinion.

In Gout, Dr. Seymour, from his practice among the richer classes, has evidently had a large experience, and after the one hundred and twenty English treatises upon it, considers he can still say something towards the re-arrangement of our knowledge upon this subject, and the rationale of treatment. We quote a very acute remark concerning the philosophy of remedies, their reviving and declining in different ages, as one which tends to promote respect, even for the vicissitudes of therapeutics:—

"If, in the course of two thousand years, remedies, especially from the vegetable kingdom, (which in such a space of time has undergone no alteration,) have been recommended by the wisest of their day, have fallen into disrepute, buried or forgotten, have again been revived and used with great advantage, and perhaps this has happened a third time; such a confirmation of their utility in different ages, under different theories, and in the habits of different nations, ought to make them acquire a greater stamp of value, rather than the contempt attributed to implements invented in an early and a savage state."—p. 74.

The English and French theories of gout are clearly presented to us, the former referring gout to suppressed and vitiated secretions of the stomach and liver, and the formation of an acid in the blood; the latter, to over-nutrition, and a determination of nutrition, amounting, at length, to irritation and inflammation, towards the articular tissues. The attacks of regular and irregular gout are admirably described, and we have no doubt our readers will be interested in the following history of the resuscitation of colchicum, as a remedy for the disease:—

"The attention of the public and the profession has been greatly occupied since the year 1810 by the resuscitation of colchicum from oblivion, at first as a secret.

"In that year a magistral or quack medicine was introduced from France, entitled the "Eau Medicinale d'Husson." Each bottle contained three doses, and it was recommended to take the third of a bottle for three successive doses,* at the end of which time the gout was gone, and wonderful stories were told of the success. Persons much afflicted with gout purchased the medicine, and reasoning about medicine as mankind without medical knowledge usually does, conceived that if a third of a bottle did such wonders, a half or whole bottle would do as much more; and under such reasoning and practice some serious accidents happened; violent purging and vomiting came on, and in one or two instances of aged persons death ensued. Anxious to discover the ingredients of undoubtedly a powerful medicine, various experiments were made. An imitation by Mr. James Moore, of Conduit-street, seemed to produce similar effects both of cure and severity.

"The base of his preparation was the root of the Veratrum album, which by some was confidently believed to be the active element in the Eau Medicinale. The Eau Medicinale, when taken moderately, produced no effect except gentle purging, with great and almost immediate relief from pain, and undoubtedly both then and now shortens the fit; in an over-dose, violent vomiting and purging were produced, and if not immediately left off, life itself was at stake. A rumour speedily was diffused that the Eau Medicinale was the vinous tincture of the root or cormus of the colchicum autumnale or meadow crocus—a plant blooming in the autumn in very wet meadows, a purple crocus.

"In France, near the town of Sedan, these plants grew in abundance, and for several successive years were found to disappear in a single night, or more probably in several successive nights. Curiosity induced people to watch, and the roots were traced to a shop in Paris, where the Eau Medicinale was manufactured.

"Dr. Perkins, of Coventry, said that the late Count of Leinengen, who suffered for many years from gout, considered himself to have been cured by taking the Eau Medicinale, and gave the recipe for its composition to Dr. Perkins. This was a vinous tincture of the root of the gratiola officinalis, which has since, it is said, been found to contain veratria.

"A very unjustifiable trick, even for the sake of science, put the dispute at an end in this country. A man (who, I believe, was employed) found his way into the kitchen in the Haymarket, where the medicine was made, its use having become general, and returned with the roots of the colchicum autumnale.

"From this time the dispute of identity seems to have been at an end, as to colchicum being the base of the Eau Medicinale; but a new controversy arose.

"It was found that at last little new had been effected by recommending the tincture, or vinous infusion or root in powder of the colchicum, in gout; that this plant existed in Greek physic under the name of hermodactyls; that the description of its effects exactly tallied with those given by one of the most eminent physicians of the lower empire—a physician of the fourth century, Alexander Trallianus.*

"In other Greek works on medicine, especially those which had been translated from the Arabic, hermodactyls were termed theriaca articulorum, or the opiate of the joints, or anima articulorum; and the efficacy of colchicum in various forms, in pain, swelling, and effusion in the joints, independent of gout, is now fully recognised. But are hermodactyls, as mentioned by these persons, a species of colchicum? Dr. Hooper, no mean botanist, says hermodactyls were the bulb, or cormus, or prepared from the bulb of the colchicum illyricum, Linn.

"The late Sir Henry Halford caused a purchase to be made at the Bazaar of Constantinople, a few years ago, of hermodactyls. The result was, a collection of bulbs undoubtedly of the genus colchicum.† These facts are in my mind quite convincing of the identity of the two medicines."—pp. 88—91.

Colchicum, cautiously but pertinaciously administered, is Dr. Seymour's great reliance in gout; the points to be avoided in its administration are, vomiting and sharp purging; the bowels are to be kept in a lax state; excessive pain is to be soothed by opiates; and fever allayed by antimonials. In this

"* On three successive evenings, or at night, the morning, and the following night. The first was the most frequently recommended plan."

"* Speaking of persons affected with gout, he says:—'Bibunt autem non-nulli etiam id quod vocatur ὄξα ερμοδακτύλου ajuntque doloris levationem unde fieri, dum et ventre quædam aquosa evacuat, ut etiam ægri statim inambulare velint. Atque hoc est verum, raroque id quod titulo promittit, non evenit sed habit aliquid quod offendit, quoniam effecit ut ii qui bibunt crebrius fluxione irritentur.'

"To obviate this, warm medicines are recommended to be added, as cummin, mastich, and ginger.—Alexander Trallianus de arte Medica, vol. ii. p. 103.—Lausaune."

"† These specimens are, I believe, in the collection of Materia Medica in King's College, London: two specimens given to me by Sir H. Halford are in the Museum of St. George's Hospital."

way, the author would conduct the patient through the ordinary fit. In the intervals, he advises small doses of colchicum, or a ptisan of arctium lappa, the bardana of the French. The good effects of moxas, in the case of Sir W. Temple, and in a patient of Van Swieting, are referred to, and Dr. Seymour then raises the question—Is the English practice of omitting local applications, right? The oiled-silk glove, (the celebrated bootikin of Sir. R. Walpole,) the cabbage-leaf of Sir M. Tierney, mineral waters, and chalk stones, are referred to in rather a cursory manner. Dr. Seymour properly observes, that if all the phenomena in the production of gouty chalk-stones could be traced, we should go near to discover the proximate cause of gout. In the miscellaneous treatment, the benzoate of ammonia or potash, as recommended by Mr. Ure, is well spoken of, the theory being, that hippuric is substituted for the uric acid, and that the salts formed are soluble, and pass readily from the system. Dr. Seymour has also seen the albumen in albuminous urine, in gouty subjects, diminish under the use of the benzoate of ammonia. Judicious remarks are made on the old purifiers of the blood—horseradish, scurvygrass, &c., the Portland powder, centaury, chamæpytis, sulphur, the Chelsea pensioner gout powder, and other magistral preparations. Cold water and hydropathy next come to be considered. We approve of many of the stringent remarks made by Dr. Seymour on these topics, but we decidedly protest against the monstrous sentence which politely admits, that "M. Priessnitz, in Germany, has become the head of a new sect of *medical philosophers*." We expect no less than to see the sentence used forthwith as an advertisement by those whom we prefer to call the hydropathic quacks. In concluding our remarks on the chapter on gout, we must pronounce that it contains a great deal of desultory but suggestive information; but empiricisms, theories, constitutional and local modes of treatment, are flirted with rather than boldly met and grappled. Dr. Seymour says, in his last paragraph, that his design in composing these "Thoughts" is, "to make others think also;" as though *he* would not have exhausted the subject, even had that been possible.

The most laborious essay of the volume is the next—that on mental derangement, a subject upon which the author, as enjoying considerable practice in this department, and as having been one of the metropolitan commissioners of lunacy, is entitled to speak with some authority. The variety of derangement chiefly treated of is the melancholic form, or melancholia alternating with violence, in which the suicidal tendency is very powerful. The treatment is the grand object aimed at, and Dr. Seymour insists with great energy upon the beneficial effects of opiates and sedative remedies. It is well remarked, that the excessive sensibility and depression is most severe in the mornings, and particularly after nights of unrest; and very numerous cases, supported by the most trustworthy testimony and observation, are given, which show that opiates given at night, to the extent of procuring sleep, exert a powerful influence over this malady. We give the passage in which the opiate treatment, adopted temporarily, pushed on through many years, or, indeed, to the extent of habit, is described and justified by the author.

"The preparation which I have preferred, and, with two or three exceptions, I have always used, is the acetate of morphia; the mode of preparation the solution. Forty drops of the solution, which I have generally employed, contain one grain of the alkaloid salt.

"It has generally been, in mild cases, my practice to begin by a quarter of a grain every night, in solution;* then, after a week, to increase this to half a grain. It has rarely, in such cases, been necessary to increase the dose beyond half a grain. In severe cases I begin with half a grain, (twenty drops,) and increase it speedily to a grain, (forty drops;) rarely, most rarely, beyond this dose. The medicine is given at bedtime, and only at bedtime—the period which is intended for sleep; but, it must be repeated, without the *intermission* of a single night, for several weeks in mild cases, for at the least three months in the most severe ones.

"In some of these cases, at first, sleep is not produced; in very few, *rest* is not produced. Slight nausea, and disturbance of the head, are felt the first few mornings; but in these cases almost always at first, and *always after* a short time, both sleep is procured and the waking hours are free from pain.

"The effect of the medicine is in precise analogy with what follows.* Suppose a man toiling with professional anxieties, and with domestic cares, returns home, after a larger proportion than usual of the annoyances of his profession or calling, fatigued beyond his powers, wearied in mind. He returns to rest unhappy, discontented, inveighing against his lot, and what he considers to be his peculiar cares. He sleeps sound, and when about to rise in the morning, the sun streaming in at the windows, after a sound sleep, how does he look upon the evils of the preceding day? Do they not lose a large portion of their affliction? Does he not look in a totally different point of view at the very causes of distress which afflicted him the night before.†

"And this is precisely what the effect of morphia, properly employed, effects in cases of melancholy mental derangement, but not once or twice, as would be the case in trifling distress. Hence it must be repeated regularly every night until the nervous system is soothed!

"Thus it requires weeks for the medicine to be repeated regularly, even without a single night's intermission, and the cure, as I shall show by examples, is the result.

"And now comes precisely the point to which I wish to draw attention. If a man suffer from continued fever, or from diseases in which large evacuations have been necessary early in the disease, afterwards, when convalescent, what is the recommendation of the physician? Moderate and nutritious diet, quina, and one, two, or three glasses of wine in the twenty-four hours. Such a course repeated for several weeks entirely restores the patient's health, his muscular powers, &c.; but what should we say if he increased the wine every day by a glass, in order to enjoy the pleasurable sensations? We should say he would become a drunkard, and deplore such an event. Yet this is precisely the argument used against the employment of opiates in this disease. Is it not reasonable, (I am sure it is true,) that in broken states of the nervous system, the regular use of these medicines, in given doses, should succeed in restoring the nervous power, as wine and stimulants, and diet, did, in the former case, the muscular system?

"The wisest and the best of our own countrymen—ay, and the most religious, have never thought taking opium for disease deserving of reproach, even when it was necessary to take a given portion (without increasing it) *regularly*. Mr. Wilberforce, whose character is above suspicion, took regularly for many years a small portion of opium for his health; and the good, the kind, the charming Crabbe, was likewise obliged to take it for his health. Both these persons lived to be nearly eighty years of age.

"If it were constantly to be increased, then, indeed, a vicious habit would be induced; but it is to be used in small quantities, regularly repeated, and never increased *beyond a certain point, whether taken for six weeks or six years!* I may say, with the greatest truth, I have never seen one single case, either where the treatment has succeeded, or where it has failed, that the smallest injury has been done, nor in a single case where the medicine has been continued beyond the time when health was re-established. The application of medicine to disease being entirely beyond the ordinary reasoning of mankind, I should not have dilated on the subject had I not met in my practice, even at the moment when, after all other means had been used, the patient was recovering, such exclamations as these: But will it not paralyze the brain? As if the means which restored sense and reason were about to do the very opposite, but of course more from the imagination being seized with the idea of opium eating: as if a remedy used for

"* In substance the effect is far less well marked. In some stomachs pills are scarcely dissolved at all. In all, except as regards purgative medicine, pills often pass unchanged.

"This remark is especially referrible to calomel pills 'made for the winter,' or made with gum, which after keeping harden."

"* This is beautifully referred to by the great poet of truth and nature, Sir Walter Scott. In Quentin Durward, he draws the distinction between the feelings of fatigued and refreshed Nature with all his wonderful power. Thus, after weariness and despair, he adds—

"'Yet unwelcomely early as the tones came, they awakened him a different being in strength and spirits from what he had fallen asleep. Confidence in himself and his fortunes returned with his reviving spirits, and with the rising sun. He thought of his love no longer as a desperate and fantastic dream, but as a high and invigorating principle to be cherished in his bosom, although he might never propose to himself, under the difficulties with which he was beset, to bring it to any prosperous issue.'—*Quentin Durward*, vol. ii. page 145."

"† 'Trim,' said my uncle Toby, 'I wish I was asleep!'"

a most severe disease, and successful in curing it, could not be distinguished from the intemperance* which seeks new sensations in inebriety."—pp. 159—164.

The contraindications for the use of opiates are of course dwelt upon, and the remainder of the chapter is occupied principally with the consideration of the cases of insanity or mental disturbance, in which an asylum, home, cottage residence, travelling, &c., are of most importance to the cure. The cases—more dramatic in these diseases than in most others which come under our observation—by which Dr. Seymour supports his opinions are related with point and ability, and are many of them extremely interesting.

In the thoughts upon sciatica we meet almost at the outset with a caustic remark about popular physic.

"Every one recommends something which is *good for sciatica!* and if the patient does not get better he soon falls into a fair way of being poisoned."

Dr. Seymour himself, distinguishing carefully between symptomatic and idiopathic sciatica, recommends, in the former, constitutional remedies; in the latter, colchicum, conium, morphia, stramonium, belladonna; but it is of acupuncture he speaks in the highest terms of praise. His practice is to insert six pairs of fine steel needles, at a distance of one quarter or one sixth of an inch between each pair; the depth to which the needles were inserted is not mentioned, but Dr. Seymour imagines it to act by setting free the fluid contained in the sheath of the nerve. Quinine, issues, cold applications, pressure by the tourniquet, are severally discussed, and the author concludes the chapter and the volume by describing those anomalous cases in which sciatica exists as a symptom of grave cerebral disease.

We have thus endeavoured to give the pith of Dr. Seymour's "Thoughts." We believe the author may safely produce his second volume. The present volume contains much that is instructive, is full of hints, of points which admit of development, and upon the whole, if not so dignified as might have been expected from the retired physician of St. George's, is extremely readable—we might almost say entertaining.

## Medical Societies.

### PATHOLOGICAL SOCIETY OF LONDON.

MONDAY, MAY 3, 1847.—DR. WILLIAMS IN THE CHAIR.

Dr. CLENDINNING exhibited the

BRAIN OF A WOMAN WHO HAD DIED SUDDENLY FROM APOPLEXY.

The patient, aged 62, who had suffered for a long time from chronic bronchitis and asthma, was taken suddenly ill after her dinner, dropped down insensible, and in a few moments expired. On the post-mortem examination, the encephalon was found about the twenty-sixth part in weight of the body, and a pound in excess, its convolutions being flattened; around the under surface of the right cerebral hemisphere, the crus, and right side of the pons and medulla, was observed a layer of blood, thicker rather in the latter than the former situations, enveloping the origins of the nerves. No blood was found in the cerebrum; ventricles contained two ounces of reddish serum; the cerebral convolutions were flattened; air-passages congested, the lungs being slightly emphysematous; slight pleuritic adhesions, with cicatrix at the apex of the left lung; the heart weighed fifteen ounces, being generally hypertrophied; liver, spleen, and pancreas large. Dr. Clendinning remarked, that in this case of hæmorrhagic apoplexy, the brain had suffered compression without laceration or softening, the comatose seizure being attributable partly to enlargement, and partly to incidental congestion, and hæmorrhage at the base of the encephalon, the principal remote causes being the state of the heart and lungs and the recent meal. Also the

MODEL OF THE LUNGS OF A MAN WHO HAD SURVIVED THE OPERATION OF TAPPING FOR PLEURITIC EFFUSION SIX YEARS.

He was thirty-two at the time of his death, which occurred after a severe attack of influenza, of six weeks' duration. Six years prior to his fatal illness he had been under the care of Dr. Harrison for four months, in the Marylebone Infirmary, and was there tapped for pleurisy, four or five pints of fluid coming away. The aperture was left open, and daily exudation of one or two pints continued for a week; it closed at the end of the second week. Three several times it opened afterwards spontaneously. He went out at the end of four months, and was at work till his last illness. There was observed, on the post-mortem examination, general bronchitis of the right lung with emphysema; the left lung (the tapping having been performed on this side of the chest) was much reduced in size, being fleshy and like spleen in structure.

Dr. BARLOW related the case of a boy, aged eleven years and a half, who had been tapped for the relief of a rapid accumulation of fluid in the pleural cavity, which had threatened immediate asphyxia. The discharge from the opening, which continued patent for several months, was intolerably fœtid, and composed of purulent fluid mixed with air, the expectoration being of the same character. A year and a half after the operation, the boy expanded the lung of the affected side with tolerable facility, had recovered flesh, and appeared in the enjoyment of good health. Dr. Barlow had never met with a more perfect case of recovery, which was the more interesting on account of the aggravated nature of the disease, the discharge being of that character usually regarded as indicative of a fatal termination.

Dr. WILLIAMS believed, that in all cases of paracentesis thoracis, the discharge of pus on the performance of the operation was (excepting those instances of complication with diseased bone, or communication of the pleural cavity with the bronchial tubes, as in the case of Dr. Barlow) inoffensive. The decomposition and fœtid character of the fluid depended, in his opinion, on the admission of air, and he remarked that, according to his experience, the chances of recovery were much diminished when such was the case.

Dr. LITTLE exhibited a specimen of

CARCINOMATOUS TUMOUR, INVOLVING THE UPPER PART OF THE RIGHT LUNG, AND CAUSING ENTIRE OBLITERATION OF THE VENA CAVA SUPERIOR,

taken from a woman, aged thirty-four, who had suffered from supposed morbus cordis for nineteen months prior to her admission into the London Hospital.*

Mr. PRESCOTT HEWETT presented five preparations of

RUPTURE OF THE HEART AND LARGE VESSELS, THE RESULT OF INJURIES.

1. *Rupture of the left auricle.*—A man, aged twenty-nine, was admitted into St. George's Hospital, in a state of extreme collapse, the report being that he had fallen from a ladder. At the time of his admission, his face was blue and much congested; the hands extremely cold; and no pulse could be felt in any of the arteries: shortly afterwards, however, the congestion of the face disappeared, and a small, irregular pulse became discernible at the wrist. He complained much of pain in the chest. The collapse continued, and he died two hours after his admission.

*Examination of the body, twenty-four hours after death.*—No external marks of injuries existed; the cavity of the pericardium was distended by a large quantity of blood, the greater part of which was fluid; the other part formed a large, thin, and dark coagulum, enveloping the heart; the blood had escaped through a rent in the anterior surface of the left auricle, towards its left side, and passing a small way up the left inferior pulmonary vein; the laceration measured about half an inch in length, and a quarter of an inch in width; the structure of the heart and valves was healthy; a small quantity of effused blood was found in the cellular tissue surrounding the root of the left lung; some patches of ecchymosis existed also in the sub-pleural cellular tissue of the ribs, on the left side, and at the posterior and lateral parts of both lungs, but, with this exception, their structure was healthy; in the abdomen, a small quantity of blood was found in the peritonæum; the liver presented, on the upper surface of its right lobe, two lacerations, measuring about two inches and a half in length, and about two lines in depth; the other viscera were healthy.

"* When persons have been cured of very severe cases of autumnal ague by the use of a solution of arsenic, people do not apprehend that it will lead to serious results, though arsenic has an undoubtedly poisonous effect on the system."

* The full detail of the case will be published in a future number of THE LANCET.

2. *Rupture of the right ventricle.*—A man, aged fifty-three, was brought into St. George's Hospital, dead—the report being, that as he was getting down from a break, one of the horses kicked him on the chest, and sent him backwards several feet. When the passers-by ran to his assistance, they found that he was dead. At the examination of the body, nineteen hours after death, no marks of external violence were observed; but on removing the skin from the chest, some blood was found extravasated in the cellular tissue. In the second piece of the sternum, there was a transverse fracture, but without any displacement, notwithstanding the laceration of the periosteum on both sides. On the left side of the chest, the second, third, fourth, fifth, and sixth ribs were fractured in two places, close to the cartilages, and near the spine; on the right side, the second and fourth ribs were also fractured at about three inches from their cartilages. The pericardium was filled with fluid blood, and an extensive laceration was found on its left side; but no blood had escaped into the pleura, owing to some old adhesions existing between the lung and the pericardium. The heart was somewhat larger than natural; its cavities were dilated, and its muscular structure thin and flaccid. The right ventricle presented on its anterior surface, and at its junction to the pulmonary artery, a laceration through which the tip of the index finger was easily passed into the cavity of the ventricle, immediately below the valves of the artery. The laceration, which ran in a transverse direction, started off from the septum, and ran along the margin of the artery. The other parts of the heart and large vessels presented nothing remarkable. The lungs were not injured; the other viscera were not examined.

3. *Rupture of the septum ventriculorum.*—A boy, aged five, was admitted into St. George's Hospital, having been run over by a heavy cart, which passed over his chest. When admitted, he was in a state of collapse, from which he never rallied, and died half an hour afterwards. The body, which was examined twenty-one hours after death, presented numerous bruises upon the arms, legs, chest, and abdomen. On opening the chest, the lungs were found to be remarkably collapsed, this state being more marked on the left than on the right side; in fact, the left lung occupied so small a space in the chest, that it was thought the pleura must have contained air which had escaped from the lung; but no wound in the lung was found, although a careful examination was made. On the left side, the second and third ribs were fractured near their cartilages, and the fourth, fifth, and sixth, near their angles; on the right side, the third, fourth, and fifth, were also fractured. Both lungs presented numerous spots of ecchymosis, and the left pleura contained a small quantity of blood. No blood was found in the cavity of the pericardium, with the exception of two spots of ecchymosis on the surface of the heart, which appeared quite healthy. One of these spots was on the anterior surface, and the other, about the size of a shilling, on the posterior surface, in the line of the septum, at about its middle part. On making an incision through the serous membrane at this point, and removing the extravasated blood, a slight laceration was observed in the muscular structure of the heart, through which a probe was easily passed, in an oblique direction, into the cavity of the left ventricle; and on laying open this ventricle, an extensive rupture was found in the septum. This rupture, which was situated at the union of the lower to the two upper thirds of the septum, began at about three lines from the anterior surface of the heart, and from thence passed backwards to the posterior surface, the fibres of which were lacerated, as mentioned above. The rupture, which thus occupied the greater part of the depth of the septum in an antero-posterior direction, in one part extended through its whole thickness, producing an abnormal communication between the two ventricles, through which the tip of the small finger might be passed; and thus the rupture was more extensive on the left side of the septum than on the right. The heart itself was well formed, and its muscular structure healthy in appearance. No rupture was observed about any of the abdominal organs; but a fracture was detected in the left part of the sacrum.

4. *Rupture of the left auricle and of the pulmonary artery.*—A middle-aged man was brought into St. George's Hospital in a dying state, having been thrown from a cart, and probably run over by it. He lived nearly four hours after the injury. At the examination of the body, a large quantity of blood was found in the subcutaneous cellular tissue, and among the muscles of the chest; the sternum was fractured just over the heart; eight ribs were also fractured on the right side, and two on the left. The pericardium was distended with blood; a quantity of blood was also found in the mediastina, and at the root of the lungs, but there was none in the pleuræ. In the front part of the left auricle, and passing transversely above the appendix, was a laceration, about an inch in length, and half an inch in width. In the front part of the pulmonary artery, and just before its bifurcation, was another laceration equally extensive. Both these lacerations extended through the various structures of these parts; but the laceration of the external serous membrane was much more extensive than that of any other structure. The heart itself presented marked hypertrophy of the left ventricle, but otherwise it appeared healthy. The abdomen was also filled with blood, which had proceeded from an extensive laceration of the spleen.

5. *Rupture of the abdominal aorta at its bifurcation.*—A man, aged thirty-five, was brought into St. George's Hospital, dead. It was stated that he was riding by the hospital, when the horse upon which he was mounted suddenly reared and fell backwards. The man was found lying under the animal. At the examination of the body, no external bruises were observed. The cavity of the peritonæum was filled with bloody fluid and large coagula, which had proceeded from an extensive laceration of the aorta, at the point of its division into the iliac arteries, running transversely, and partly dividing the iliacs themselves, especially the left, which was all but separated from the aorta. The left psoas muscle was much lacerated and bruised, and the bones forming the right sacro-iliac synchondrosis were slightly separated from each other, but without much laceration of the soft parts in the neighbourhood. The coats of the aorta appeared quite healthy.

The appearances observed in Case No. 3 have already been slightly noticed in Mr. Henry Lee's report of the morbid appearances, &c., published in the *Medical Gazette* of 1844. Preparation No. 4 is in Mr. Cæsar Hawkins' museum. The others are in the museum of St. George's Hospital.

*(To be continued.)*

# Foreign Department.

## French Periodicals.

*Sublingual Tumour.—Salivary Calculus.—Dilatation of Wharton's Duct.*

As cases of salivary calculi, especially in Wharton's duct, are very rare, we record the following case briefly, as contained in the *Gazette des Hôpitaux*:—It occurred in the practice of M. Robert, at the Hospital Beaujou, in a man who had suffered nearly eight years from an enlargement of the sub-maxillary gland and a sublingual tumour. The tumour, small at first, had gone on gradually increasing up to the time of his admission into the hospital, when it had attained such a magnitude as considerably to impede the movements of the tongue, and to interfere with the speech and deglutition. M. Robert made an incision over Wharton's duct, when there issued a large quantity of viscous and transparent saliva, together with a calculous concretion, of the volume and form of a pistachio nut. The duct was enormously dilated, having the calibre of a large goose-quill. After the incision had been made, the tumour shrunk and disappeared, showing that it was chiefly dependent on the arrest of the flow of saliva, and not solely on the presence of the calculus. The orifice of the canal was not completely closed; and hence it was that the patient had been enabled to postpone an operation so long a time.

The reporter of this case in the *Gazette*, states that a case, given by Sabatier, is the first of the kind on record, and that, since his time, three cases have been collected and published by Dr. Dourlens, of Lille, in 1837. The first of these three cases was mistaken by a surgeon for an abscess, depending on alveolar caries, and a canine and two molar teeth were extracted. But the tumour went on increasing, and M. Dourlens detected a salivary calculus in Wharton's duct, which he extracted after some trouble, on account of adhesions which had been formed. It was of the size of a garden bean, and weighed ten grains. The second case was that of a woman, aged twenty-seven, who had suffered seven years from acute pain in the left side of the lower jaw, radiating thence to the neck and ear. For some months the speech and swallowing had been affected, and the saliva pressed out was thick and purulent. As in the former case, a hard moveable tumour, and of large size, was detected. The calculus was cut down upon, and removed, its many adhesions having been destroyed. It was of the size and form of an almond, and weighed fifteen

grains. The third case was similar to that reported above. The calculus was for some time but a matter of inconvenience, but by-and-by set up active inflammation, accompanied with a purulent discharge in the mouth, and succeeded by a chronic inflammatory state, lasting for two years, and giving rise to the formation of pus. The calculus could easily be felt beneath the buccal mucous membrane, and appeared of the size of a haricot bean. The Whartonian duct was greatly dilated. As the concretion was only a source of inconvenience, M. Dujardin did not risk an operation.

*Anæsthesia in Affections from Lead.*

M. Beau has remarked that those suffering from the effects of lead always present, in a more or less marked degree, an insensibility of the surface. It does not, however, exist to a very remarkable extent, but in six or eight cases in 100; but, whatever be the form in which the lead affects the economy, slightly or severely, there is always insensibility of the integuments, more complete in certain regions than in others, and directly proportional in intensity to that of the saturnine affection. The integuments may be frequently pricked and pinched, without any intimation of pain being excited. This peculiar state of anæsthesia may, then, be made use of in the diagnosis of poisoning from lead.

*Nephritis from Calculus, simulating Cancer of the Stomach.*

A captain of infantry entered the Hospital of Val-de-Grace, under M. Champouillon. For seven years, this officer, of a sanguine and robust constitution, had complained of pain in the epigastrium, increased during digestion, and attended with vomiting after a tolerably full meal. For these sufferings the patient consulted numerous physicians, all of whom spoke of gastralgia, of chronic gastritis, and consequently prescribed for him repose, baths, and a vegetable and milk diet. This regimen always produced a notable amelioration of the symptoms, so as to give the patient the idea of recovery. However, a new and final relapse occurred at the end of March, and the captain determined to enter the hospital, which he did on the 7th of April. The vomitings were then very painful, and almost continual; the belly was distended; the feet and hands presented a moderate amount of serous infiltration. Leeches were applied to the epigastrium, and ice placed on, and which was also taken internally, with morphia. The vomiting was by these means suspended for a few days, and then returned. The tongue, previously dry and brown, began to be moist and white. The matters vomited, at first white and glairy, became, on the 12th of April, of a blackish colour. On a microscopical examination, they were found to be composed of mucus, and of a granular matter, which M. Millon recognised as blood-discs, altered in form. On the 13th, a consultation was held. The physicians present attempted in vain to percuss the epigastric region. The abdomen, always distended, prevented a manual examination, and the slightest pressure also caused the most severe pain. This circumstance, coupled with the nature of the matters ejected, and the straw-yellow tint of the countenance, gave rise to the opinion that, instead of chronic gastritis, there was cancer of the stomach; and this opinion was strengthened by the fact, that his mother had suffered from cancer of the womb. Ice and opium were given; but the vomiting persisted till death, which occurred on the 16th. A post-mortem examination was made the next day. The mucous membrane of the stomach was found slightly injected towards the great cul-de-sac, but appeared elsewhere quite healthy. The intestines, liver, and spleen, presented no pathological lesions. The kidneys were very large, imbedded in a layer of compact cellular tissue, to which they were firmly adherent. The cortical substance, considerably atrophied, was of a decidedly black colour. Each kidney enclosed a calculus of lithate of ammonia, rugose and mamillated, and of the size of a pigeon's egg. Several smaller calculi were contained in the pelves of the kidneys.

Here, then, was a complete error in diagnosis. The symptoms were such as might, with the greatest probability, be referred to cancerous disease of the stomach, with ulceration. In forming the diagnosis, no aid could be drawn from a manual examination of the epigastric region, and from palpation; but the same thing may happen in cancer of the stomach. M. Champouillon, indeed, in making his examination, and pressing on the lateral and posterior region of the abdomen, had excited acute pain. This pain, coinciding with the œdema of the extremities, and the frequent vomiting, at once led him to suspect nephritis from calculus, or with albumen. Consequently, he examined the urine of the patient to detect albumen, or an excess of lithic acid; but the re-agents employed gave no indications of either; and, moreover, the patient never having complained of pain in the lumbar region, or of any derangement in the functions of the kidney, the idea of renal disease was given up.

*Paralysis in the Insane.*

The following communication is contained in the *L'Union Médicales*, from M. Baillarger, physician to the Salpétrière. It is a form of paralysis met with among, and apparently confined to, the insane, but one which presents many features of great interest both to the physician and physiologist, and to the intellectual philosopher. It has been a question among authors, whether the disease commences with the disorder of intelligence, or by the lesion in the movements. M. Baillarger says, the error of those physicians who regard the lesion of the movements as rarely preceding that of the intelligence, lays in this, that they have not paid sufficient attention to the passing symptoms of paralysis. A patient is attacked with cerebral congestion and loss of consciousness; when he recovers, some embarrassment is noticed in his speech. This symptom rapidly fades away, but after some hours, or some days, a delirious state of the mind supervenes, marked by a predominance of ambitious ideas. The lunatic now examined presents no difficulty in his speech, and, as yet, no feebleness of the lower limbs is noticeable. After some months, a year, or even more, evident symptoms of general paralysis offer themselves, either spontaneously, or after a fresh attack of cerebral congestion. All the cases of this description are set down as those where general paralysis is consecutive to intellectual disorder. To view them thus appears wrong; for the lesion of movement marks the onset of the malady, although it rapidly passes away. Sometimes, indeed, the lesion of motion is still less marked; for there may be but attacks of giddiness and partial insensibility, liable to frequently recur, but, nevertheless, followed by the development of those ambitious notions which characterize the unsound mind in general paralysis. In short, then, a disorder of the intellect often precedes the permanent establishment of the symptoms of general paralysis; but it is itself, in almost all cases, preceded by short-lasting lesions of movement.

The contrary opinion, held by many, is explicable, from the following reasons:—1. They have not distinguished between the passing and permanent lesions of the movements. 2. The slight lesions of motion are often suspended, or, so to speak, masked in excited patients. 3. In most cases, the accounts given by friends have been trusted to, as they should not. 4. The slight signs of paralysis, which occur among some patients at irregular intervals, have been overlooked.

This question as to the priority of the lesion manifested at the beginning of general paralysis being settled, there is yet another respecting the order in which the symptoms disappear in those cases—very rare though they be—in which an improvement takes place, or still more rarely, recovery. When an amelioration of the symptoms of general paralysis takes place, it is not alike in the two kinds; the disordered intelligence disappears, but the paralysis persists, or declines much more slowly than the former.

General paralysis never arrives at its last stage without the enfeebling, or even the abolition, of the intelligence; but there are numerous cases in which delirium is wanting. Such patients are no more lunatics than are those apoplectics who fall into a state of dementia. The pure and simple abolition of the intelligence and mania are two things quite different. In one case given by Bayle, the patient answered questions rationally, and appeared sensible of his unfortunate situation; and it was not till the general paralysis had lasted three months, that delirium supervened. In another case, the patient only suffered from a great defect of memory, talking with reason, but repeating the same inquiries, and thus continued till death. These cases are more frequent than is generally thought. We may say, then, that general paralysis may exist without delirium.

The facts indicated will go to establish the following:—1. That in general paralysis lesions of movement most frequently precede the signs of loss of intelligence. 2. That the defect of intelligence ceases before the disappearance of the symptoms of paralysis, when the disease tends to a cure. 3. That general paralysis may exist in many cases without delirium; and they establish the opinion, that the lesion of movement is the primitive and principal element; that the mental alienation is a secondary phenomenon, but absent in many cases; that mania and general paralysis are independent and distinct maladies.

# THE LANCET.

LONDON, SATURDAY, JUNE 12, 1847.


We have uniformly advocated the extension of scientific knowledge among the members of the profession—that is, scientific knowledge in all that relates immediately to the practice of medicine, and in an acquaintance with the principles of general science. We have given it as our opinion that general science ought to be to the medical man what history is to the lawyer, or the classics to the clergyman. It was with a view to contribute to the spread of a taste for general science amongst our students and practitioners, that we proposed to publish the extended course of lectures on natural philosophy, by Dr. Muller, of Frieburg. Numerous correspondents, however, demurred to the occupation of a strictly professional journal by the general branches of physical science. Pathology and physiology, therapeutics, diagnosis, and clinical medicine, surgery and midwifery, were thought more germane to the columns of The Lancet than mechanics, hydrostatics, hydraulics, and pneumatics; and our readers preferred a knowledge of the heart, the brain, the nerves, the stomach, and the uterus, to the best disquisitions on the wheel and axle, the screw, the wedge, and the balance. These reasons, with the pressure of an unparalleled amount of original contributions by the best writers and practitioners in the profession, induced us, with some regret, to forego our intention, more especially as the publication of these lectures, in an imperfect form, were commenced in a non-medical publication, which we need not name.

It is with very great pleasure that we have now commenced the publication of an admirable course of twenty lectures, by the celebrated Matteucci, in which physical science is applied most successfully to the functions of the animal economy, so that our readers may study the physical science of the human body, and of all living beings, without feeling that they are straying from the legitimate walks of medical science. In the ordinary functions of the animal economy, and in many of its diseases and derangements, a great number of physical phenomena come into play, which have a direct bearing on the processes of health, on the origin of disease, and on the action of remedial agents. All these physical phenomena are separated, as far as the most advanced knowledge admits, by Professor Matteucci, with consummate tact and skill, from those phenomena which are strictly vital, so that we are presented with a lucid and an accurate digest of the *physics* of physiology, pathology, and practice. Upon these points, the extreme value of this course of lectures will depend, and we do not doubt of their being universally acceptable to the profession. The general scope and bearings of the lectures have been given in the first lecture; the lecture published in the present number commences the subjects of Molecular Attraction, Capillary Attraction, and Imbibition; next in order, come the phenomena of Exosmose and Endosmose; then we have the Physics of Digestion, Respiration, Nutrition, and Animal Heat; and after these, the Phosphorescence of Living Bodies. The next department handled by Professor Matteucci, is Electro-Physiology, and this is, perhaps, the most important topic of the day. It is certainly in the very van of physiological and physical discovery, and approaches nearer the penetralia of life and nervous action, than any other course of investigation. In the department of Electro-Physiology, Matteucci has earned a most extensive reputation, and has proved himself a worthy successor of Galileo, Volta, Galvani, Aldini, and the other minds whose scientific subtilty has led the way in the most refined physical researches which have ever engaged the attention of philosophers. Until recently, indeed, Electro-Physiology seemed almost indigenous to the Italian mind; but now that the Saxon and Teutonic intellects have taken up the subject, we may hope for a splendid advance. To this end the extensive publication of these lectures must form no inconsiderable stimulus. The concluding lectures are devoted to the mechanism of Muscular Contraction, the physics of the Circulation of the Blood, and the physical phenomena of Voice, Hearing, and Sight.

The above offers a slight sketch of Professor Matteucci's lectures. They were originally delivered in the University of Pisa, at the instigation of the government of Tuscany; subsequently, they were published in Italian, and two editions were rapidly called for. A French edition has also been published, under the superintendence of the author. An English edition has been advertised by Dr. Pereira; and on this head it is necessary we should state, that before his announcement was made, the translation which appears in The Lancet was already half completed. These lectures will thus have a most extended circle of readers; and the acquirements of Dr. Goodfellow, already favourably known by his original investigations, and his editorship of the *Physiological Journal*, by whom they are translated for this journal, are a guarantee that the edition prepared for the readers of The Lancet will be most accurate and complete. The wood engravings, which illustrate the French and Italian editions, will be carefully engraved from the originals.

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The subject of medical benevolent funds for decayed members of the profession, and annuities to the widows and orphans of medical men, has recently received more than usual attention. The annual meeting of the Society for the Relief of the Widows and Orphans of Medical Men in London and its Vicinity, and the excellent sentiments expressed by the speakers; the meeting at Northampton, at which the benevolent and indefatigable Mr. Daniel, of Newport Pagnell, were rewarded by the establishment of an annuity fund; and the more recent proposal of Mr. Palmer, of Birmingham; have all contributed to this result. We are most willing and desirous of expressing our high sense of the value of all benevolent provision for calamities, which it may be impossible in all cases to guard against. We hope to see a spirit of generous rivalry spring up between the Society in London and the Annuity Fund. We would urge to the utmost upon all thriving practitioners the duty of sparing a little of their gains to such good purposes as those which are the objects of these societies.

Professional benevolence ought to be a field in which all may meet, and perform what is, after all, only a serious duty towards those worn out in the practice of the profession, or dying without being able to make provision for their families.

At the London meeting, the duty which lay with the Colleges of Physicians and Surgeons to subscribe to the benevolent fund was insisted on. Other societies, as the Medical

and Chirurgical, the Sydenham Society, and many others which might be named, should be appealed to, and we should hope, with some success. In the provinces, every library society, medical society, or association, should be invited to subscribe to the Annuity Fund. We want some means of binding together the richer and poorer members of the profession, and there is no better medium than such societies as those we refer to.

It will be remembered, that we published a letter anonymously, but which, nevertheless, was penned by a learned and excellent physician, in which the insurance companies were appealed to on behalf of the Society for the Relief of Widows and Orphans. This has called forth a letter from Mr. Farren, resident director of the Asylum, which will be found in another page. This gentleman, we have no doubt, is actuated by the best and most honourable motives; still we are obliged to say his offer is a very safe one; for there is no probability that the hundred established offices would unite with the Asylum in such an offering to the profession. Moreover, the question between the profession and the insurance offices is one of *right*, not of *charity*, and must be settled as such. If medical men have a right to remuneration for their professional opinions from the insurance companies, they will scarcely stoop so much as to convert a just right into a beggar's dole. Offerings from the rich or thriving in the profession is quite another matter. One point has often struck us when the subject of payment for insurance has been mooted. It is, that the profession are behindhand in not deriving any fair amount of benefit from the extension of life assurance. This great feature of modern industry owes more to the medical profession than to any other section of the community. The lawyers, and even the publicans, have their own offices. Medical men have not a single office. We believe the "Licensed Victuallers'" Insurance Company contributes to the charities of the class which supports it; there is the "Church of England Office," and the "Scottish Widows,'" which set aside, for charity, a portion of the profits of their business. For the present, we merely throw out these hints for the consideration of the managers of our few and ill-sustained medical charities. The subject of our benevolent funds is one to which all members of the profession, in their degree, and according to their means, should give their attention.

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A meeting was held at University College, on the 3rd inst., to consider the best mode of paying some tribute to the memory of the lamented John Phillips Potter. A large number of professors and students attended in the botanical theatre, and it was resolved to place, by subscription, a marble bust within the walls of University College. Though our pages have already contained an obituary of Mr. Potter, our readers will excuse our reverting to the career and death of this much respected gentleman. Dying at the early age of twenty-nine, he had achieved a promise of success and reputation, such as could only have been attained by the possession of great intellectual powers and unwearied industry. Barely twelve years had elapsed since he first became a student of medicine. In that period he had carried off numerous prizes at University College, and had filled the arduous posts of clinical clerk, dresser, and house-surgeon, at University College Hospital: he had obtained the F.R.C.S.E., and the M.B. of the University of London; at the examination for the latter, in 1841, carrying off the gold medals in physiology and surgery, and the University medical scholarships in physiology and comparative anatomy, and in surgery. In 1843, he became assistant demonstrator at University College, and during the short illness which terminated in his death, he was appointed assistant-surgeon to University College Hospital. These are no mean achievements, and the eminent and enduring qualities of his mind and heart render it certain, that, had he lived, his career as an anatomist, and as a scientific surgeon, would have been as distinguished as his student life had been.

Death from dissection is unfortunately a common catastrophe among students of medicine. We can deliver our artizans of the mine and the loom and the wheel, from many of the dangers incident to their callings, but our art has failed, hitherto, of delivering our own workers from this destructive poison. There is something very painful, but mixed withal with a sublime feeling, in contemplating the sudden arrest of a laborious and honourable career of a young professional man, like the student-teacher of University College; of meeting, as he did, the hand of Death, from the very labours in which he delighted, and with the promise of his well-earned reward in full flush before him. The victims of dissection ought to hold a distinguished place among the martyrs to science and knowledge. Braving the danger of this death is one of the silent heroisms of our profession, which should make the medical man feel the pride of courage and endurance; and we are the more reminded of these things at the present time, when numbers of professional men, in this country and in Ireland, are falling victims to their attendance on the pestilential fever produced by famine. A priest struck down at the altar; a lawyer, at the forum; or a soldier, in the "imminent deadly breach;" is not so moving as the anatomist struck with death by those labours to which the love of knowledge is the only lure, and which lead to health in others,—mortally wounded by those instruments which are only exerted to save life and limb. All the years of his pilgrimage had been spent by the subject of our epithalamium in acquiring knowledge. In the words of a poet, himself young,

> "——————— nourishing a youth sublime
> With the fairy tales of science, and the long results of time."

And then, before their fruition, or full exercise, just as the field for exerting his talents presented a brilliant prospect, he is summoned from the scene. We feel it a privilege to turn away from the hard ways of medico-political strife to lay a wreath upon such a shrine.

In the case of Mr. Potter, his election to the hospital when on the bed of death, the concourse of students and fellow-teachers which followed him to his early grave, the omission of the annual college festival, and the meeting to erect a monument to his memory, are incidents grateful in themselves, and reflecting the highest honour upon University College. If anything of an earthly nature could console the friends and relatives who mourn his loss, it is such incidents as these, conveying, as they do, the gratifying knowledge that his friends and companions have not suffered him to pass to the tomb

> "Without the meed of some melodious tear."

The homage which followed another student teacher, Dr. John Taylor, into his comparative retirement, is but just hushed. Twice within a brief period the College has assembled

to do honour to the living and the dead, educated within her walls, and spending their strength in her service. Such events are new to the students of this country. Let the same spirit be continued, and the expression of such loving sympathies will go far to counterbalance the absence, in our medical academies, of those noble associations which grace the colleges of the ancient universities.

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After a long opposition, the surviving heroes of the Peninsular war, from Maida to Toulouse, and of the long series of naval engagements, which began with Lord Howe's victory, in 1794, and ended with the naval fights between the English and Americans, in 1814 and 1815, are all to be rewarded by a medal. In this portion of our naval and military history, the medical men of the armies and navies of Great Britain bore their part, and conduced in no mean degree to the brilliant successes it commemorates; yet, according to custom, those of our medical brethren who served in these wars will have no share whatever in the decorations about to be conferred. We feel called upon to protest against this, as being an act of the greatest injustice. In times of peace or war, the avocations of the military and naval surgeons are as arduous, and we venture to say as honourable, as those of their brother officers, while they are attended by peculiar perils of contagion and infection, from which the fighting staff are in great measure exempt. To their peace services it is that the military profession owe the knowledge of the economy and physique of fighting men. Many of the most eminent military writers have been medical men, and some of the greatest names in medicine grace also the military section of our profession. Harvey narrowly escaped being killed by a cannon-ball at the battle of Edgehill; John Hunter served at the siege of Bell-isle; Pringle was with the army in the Low Countries for nearly twenty years; and Sir Gilbert Blane, to whom the prevention of scurvy in our fleets is mainly due, saw a long period of active service. In the day of battle, as we have before had occasion to show, the personal hazard incurred by the military surgeon is as great as that to which the rest of the troops are exposed, and in all enterprizes of danger, the surgeon is called upon to take his chance with the rest. It may be objected that surgeons do not engage in actual fighting; but neither are the officers of an army, from the commander in chief down to ensign, called upon to engage hand to hand with the enemy, except in self defence; and this of course the surgeon would do, if necessary. The duty of the officer is in directing—in wielding and impelling the power of the men under his command, to the proper point, with the proper impetus. All the qualities of intrepidity, courage, and coolness, requisite by the acting officers, are equally necessary to the surgeons of the army and navy. They have frequently, upon the open field, or in ships, in danger of fire, sinking, or capture, coolly to follow their vocation; to amputate, trephine, tie up vessels, apply sutures to gaping wounds, extract balls, arrange fractures, and fulfil the other offices of their art that a great battle may render necessary, and which were recently described most ably, in the House of Commons, by a veteran soldier, Sir Howard Douglas. To perform these duties well, the very selfsame qualities as those which make the brave soldier or sailor are imperatively required; and why, then, are not the same means of evoking and sustaining the military spirit distributed to them in common with the actual fighting men and their leaders? If medals and ribbons are useful in inciting the ardour and rewarding the courage of our troops, they would be equally useful in sustaining and rewarding the same qualities in the medical men of the army and navy. Military surgeons are nothing if they are not imbued with the true military spirit; they are frequently killed or wounded in battle; are called to the front ranks to succour the wounded men; and it is their coolness and skill, exerted on the instant, to which a Wolfe or a Nelson must owe all his chance of recovery. Again we say, as participators to the full in all warlike dangers, they should be made the sharers of military honours and rewards. Apart, too, from the immediate services of naval and military surgeons, our profession has done enough for the efficiency of the sea and land services to deserve every consideration from civilized governments. Medical science has done much to allay the horrors of war, and lessen the sacrifice of human life; it has done, too, quite as much as military tactics to strengthen the national arms. It is to medicine that our armies owe it, that dysentery and malignant diseases do not stalk after large bodies of troops, as they did of old, causing oftentimes as much dismay in the rear as the enemy in the front, and devastating armies even more rapidly than the sword. It is to medicine that our navy, and not less our commerce and civilization, owe their immunity from scurvy—a pestilence which formerly rendered lengthened voyages, or prolonged naval operations almost impossible. How could modern naval warfare be carried on if such a state of things as that described by an unprejudiced historian, Sir J. Herschel, prevailed in the present day?

"The sufferings and destruction produced by this horrid disorder on board our ships, when, as a matter of course, it broke out after a few months' voyage, seem now almost incredible. Deaths, to the amount of eight or ten a day, in a moderate ship's company; bodies sewed up in hammocks, and washing about the deck for want of strength and spirit on the part of the miserable survivors to cast them overboard; and every form of loathsome and excruciating misery of which the human frame is susceptible: such are the pictures which the narratives of nautical adventure in those days continually offer. At present, the scurvy is almost completely eradicated from the navy—partly, no doubt, from increased and increasing attention to general cleanliness, comfort, and diet; but mainly, from the constant use of a simple and palatable preventive. If the gratitude of mankind be allowed on all hands to be the just meed of the philosophic physician, to whose discernment in seizing, and perseverance in forcing it on public notice, we owe the great safeguard of infant life, it ought not to be denied to those whose skill and discrimination have thus strengthened the sinews of our most powerful arm, and obliterated one of the darkest features in the most glorious of all professions."

This description, it is worth observing, applies only to about seventy or eighty years ago.

Thus, then, we have attempted to show that medical sailors and medical soldiers deserve to form an integral part of the profession of arms, and that they ought to receive their meed of honour and decoration when medals are to be worn and ribbons displayed. They ought not to be treated as mere hirelings, as they now are; and governments may rest assured, that unless the naval and military branches of our profession receive the same stimulus as is awarded to other sections of the army and navy, the state does not receive all the benefits, and call forth all the services, which the profession is capable of rendering. We do not deny the present efficiency of the military medical staff of this country; but taking human nature as it is, in its strength and weakness, there can be

no doubt that the prospect of military honours would be a stimulus to the highest exertion—to exertions for which mere hire and pay can never compensate. Military and naval medical men deserve that this should be conceded to them for their own services; and they have an additional claim in the great services which the profession of medicine generally has rendered to the profession of arms. We advise medical officers who served in the actions for which the new medal is to be given, to send in their claims to the War-office and the Admiralty, and we should hope such claims would be efficiently supported, at the one by Sir James MacGrigor, who is as much a soldier as any general, and at the other by Sir William Burnett, who is as much a sailor as any admiral, in the United Services.

## TO THE MEDICAL PRACTITIONERS OF THE UNITED KINGDOM.

Gentlemen,—The Medical Registration Bill is now fully before you, waiting for your assent or dissent to its provisions. Let us see what it promises to effect.

*First.*—To combine, in one legal whole, all the various parts of the profession; to make one complete medical and surgical body of legally recognised practitioners, who, as such, will obtain new and more valuable privileges, while it draws a marked line of distinction between them and illegal practitioners, against which it provides new and more stringent penalties.

*Secondly.*—Over this body it appoints a head, the Secretary of State, armed with the long wanted supervision over our College and Examining Board, which henceforth will be made *responsible*, instead of *irresponsible* bodies. He will have the power of enforcing equality of education, sufficient strictness of examination, and of preventing a man passing an examination for, and obtaining his diploma, more easily in one capital than he can in another.

We acknowledge the necessity of supervision, of a controlling power, of a head, to be a principle universally applicable. Why should our nineteen examining bodies alone be exceptions to the rule?

It has been objected by the Colleges that the Secretary of State will possess arbitrary power if the Bill be allowed to pass.

In reply, we would observe that what may seem arbitrary to them, will to us most probably appear both just and righteous.

*Thirdly.*—All registered practitioners, whether physician, surgeon, or apothecary, will be legally enabled to recover their debts.

The apothecary only can do so now, but the privilege is more pretty than useful; his diploma is only gilt-edged instead of plain; for as fully two-thirds cannot legally recover, the practice of doing so is unusual; and were the apothecary rigidly to stand by his privilege, especially in the country, he would lose his practice, his conduct being singular and obnoxious.

On the other hand, could *every practitioner* legally enforce his just debts, the practice, instead of being unusual, would be general, and the immense per centage of bad debts which are now annually found on the books of the surgeon, would be reduced to a par with those of the legal profession.

It is computed that there are 15,000 medical practitioners in this country. It is a low average to suppose that during the past seven years each practitioner has booked from 70*l.* to 100*l.* annually, which he has never received. There is, therefore, due for that period to this hard-worked and ill-paid profession, from *seven to ten millions of money*—a loss equal to the sum of from one million to a million and a half annually. In this average is not included every debt, or it would be much too low; there are many whom we attend from accident or disease, who, if payment were enforced, would have to pay for their life with the staff of life. God forbid that the extremity of such should be our opportunity! But it comprises those who think that a doctor's bill need not be paid for; that it either will not, or cannot, be enforced; who have the means, but not the honesty—not the self-denial—to pay for kind, assiduous attention, except in the coin of promises or impudence; while the beer-house bill, punctually paid, exceeds the doctor's. How often would one, two, or three months' saving from the former more than meet the latter? Put your feet, gentlemen, upon the neck of this practice, so pernicious to your interests. You can crush it in two months. The Registration Bill, which you may have, with the admirable Small Debts Act, which you already possess, will give you this power, and increase your incomes to an amount which is well worth considering.

*Fourthly.*—This Bill will give a power to the magistrate, of summarily convicting all illegal practitioners who so ravenously eat into the gains of the orthodox surgeon, living by what *he* should live.

On this point the Colleges *have* never sympathized with us; they *do* not—they *will* not. They affect not to believe in the existence of the evil. Cruikshank's caricature of the well-fed flunkies lazily asking, "What are taxes?" might with equal fidelity represent two of our wealthy self-elected rulers asking one the other, "What are quacks?"

Such, then, are the benefits which this Bill is calculated to confer,—such the evils which it is designed to remedy. Brother practitioners! are they "small things with you?"—are they not rather the kernel of your petitions—the pith of your "resolutions" for years?

But there is an opposition in the field. The President and Censors of the College of Physicians—the Council of the College of Surgeons—and the Court of Examiners of the Apothecaries' Company,* have petitioned against the Bill, and are using all their influence to prevent its passing into a law,—of having one finger laid upon their privileges.

Allow me, gentlemen, to ask you,—Have these bodies, individually and collectively, your confidence, or not?

Do you believe, that if they could introduce and pass a medical Bill—if they could legislate *for you*, they would legislate *to benefit you?*

Would your interests, or their own, be most regarded? If yours, then give them your confidence—petition, as they have petitioned, against the Bill. If theirs, then withhold that confidence—petition, as they have not petitioned, in its favour. For if they would legislate rather for their own interests than yours, they will oppose legislation which promised more for your interests than theirs.

On this point we think it will not be difficult for you to come to a decision.

Consider, however, for one moment, the position which we occupy in regard to this opposition: our opponents are strong, flushed with the success of many encounters—they are the victors "of a hundred fights" against us. All beneficial legislation *for us* has ever been successfully resisted *by them;* and if we again resist, again they exultingly expect to occupy the same position,—*they* once more the conquerors—*we* once more the conquered.

Men and brethren, are not these things so? Then let them not continue without an effort to remedy them. Pick up the glove of opposition which is lying on the ground, and bring your unfelt strength into this bloodless contest;—turn the tables on the foe, as undoubtedly you can; and then the words will read—*We* at last the conquerors—*they* at last the conquered.

How many convincing, stirring lessons might we learn from the political world. The Reform Bill, Free Trade, and a hundred other measures, were long opposed by Government and

* In this list is not included the National Institute, because their recent manifestoes so smell of Apothecaries' Hall, that I think they may henceforth fairly be regarded as one and the same body under different names.

Parliament. At last the people *willed* them, and the people obtained them.

So let it be with Medical Reform. In this case the Government is not as an opponent, but as our own flesh and blood. Sir G. Grey has even said in the Commons House of Parliament, "that he did not think the objection, which had been urged" (by the colleges) "against *many parts* of the Bill of the honourable member for Finsbury ought to prevail."

Are you, gentlemen, of the same opinion? If so, express it, and they will not prevail. Petition in its favour unitedly, perseveringly—Petition, Petition, Petition. Rest assured that the Government is listening for your voice—they are waiting to ascertain the views which you hold upon this question; they are asking you, as constituents, for a vote of confidence, or no confidence, in your so-called representatives. Be not silent in reply; quit you like men—Ay, or No.—I am, gentlemen, your obedient servant,

June, 1847. A Provincial Infirmary Surgeon.

## MEETING OF THE MEDICAL PRACTITIONERS OF SHROPSHIRE AND NORTH WALES.

The annual meeting of the Shropshire and North Wales branch of the Provincial Medical and Surgical Association, and of the resident medical practitioners of Shropshire, was held on Friday last, at the Raven and Bell, in this town, and was rather numerously attended by members of the profession from Oswestry, Wellington, and other towns.

P. Cartwright, Esq., of Oswestry, on taking the chair, observed, that in exerting himself to ensure a numerous meeting on that occasion, he had been influenced solely by the desire he felt, as president of the Association, to make himself useful to the profession. He thought advantage should be taken of the parliamentary committee now sitting on Mr. Wakley's Medical Registration Bill, to make the members of the legislature better acquainted with the wants and wishes of medical men. It was only necessary, in his opinion, that they should now come forward and make known their grievances, to gain all that was essential to the prosperity and usefulness of the profession, and raise its members in the estimation of society. By the Registration Bill a line of circumvallation would be drawn round the educated practitioner, broad and distinct enough to separate the mere pretender and quack from those who possessed legal attestations of their medical and surgical skill. Mr. Wakley's Bill was not, perhaps, all that could be desired; but he had done his best to simplify it, and adapt it to the present exigencies of the profession. He thought it was sound in principle, and it also appeared to him that there were many provisions in the Bill that would contribute to the protection and improvement of the profession. Mr. Cartwright then proceeded to point out, at some length, the present anomalous position of general practitioners. Excluded from the College of Physicians and insulted by the College of Surgeons, the great bulk of the profession was, he said, left unprotected, and stripped of that collegiate and social standing which their attainments entitled them to. The powers of the new Charter had been exercised by the Council of the College of Surgeons invidiously, and many had been made fellows who had no more title to that distinction, on the score of merit, than the thousands who had been passed over. The Council had divided a body which was essentially one, and elevated individuals, to the great disparagement of others. He, however, did not know that the members of the College would have very much to complain of, if the Charter had not given to the fellows the sole right to elect the Council, which was a matter of much more importance than conferring an honorary title on a few individuals, and seriously affected the right of the members. As the special advantages of the Bill, and the demands of the profession, were set forth in the petition he had the honour to present to them for signature, he hoped he had done right in preparing one for the occasion.

Mr. Wood next moved a resolution in favour of the Registration Bill, and remarked that in 1845 the medical practitioners of Shropshire exerted themselves successfully in opposing Sir James Graham's Medical Reform Bills, and he was pleased to see several suggestions then made embodied in the present Bill. It was the duty of every body of men to take care of their own interests; and he trusted, as there was a parliamentary committee sitting, his medical brethren would not be backward in giving such information as would tend to enlighten them on the present state and wants of the profession. From their own committee, at the time he had just alluded to, nearly three thousand letters were sent out; and he was sure a similar system of agitation was all that was necessary to enable Mr. Wakley to pass his Bill.

The several resolutions advertised in this day's paper were then carried, as well as the following petition, which received about fifty signatures, and was presented to the House of Commons by Mr. Ormsby Gore, on Monday night:—

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The petition of the president and council of the Shropshire and North Wales Branch of the Provincial Medical Association, and of the resident medical and surgical practitioners of Shropshire, in public meeting assembled, showeth,—

That your petitioners beg respectfully to express their gratitude for the consideration you have evinced towards the medical profession, by the appointment of a committee to investigate the subject of medical registration, and the state of the law relating to the practice of medicine and surgery in these kingdoms.

That your petitioners are of opinion that the grievances which affect the medical profession arise from the following causes:—

1st. That ignorant and unqualified persons have the power of assuming with impunity professional titles and degrees, and thereby grossly and injuriously imposing on the public.

2nd. That no uniform standard of conjoint medical and surgical education exists, and that divers colleges and bodies corporate have the privilege of granting degrees and titles, at rates of education and qualification essentially differing from each other.

3rd. That the Colleges of Physicians and Surgeons hold an irresponsible power, which, in the instance of the College of Surgeons, under their recent charter, has been arbitrarily and injuriously exercised towards its members.

4th. That the Apothecaries' Company is the only body corporate capable of granting a licence to practice in England and Wales, and may thus interfere to prevent those from practising who possess higher qualifications than the members of that body.

Your petitioners, therefore, considering it essential to the health and safety of the public, as well as to the improvement of the profession, that these grievances be redressed, entreat your honourable house,—

1st. That the Medical Registration Bill be passed into a law.

2nd. That one uniform and determinate standard of conjoint medical and surgical education, combined with two or more practical examinations, be established, and that no person, after the passing of the Medical Registration Bill, be registered or entitled to practice, who cannot produce testimonials of having completed such conjoint education and examination, excepting always those in actual practice at the time of the passing of such Bill, and qualified to be registered under it.

And 3rd. That a just and fair system of representation be accorded to the great body of the members of the profession in their several colleges; and, in particular, that the irresponsible power now possessed by the Colleges of Physicians and Surgeons be so modified, on the representative system, as to impart to those institutions a greater influence, security, and efficiency.

And your petitioners will ever pray.

In the evening, most of the gentlemen who attended the meeting dined together in the large room at the "Raven and Bell," under the presidency of Mr. Cartwright. The usual loyal and professional toasts were given, and Dr. Drury, of this town, was elected president of the Association for the ensuing year.

# Correspondence.

## FEES FROM LIFE ASSURANCE COMPANIES.

*To the Editor of* The Lancet.

Asylum Foreign and Domestic Life Office,
72, Cornhill, London, June, 1847.

Sir,—Your correspondent J. A. W., in your number of 29th ultimo, observed that a moderate annual contribution by the several life offices to a fund for the relief of the widows and orphans of medical men, whilst forming a large certain addition to the fund for the support and comfort of the

bereaved individuals whose interests it represents, would be a graceful conciliation of the very painful and difficult question now constantly raised between the office, the referee, and the proposer.

As I addressed you on this difficult question as far back as 1837, and you were good enough to publish my letter in THE LANCET of Nov. 11th in that year, I now lose no time in saying that the Asylum Company, of which I am resident director, and which has uniformly acted on the opinions then expressed, will feel much pleasure, as one of the one hundred existing life offices, in making a contribution to a Life Insurance Fund, for the benevolent object advocated by your correspondent, so soon as we shall receive an intimation of such a system being in operation.—I have the honour to be, your obedient servant, GEO. FARREN.

COPY OF A LETTER ADDRESSED TO MR. H. SMITH.

SIR,—Having seen in this day's LANCET a correspondence bearing your name, I beg to suggest that it should be inserted in *The Times* newspaper. I am sure there are many spirited medical men still left among us that will subscribe to pay the expense. I, for one, am ready to contribute my mite, if the correspondence be inserted, bearing the names of all the parties, except that perhaps of the gentleman whose life was to be insured, and if he made no objection, that should also be given in full.—I have the honour to be, Sir, your most obedient servant, G. I. PINCHING, Surgeon.

Gravesend, May 8th, 1847.

EXTRACT FROM THE "POST MAGAZINE," DEFENDING NON-PAYMENT.

"The information is usually required by the authorities of life assurance offices, at the request of the patient himself; so that if it be not given, the question of withholding it is entirely between the doctor and the individual of whose state of health he declines to afford testimony. The person who goes to an assurance office to make a proposal for effecting an assurance on his life, does so, we presume, for the benefit of his family, and not with the remotest view of advancing the interests of the parties with whom he desires to form the contract. It is, therefore, the greatest piece of absurdity in the world, for that individual's medical adviser to decline stating what has been his knowledge of the patient's constitution, on the ground that the office may benefit by the information. References of every kind are, invariably, for the benefit of the parties giving them. A man wishes to obtain credit as a trader, and gives a reference to some friend who will bear testimony to his honesty. What would be thought of the friend who declined to give any opinion upon the subject, without receiving a fee from the merchant, under a consideration that the latter would derive benefit from the sale of his goods—altogether overlooking the much larger benefit to be derived by the party to whom they are to be disposed of. A person might as well decline to give a character of a good servant, on the ground that the man's new employer would derive advantage from his services.

"It should be observed, that the information required by the assurance offices is simply a statement of knowledge derived from past experience, and not an expression of opinion to be formed by farther inquiry, and the exercise of professional skill; and we assert, that neither morally nor *legally* can a medical man withhold the information if required by a patient to furnish it. The patient is as much entitled to his physician's opinion respecting his state of health, as he is to the prescription or the medicine by which it is to be improved. He pays for both; and the patient is as legally qualified to send a Life Office letter for the one, as he is to send his own servant for the other.

"The information in such cases, which the medical man is requested to furnish, will in many instances have been derived by himself, at considerable cost to the individual who requests an Assurance office to apply for it; and, even if it were legal to refuse to give an answer to the plain question asked of him, the refusal would be most scandalous, considering the connexion of the parties, and the stake at issue with one of them. Whilst the doctor is huxtering about a trumpery half guinea, his neighbour's family may be thrown into a state of destitution by delay.

"The argument to which we have already referred, that the office profits by the information, is not worth a button. Admit that Assurance offices were to submit to the extortion, it is not these institutions that pay the fee, after all, but the assured, in having a corresponding amount held back from the bonuses by which the value of their policies is increased, according to the profits of the office divided amongst them.

"Further, the proposal is not practicable, inasmuch as, in case of fraud, the office would, by payment of a fee to the medical referee, be deprived from calling him to prove certain facts to which he might be able to depose. The office pays its own medical man, and it is but right that the party proposing to assure should pay his, if payment in that quarter is considered requisite."

LIFE ASSURANCE CIRCULAR.

The Legal and Commercial Office has issued the Address, from which we extract the following. As in this office Mr. Charles Buller, and Mr. Samuel Martin, Queen's Counsel, are trustees, and Mr. Montagu Chambers, Mr. T. O. Anderdon, and Mr. Cockburn, all Queen's Counsel, are directors, the circular may be taken as a sufficient answer to the legal opinions of the "Post Magazine."

"Legal and Commercial Life Assurance Society,
73, Cheapside, London, Feb. 1847.

"In presenting to your notice a prospectus of the Legal and Commercial Lite Assurance Society, I beg leave to direct your attention to some peculiar privileges offered by this Society to the medical profession, which it is presumed will bespeak the favourable consideration and support of its members. *This Society admits most fully the just claims of the medical referee to a fee, on requiring from him a certificate of the health of the party proposing to effect a life assurance.*

"*It is clearly for the benefit of the Society, and therefore of the assurers themselves, of whom the Society is composed, that the medical referee should answer the queries proposed to him fully, carefully, and with reference to his past experience, of the health of the party seeking an assurance—he is even required to give an opinion as to the eligibility of the life for assurance. The information thus given by the medical referee is of a confidential nature, and it is a document of value to the office, yet it is customary to refuse a fee for it. Surely it is unreasonable to require or expect that this service should be rendered without the payment of a fee.*

"This Society has advanced a step further in recognition of the rights of the medical profession to remuneration for the performance of services which are decidedly conducive to the prosperity of the Society. It has placed the medical practitioner on an equal footing with the solicitor in that respect, and it allows him the same liberal commission usually given to other professional men for the introduction of a life for assurance on the completion of the assurance.

"Few men have more frequent opportunities than medical men of appreciating the necessity and benefits of life assurance, and of extending widely its sphere of usefulness, by recommending it in the numberless instances which come under their notice, where its timely adoption may be the only means of securing future provision to families.

"J. C. HARDY, Sec."

THE EQUITABLE LIFE OFFICE.

*To the Editor of* THE LANCET.

SIR,—I am glad to find that Mr. Henry Smith has revived the subject of fees to medical men, when consulted by Assurance Societies on the safety and security of transacting business with their customers; and I am surprised there should be any difference of opinion by whom the medical man should be remunerated, or that his fee should not be given him before he has given his opinion, thereby releasing him from the bias so generally admitted to influence opinions. The office says he is to get it from his patient. Yes—after he has offended him by giving an honest opinion, on which the policy is refused. I have more than once offended a valuable patient by so doing. As to the office not divulging the answer, it is sheer nonsense; it will be discovered by the patient when he applies to the office a second time to get his answer to the proposal; and I know, from experience, that the medical man does not get a fee in half the cases, unless it comes from the office.

Sir, the public is not generally aware of the great wealth and superior advantages derivable from assurance in the Equitable Society, that society never advertising, or allowing public reports from its quarterly meetings. Now this rich society has obtained opinions from medical men on nearly 30,000 policies, since its institution in 1762, without fee, thereby saving as many guineas, which were justly and honourably due to members of the medical profession—a considerable sum of itself, by accumulation. By this means, and the excellent management of its directors and other officers, it has at present a fund of between nine and ten millions sterling, although, in the years 1830 and 1840, more than six millions were given in additions to the 5000 oldest policies.

I have hitherto advocated the sending a fee to the medical man without effect, but hope that next month, at the quarterly meeting, some more able member will move and carry a resolution to erase this blot from the fair fame of this respectable society.—Sir, yours faithfully,

May, 1847. L. L——, M.D., & F.R.C.S.

## CASE OF MR. W. H. OSBORNE.

The following important letter has been addressed to Mr. Fosbrooke. It puts one part of the schedule of Osborne in a more prominent light than before, and increases the necessity for interference on the part of the Council of the College of Surgeons:—

South Shields, June, 1847.

Sir,—I make no apology for thus intruding on your attention, as I am certain you will excuse me. On perusal of Saturday's Lancet, I observe that John Henry Osborne has been a member of the College of Surgeons nearly as long as myself. Now this surprises me greatly, as I knew him to be a first year's student immediately before I went up for examination, (June, 1845.) In his schedule are two false certificates, and two others exceedingly suspicious looking. The false ones are Dr. Lawrie's and Dr. Hannay's for hospital practice, and Mr. Lyon's for surgical lectures. In the spring of 1842, I commenced attendance in Dr. Moses' and Buchanan's dissecting-room. I found that the doctor would take charge of half the surgical wards in the infirmary, 1st May, 1842—Mr. Lyon to be his colleague until May, 1843, when, by the rules of the hospital, he retired. Dr. Pagan now became Dr. Buchanan's colleague for the remainder of Dr. Buchanan's term of office—viz., till May, 1844. At this date, Dr. Pagan becomes senior surgeon; Dr. Hannay succeeds Dr. Buchanan. On 1st May, 1845, Dr. Pagan retires, and is succeeded by Dr. Lawrie. Osborne's certificates, to be correct, ought to be attested by the signatures of Drs. Buchanan and Pagan, from November, 1843, to May, 1844; by Drs. Pagan and Hannay, from May, 1844, to May, 1845; and by Drs. Hannay and Lawrie, from May to August, 1845. I do not wish to doubt Dr. Lawrie's honesty; I believe him to be unknowingly the instrument of a falsehood. He certifies to an attendance of twenty-one months, which is eighteen months antecedent to his becoming surgeon to the hospital. In like manner Dr. Hannay bears testimony to an antecedent period of six months. I do not believe Dr. Pagan's signature has been asked. Why, is obvious. The date of Osborne's entrance to the practice of the infirmary can be ascertained from the superintendent's register. Also from the names of the students in the album, which we were in the habit of signing every two months. That Osborne was not attending the infirmary during the session 1843-44, I am well aware, as are others. He never was seen in the hospital that winter. Had he been in attendance I should certainly have seen him.

In the summer of 1842, Mr. Lyon lectured on surgery; but owing to the small attendance on his winter course, he did not do so any more in summer. In the spring of 1845, I was repeatedly urged by a Mr. King, of Bradford, to be one of a party who were anxious to get Mr. Lyon to give a course of lectures on surgery between April and August. Their object was to get the College schedule filled up. I expressed my doubts as to the sufficiency of a summer course of lectures on surgery for recognition at the London College. An advertisement of the Portland-street School of Medicine appeared in April or May, 1845, in which Mr. Lyon expressed his willingness to lecture if a sufficient number came forward. Whether the lectures were delivered or not I cannot tell; but assuming that they were, how is it that Osborne's certificate is dated 1844, instead of 1845? I doubt not there is deliberate fraud here, at whose hands ought to be shown. Either Osborne has altered the date, or Mr. Lyon has knowingly certified to a falsehood.

If Mr. Belfour would allow you to look at the schedules deposited by John Maund, of Bromsgrove, Benjamin Sykes, of Clickheaton, William S. King, of Bradford, or any others from Glasgow, in the beginning of August, 1845, you can draw an inference as to the culpability of the parties. I will only add that Osborne told me, in Dr. Buchanan's class-room, that his father predated his indentures to enable him to obtain his examination at Apothecaries' Hall in accordance with the curriculum prior to 1835.

You are at liberty to make any use of this you think proper.—I am, Sir, yours truly,

To J. E. Fosbrooke, Esq. J. S. Dunham, M.R.C.S.E.

The following letter, addressed to Dr. Watts, shows either that the medical authorities of Glasgow have grossly deceived the College, or else that the Council are fully aware of the frauds contained in the schedule of Osborne. We shall take occasion to comment further upon the matter. It is most extraordinary, that a number of persons should be openly charged with participation in what cannot be considered as otherwise than careless or wilful fraud, and yet up to this time not a single answer or explanation has been made:—

29, St. Vincent-place, Glasgow, July 30th, 1847.

Sir,—Reverting to your communication of the 25th current, regarding Mr. John Henry Osborne, I am directed by the Weekly Committee of the Glasgow Royal Infirmary to intimate in answer, that they received various applications from Mr. Belfour, of the Royal College of Surgeons in London, regarding Mr. Osborne, and that they have furnished him with the facts of the case, and I beg, therefore, to refer you to that gentleman for the information you desire.

I am, Sir, your obedient servant,

Rob. Lamond.

To Wm. Watts, Esq., M.D., Exchange, Nottingham.

## QUACKS AND QUACKERY.

*To the Editor of* The Lancet.

Sir,—Like yourself I have a great antipathy to quackery within or without the profession; that without now assumes a bolder front than ever, and calls for our reproof and reform, since, to our honour as a body, we are willing to submit ourselves to a reform in qualification and morals for any new legislation affecting us. The notorious Morrison, with his advertisement puffs, pervaded the civilized world, gathering its gold, but his successor, Holloway, leaves him far in the shade. When Morrison, fifteen years ago, added the Asiatic cholera to his puff cure-list, I cautioned the people in my neighbourhood, through our provincial paper, against him, and received from him an especial notice in all his advertisements of that time; but that I cared not for, being desirous of doing good. It appears to me at this time, if practitioners, in their several localities, would occasionally address similar cautions to the readers of local newspapers, they would enlighten them against the chicaneries of the quacks, and in part do what it is to be hoped the Government will be brought to do, clip the wings of this carrion crow, quackery, whose scream of delusion and affright is so resonant in our land. When I hear the dons of the profession laugh at any legal interference with this fraud, I am not surprised at its triumph; but true it is, reforms in divinity, law, or physic, do not essentially originate with the rich and distinguished of those bodies, and therefore the general practitioners must take the subject the more thoroughly in hand. If the public reflected on the matter—inasmuch as one nostrum succeeds another so constantly,—they would conclude that all are bubbles which burst alike; but we know the hope and the gullibility of the sick do not often allow of any reasoning upon the subject, and especially when a few high-coloured cases of cures are before them. There was a man, called the Prophet, last year at Stroud, who cured complaints by a special gift of God, as he said. Many believed it, and many said they were cured; and this man could have obtained signatures in abundance for remarkable cures under credulity and excitement; but he had not been gone a week before the maladies kept creeping back, and it was found the Prophet had not effected the cures. He was to return, but has not, of course. In this way many quack cures are effected by nostrums, and after the cases have been published, the individuals have found their complaints again. In answer to these remarks, it may be said, that some, from perseverance in merely a course of purgation with Morrison's pills have been cured of complaints which have defied all science; but if the failures and the mischiefs proceeding from one curative nostrum were placed against the credit side, there can be no question the remedy would be easily proved bankrupt. If Holloway's pills and ointment were adopted by any medical man to cure all that Holloway vouches for, that medical man would soon find his practice leave him. This would open the eyes of a legislator, could he see with the eyes of an enlightened observer. Holloway and Co. succeed because they have not a small community to sell physic to, but a kingdom, or many kingdoms, where their failures are not compared by one with another from distance, and every chance or temporary success is alone exaggerated and puffed to the advertisement and case reader. If you look at Holloway's envelop for the ointment you will see the

names of most of the leading physicians and surgeons in London as either using it or recommending it. Now, this array of names, honestly or fraudulently made, is well calculated to sell Holloway's nostrums, but it shows that these gentlemen have been easily entrapped, or are guilty of most reprehensible neglect to themselves and profession, in allowing their names to be stamped on coin which they know to be counterfeit.—I am, Mr. Editor, very respectfully yours,

Nailsworth, June, 1847. THOMAS STOKES.

P.S.—It is quite the artifice of a modern quack to affix some scientific research on physiology &c. to his advertisement, and this tells for his nostrum with the ignorant; but which has no more to do with it than Professor Holloway has with the title of a Professor, as it is usually understood, or to be next in succession to Queen Victoria, or any other absurd incongruity.

*** The envelop shows the number of professional men who suffer the advertising "Professor" to use their names on behalf of his nostrums. Who the Kennys, Niochets, Binnses, Konarskis, Lamberts, and Mac Donnells may be, the profession does not care to know. But it might have been expected that in a list containing the names of Brodie, Dobson, Bright, Travers, White, Andrews, Callaway, Partridge, (King's College,) Dendy, Stafford, Busk, Taunton, Pilcher, Bishop, &c., some one would have had sufficient spirit to prosecute the impostor who thus uses their names to obtain money under false pretences.—ED. L.

"A CURE FOR ALL BY PROFESSOR HOLLOWAY'S OINTMENT!

'The physiology of the prospectus of Holloway's Pills and Ointment is, I must say, unexceptionable, and tallies with the received opinions of the first medical practitioners—not only in Great Britain, but also in France, Italy, and Germany. I say this, not from *hearsay*, but from *personal experience*, as I have practised in those countries.

S. KENNY, M.D. & M.R.C.S., Medical Lecturer.

8, Charles-street, Euston-square, London.'

## PROPOSED MOTTO FOR "THE LANCET."

*To the Editor of* THE LANCET.

SIR,—You have no *motto* for your useful work. Perhaps you do not want one. But if you do, allow me to suggest one from your own pages (603) of last week:—"THE MEDICAL PROFESSION DOES MUCH FOR THE PUBLIC, RICH AND POOR; BUT MANKIND CARE VERY LITTLE ABOUT THE PROFESSION, AFTER THE IMMEDIATE RELIEF OF THEIR OWN AILMENTS. IT BEHOVES US, THEREFORE, TO HELP OURSELVES AND EACH OTHER."—*Sir C. M. Clark, Bart., at the Meeting of the Society for Widows and Orphans.*

I never see letters in THE LANCET printed in *gold*, though many which occupy its pages would deserve that distinction; the motto which I now suggest for its future numbers, most certainly does so.—I am, Sir, your obedient servant,

London, June, 1847. MEDICUS.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions in favour of the Bill, received for Presentation by Mr. Wakley, M.P.:—*

Andrew Ross, M.D., Boulogne-sur-Mer; C. E. Joseph, Tipton, Staffordshire; Practitioners of Abingdon, (four signatures;) David Paterson, Grove-street, Liverpool; Medical Practitioners of Bath, (forty-one signatures: this petition has been principally due to the zeal and activity of Dr. P. Ballantine Ferguson in the cause of medical registration;) George Croudace, West Rainton, Durham; Medical Practitioners of Clapham and Wandsworth, (four signatures;) Henry Myers, Milton-street, Dorset-square; Rev. E. Arundel Verity, Habergham, Lancashire; William Robins, Paddington; William Furnivall, Hutton, Somerset; Donald Clarke, Ferryhill, Durham; Richard Alford, Tewkesbury; W. J. Mackarsie, Clay Cross, Derbyshire; William Clowes, Stalham, Norfolk; N. J. Haydon, Bovey-Tracey, Devon; Henry William Sandell Potton, Beds; B. M'Laren, Bedlington, Northumberland; J. Rose Cormack, Putney; J. T. Waller, Hemesby, Norfolk; Medical Practitioners of Seacombe, &c., Cumberland, (four signatures;) Thomas Macartney, Liverpool; Medical Students of Liverpool, (six signatures;) William Cooper, Roch Ferry, Cheshire; Hilary Hill, Worcester; J. P. M'Donald, Bristol; John Wightman Cawood; John Gray, Upper George-street, Bryanston-square; Thomas Moore, Brown-street, Bryanston-square; Thomas W. Grant, Nutford-place, Bryanston-square; E. W. Howitt, Walworth; H. Humphreys, Whitcombe-street; R. Rowlands, Langaeth, South Wales; A. F. Price, Deptford; Orlando G. Bell, Walworth; Alfred Collinson, New Cross; F. B. Fulcher, Deptford; Francis Jackson, New Kent-road; C. L. Alexander, Brunswick-street, Dover-road; James Hales Shirreff, Blackheath; John Drury, Bushey, Herts; Hugh Spencer Hughes, Greenwich; George Lockyer, Deptford; P. A. La Farque, Old Kent-road; David Davies, Bazier's Buildings; Michael Drury, Deptford; W. O. Leigh, Deptford; A. Wright, Old Kent-road; H. Hardinge, Silver-street, Golden-square; J. Airey, Poland-street; Miller Hamilton, Leicester-square; Thomas Wood, Panton-street; Francis Smith, Medical Student, Blackfriars-road; Thos. Longmore, Borough-road; Thomas Bromley, Lambeth; W. Seagrave, Newington, Surrey; J. B. Burridge, Walworth; B. Brooking, Bow-street, Covent-garden; J. Taylor, Old Kent-road; F. H. Johnson, Bishop's Wearmouth, Durham;—Chas. Bayfield Miller, B. Phillips, H. W. Dixon, Herbert Brecon, Francis Goduck, E. Neville, and G. M. Frost, Medical Students of St. George's Hospital; C. W. Goodall, Medical Student of Middlesex Hospital; W. Price Evans, Mile-end, near Swansea; Charles Long Allwork, Maidstone, Kent; Thomas Cattell, Braunston, Northamptonshire; Thomas Abraham, Old Broad-street, City.

*Petitions presented by other Members of Parliament.*

May 31.—Medical Officers of the Liverpool North Dispensary; Medical Officers of the Liverpool Fever Hospital and Workhouse; Medical Officers of the Southern and Toxteth Hospital, Liverpool; Medical Officers of the Liverpool Lying-in Hospital; Medical Officers of the Liverpool South Dispensary; Honorary Medical Officers of the Liverpool Eye and Ear Infirmary; Honorary Medical Officers of the Liverpool Ladies' Charity; Medical Practitioners of Liverpool, (seventy-two signatures;) John Maxwell and others, Medical Practitioners in London; James Edward Matthew, Kingsland; G. West, Hackney-road Crescent; John Chambers, Hackney-road; F. Secton Gavin, M.D., Edinburgh; President and Council of the Shropshire and North Wales Branch of the Provincial Medical Association, and of the Resident Medical and Surgical Practitioners of Shropshire, in public meeting assembled, (fifty signatures;) Medical Men of Whitchurch; Medical Practitioners of Ellesmere; Medical Men of Oswestry, (nine signatures;) Robert Falder, Alnwick, Northumberland; John Davison, Alnwick; Mungo Park and others, Medical Practitioners in London; William Tayler, Tywardreath, Cornwall; Caleb Crowther, M.D., Wakefield; Samuel Secker, Wakefield; Richard Oke Millett, M.D., Penpol, Hayle, Cornwall; Charles Alexander Parson, Richard Balchin, and Alfred Thomas Chandler, Godalming, Surrey; Benjamin Thomas, Llanelly, Carmarthenshire.

June 3rd.—David Taylor and J. E. Pattison.

June 9th.—John Thurnham and Thomas Laycock; Alex. Henry; Leyland; Surrey; John M'Donogh; Chichester; Staffordshire Potteries; Beaumaris; and, members of the Plymouth, Devonport, and Stonehouse Medical Society, (Honorary Secretary.)

*Petitions against the Bill.*

From Ulverston and Lonsdale; and George Ford Copeland: (referred to the Select Committee on Medical Registration, &c.)

# Medical News.

MEDICAL REGISTRATION COMMITTEE.—A full meeting of the Committee was held last Tuesday evening, at the Freemasons' Tavern. Edwin Lankester, M.D., F.R.S., in the Chair. The objections published by the different Corporations, against the Registration Bill, were discussed, and it was unanimously resolved, to issue another Address, in answer to them. The Sub-Committee reported that they had received authority to add several other names to the Protest against the proceedings of the Council of the National Institute, and from their personal experience, they entertained no doubt that the Protest was universally approved of, and would be as universally signed. The Chairman observed, that very nearly five hundred petitions, in favour of the Bill, had been presented to the House, from London alone, through the individual efforts of the members of the Committee; and with this highly-gratifying fact before them, it was resolved to continue their exertions as long as the Bill should be before Parliament. Additional handsome subscriptions were an-

nounced from the friends of medical reform, and numerous communications received from various parts of the country, all expressing, in warm terms, indignation at the opposition offered to the measure, by the London Corporations, and sympathy with the successful labours of the Registration Committee.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen were admitted members of this Institution, on June 4th—viz., Messrs. Richard Denny Larke, Stow-in-the-Wold, Gloucestershire; Henry Fisher, Hatherleigh, Devon; Thomas Thompson, Upper Hamilton-terrace, St. John's-wood; John Pierce Bowling, Hammersmith; Edward Davies, Dean Forest, Gloucestershire; John Holmes Perry, Worthing, Sussex; Frederick Horace Ransom, Sudbury, Suffolk; Charles Oakley, Stapleton, Shrewsbury; William Ellery, Bolton-le-Sands, Lancashire; and Christopher Irving, West Burton, Yorkshire. At the same meeting of the Court, Messrs. James Henry, and Henry Richardson, passed their examinations for Naval Surgeons; the former gentleman is a member of the London College, his diploma being dated May 17th, 1841; the latter gentleman is a member of the Edinburgh College.

APPOINTMENT.—The *London Gazette*, of June 8th, announces that the Queen has been pleased to appoint Assaad Jacop Kayat, Esq., M.R.C.S.E., to be her Majesty's Consul, at Jaffa.

OPHTHALMIC HOSPITALS.—At the recent festival of the Royal London Ophthalmic Hospital, the Lord Mayor stated that this hospital had been serviceable as a model for many similar establishments, not only in the metropolis, and large provincial towns, but in the United States of America, in the three Presidencies of British India, where Ophthalmic Hospitals have been established on a large scale, by the East India Company, and lastly, in China, where seven Ophthalmic Hospitals have already been appointed, and one of them is now being founded at Hong Kong, as a college. It is to be regretted that such an institution should be crippled in its usefulness for want of means, as from the Report it appears, that during the last two years the average annual income of the hospital, arising from subscriptions and dividends upon stock, has been only £514, whilst the average annual expenditure has been £816—leaving a deficiency, each year, of about £300, which the Committee, having the management of the hospital, had been obliged to meet by encroaching upon its permanent resources. The appeals made by the chairman and others to the visitors had the effect of increasing the funds by the sum of £450.

KING'S COLLEGE HOSPITAL.—On Wednesday last, June 9th, the annual dinner in aid of the funds of this hospital, took place at Stationers' Hall; Sir Robert Peel, Bart., in the chair. Upwards of 300 gentlemen were present, and after an eloquent and forcible address from the Chairman, advocating the claims of the hospital to liberal support, the magnificent sum of £1700 was collected; the right honourable baronet himself contributing £100.

UNIVERSITY COLLEGE.—A very numerous general meeting of the professors and students of University College, and of other friends of the late Mr. John Phillips Potter, was held at the College on Thursday last, the 3rd of June. Professor Liston, the Dean of the Faculty of Medicine, presided on the occasion; and Professors Thomson, Grant, Quain, Sharpey, Walshe, and Murphy, were present. Professor Williams was unavoidably absent. In some brief prefatory remarks, Mr. Liston stated the object of the meeting to be, to consider the best means of permanently recording the respect entertained by all for the memory of the late Mr. J. P. Potter. The minutes of other preliminary meetings having been read by the secretary, the following resolutions were then carried:—1. It was proposed by Professor Quain, in a very feeling and effective address, and then seconded briefly by Mr. Ellis,—That this meeting being desirous to testify its respect for the high moral and intellectual qualities which distinguished the late John Phillips Potter in his short career, is of opinion that a suitable monument, commemorative of his virtues, should be erected by subscription among his friends. 2. It was then proposed by Professor Sharpey, and supported by Mr. Morton, and unanimously carried,—That the tribute to the memory of the late John Phillips Potter consist of a marble bust, on a suitably inscribed pedestal, to be placed in the University College. Four other resolutions, referring to the commencement of a subscription, and to the appointment of a Committee, Treasurer, and Secretaries, for the purpose of carrying the above object into effect, were then carried. These were moved and seconded respectively by Professor Thomson and Mr. Erichsen; Mr. Durancé George and Mr. H. Sharpe Taylor; Dr. Parkes and Mr. Clover; Mr. Park and Dr. C. J. Hare. The list of the Committee included all the Professors, and a very large number of gentlemen educated at the College. Mr. J. E. Erichsen was chosen Treasurer, and Dr. Croft and Mr. John Marshall, Secretaries. The subscriptions already promised were announced by Mr. John Marshall, who then proposed, and Dr. Croft seconded, the thanks of the meeting to the Dean of the Faculty of Medicine, for having taken the chair. After the separation of the meeting, the sums subscribed amounted to upwards of £100.

## CORRESPONDENTS.

*Vigilans* should authenticate his statement. As the party of whom he writes has his (supposed) qualification entered in the *Medical Directory*, it would be a dangerous and unwise proceeding to publish a letter, describing him as devoid of legal qualification, without possessing full and certain proof that such is the fact.

*A Provincial M.D.* will, we have no doubt, obtain all the information he desires, by addressing a letter to the secretary of the Baths and Washhouse Establishment, in George-street, Hampstead-road.

*Mr. Faulks* has sent us a long and scarcely intelligible letter, carping at the complaint in last week's LANCET respecting the proceedings of unqualified assistants. The absolute meaning of his communication appears to be, that unqualified assistants, who have followed a certain course of study, may be as well fitted for practice now, as was the qualified surgeon of thirty years since. If he be not better qualified than were most of those gentlemen, his knowledge will certainly not be sufficient to enable him to practise with safety to his patient and with honour to himself.

*Dr. Butler Lane's* communication will be acceptable.

*A Subscriber.*—We are not aware of any particulars respecting the appointment of Resident Physician to the Somerset County Lunatic Asylum.

*Mr. O'Shea.*—The communication shall appear, with many others of a similar nature, respecting the conduct of the Institute, in our next, if possible.

*M.D.*—The advertising doctor in Harley-street has, we believe, a diploma, though his puffing practices are most unprofessional, and not very indicative of "regular" practice.

*A Hater of Humbug.*—We are constantly receiving complaints respecting the quackish practices of certain medical men, at Birkenhead. We advise the sound men to persevere in their endeavours. This rising town seems to have—at least, so far as our profession is concerned—some of the tendencies to degenerate which are seen in distant colonies. We shall take occasion to quote from the information of our correspondent.

*Mr. G. C. Dale.*—The numbers we published referred to petitions actually *presented*; those from Sir W. Clay, we presume, have been presented since; but we shall publish the numbers up to a later date.

*Amicus Humunitatis.*—The letter shall be published in an early number of THE LANCET.

*Detector* shall be communicated with shortly. The matters sent are at present under examination.

*Mr. Henry Wightworth* (Swansea) is thanked most cordially for his able communication.

*Anti-quackery.*—The quack shall not escape any the more, because for a few weeks we have been obliged, for the interests of the profession, to bend our thoughts in other directions. We shall return refreshed, after a while, to our attempt at their extermination.

*Mr. George Stilwell* is thanked for his letter: if the Registration Bill were passed, no druggist would be able to defeat its intention by any such subterfuge as calling himself "Surgeon and Operative Dentist." Mr. Stilwell assures us "the country druggists are very fast supplanting the regular practitioner; and although cases of the most lamentable ignorance are constantly occurring, the evil is rapidly increasing." Thousands of medical practitioners bear the same testimony. There will be no rest to the profession till a legal Registration is effected.

*Mr. Cattell's* paper on dissection wounds shall be published.

*Mr. Foulis.*—With many apologies to our correspondent, the paper shall be published shortly.

*Mr. Storks.*—The communication has been received, and is intended for publication.

*Mr. M. Groome.*—Though our correspondent is an M.R.C.S.E. and an apothecary of Dublin, he would not be able, under the present laws, to practise in this country without incurring the risk of prosecution by the London Society of Apothecaries.

*Dr. M'William.*—We shall have much pleasure in complying with the request which has been conveyed to us.

Communications have been received from—Mr. Farren; Mr. M. O'Shea; A Subscriber; Dr. J. Rose Cormack, (Putney;) Mr. T. Hodson; M.D.; A Hater of Humbug, (Birkenhead;) J. S.; Medicus; Mr. Henry Wightworth, (Swansea;) Dr. T. C. Noel, (Worcester;) Anti-Quackery; Mr. George Stilwell, (Epsom;) Amicus Humanitatis; M. S.; Detector; Mr. Michael Groom, (Rathinnis, Dublin;) Dr. M'William; Mr. Caleb Radford, (Wakefield;) Dr. W. H. Elliot, (Exeter;) Dr. Bence Jones; Mr. Storks; Mr. R. Camwood, (Burnsley;) Mr. Cattell, (Braunston;) Mr. R. Foulis, (Edinburgh;) Mr. J. Rhodes; Mr. W. M. Powell; Dr. J. Pidduck; Mr. G. C. Dale; Mr. George Millet Davis; Dr. James L. Clarke; &c.

# A Course of Lectures ON THE PHYSICAL PHENOMENA OF LIVING BODIES.

DELIVERED IN THE UNIVERSITY OF PISA.

BY PROFESSOR MATTEUCCI, F.R.S.

(*Translated, for* THE LANCET, *by* S. J. GOODFELLOW, M.D. Lond., *late Physician to the Cumberland Infirmary.*)

## LECTURE III.

*Endosmose.*

HAVING occupied your time, hitherto, with the phenomena of capillarity and imbibition, it becomes necessary for me, in order to enable you to apply the knowledge of these facts to the functions of exhalation and absorption in living bodies, to make you acquainted with another phenomenon, which, although appearing under exclusively physical characters, does not the less appertain to organized bodies, from the application which may be made of it to their functions. I allude to the phenomenon of endosmose, discovered by Dutrochet, which, reduced to its simplest expression, is the reciprocal action which two fluids exert upon one another when separated by a membrane. Although the theory of this phenomenon, and the physical principle to which it is due, are as yet unknown, it is still of the highest importance.

FIG. 1.

I shall begin by showing the fundamental fact in all its simplicity. Here is a glass tube, having its inferior extremity closed by a piece of bladder extended in a rounded form. This instrument is called an *endosmometer*. If we pour into this tube an aqueous solution of gum or sugar, for example, and then place its closed extremity into pure water, we shall perceive the water continually entering the tube through the membrane, even in opposition to the pressure of the fluid. The fluid contained in the tube will also be raised so as even to flow over its superior opening; at the same time, some of the fluid in the tube, but necessarily less than the first, will transude through the membrane, and mix with the pure water. Dutrochet has termed the first of these phenomena *endosmosis*, the second, *exosmosis*.

Membranes are capable of producing endosmose, even when they are at the point of putrefaction, but after this process has begun, it no longer takes place, and the fluid which was raised in the tube, re-descends and filtrates through the membrane.

Not only are membranes endowed with this property, but layers of slate, or, better still, baked clay, are capable of exerting the same phenomenon, though in a less degree. Calcareous and siliceous layers, on the contrary, have not this property, no endosmose taking place with them.

The nature of the fluid employed has a considerable influence upon the phenomenon. The endosmosis is the more evident as the density of the fluid in the tube exceeds that of the external fluid. It would appear that the intensity of the current is in proportion to the difference in density of the two liquids. Nevertheless, alcohol, which is of less density than water, introduced into the tube, produces endosmosis upon water placed external to it.

Saline solutions, while traversing the membranes, occasion very energetic effects, which are, however, of short duration. Increase of temperature augments the velocity of the endosmotic current. What is very curious in this phenomenon is, that the slightest trace of sulphuric or hydrosulphuric acid is sufficient to modify its production, even with those liquids which are the most active; and that the other acids, as the hydrochloric, or nitric, have not this effect.

All animal fluids produce endosmose with energy when in contact with water, except those usually found in the large intestine, which is perhaps owing to the hydrosulphuric acid which they contain. Dutrochet states that this gas is so destructive to endosmose, that it completely ceases to manifest itself if a membrane be used which has been, even for a short time, in contact with it. He endeavoured to measure the velocity with which, in virtue of endosmose, a fluid can penetrate from the exterior to the interior of a tube. The results are as follow:—If a tube of two millimetres in diameter be closed at its lower extremity by a membrane forty millimetres in diameter, a solution of sugar, the density of which is 1°,145, will rise thirty-four divisions in the space of an hour and a half, each division being two millimetres. In another experiment with a solution of sugar of the density of 1°,228, the ascent in the same space of time was fifty-three divisions. In a third experiment with a solution which had a density of 1°,083, the column rose 19½°, in the same space of time. The velocity of endosmose is, therefore, in direct proportion to the excess of density of the internal liquid over the water employed outside.

Dutrochet having taken solutions of different substances of the same density, compared them with water, from which they were separated by a bladder, with the following results:—

| | |
|---|---|
| Solution of gelatine | 3 |
| „ gum | 5·17 |
| „ sugar | 11 |
| „ albumen | 12 |

It appears by this table, that of all organic substances soluble in water, albumen produces endosmose with the greatest force.

Among the most curious facts discovered by Dutrochet, in studying endosmose, must be mentioned that of a change of direction in the current between certain acid solutions and water, according to their density and temperature; the solution of hydrochloric acid especially presents this phenomenon. Thus, with a solution of hydrochloric acid of the density of 1°,02, endosmose takes place from the water to the acid; while, at the density of 1°,015, the current is in the contrary direction—namely, from the acid to the water; but with this last solution, at a higher temperature than 20°, endosmose again takes place from the water to the acid.

It is important to know the force with which the liquid penetrates; or, in other words, the force of the current called endosmose. To this end Dutrochet thought of employing the apparatus which Hales, and afterwards Mirbel and Chevreul, used to measure the pressure of juices in vegetables. In this apparatus the force is estimated by the height of a column of mercury sustained by the liquid.

By studying endosmose under this point of view, Dutrochet has proved that, all other things being equal except the density of the interior liquid, the force of the current is proportional to the excess of density of the interior liquid over water. It is for this reason that the force, as well as the rapidity of endosmose, appears to be subject to the same law. Hence it results, if the law be correct in all cases, that syrup, at the density of 1,3, will produce a current capable of raising a column from 127 inches (three metres, forty-two centimetres) of mercury; or, what is the same, will be equal to the enormous pressure of four atmospheres and a half.

Dutrochet has endeavoured to give an explanation of the phenomena of endosmose, as have also Poisson and Becquerel. Thus one has attributed it to the action of an electric current, developed by the contact of two different liquids exciting a movement of the water through the membrane, from the positive to the negative pole, as in the well-known experiment of Porret. But to render this hypothesis at all probable, it should first be proved that there is a development of electricity upon the contact of water with alcohol, a solution of sugar, &c., which has not yet been done. Prisson thought that the less dense fluid penetrates the capillary tubes of the membrane, and that this capillary thread, drawn down by the action of simple water, and upwards by the action of a denser liquid, must rise by reason of the excess of molecular (capillary?) attraction. But this explanation is equally inadmissible when we reflect, that alcohol, which is less dense than water, produces endosmose; that the smallest quantity of sulphuretted hydrogen stops it; and that certain calcareous and siliceous stones, used in the same manner as membranes and plates of clay, do not produce the phenomenon. It must therefore be confessed, that we have no satisfactory theory of endosmose, though we know that the general conditions of the phenomena are, 1. That one or both of the fluids should have an affinity for the substance interposed; 2. That the two fluids should have an affinity for each other, and be therefore miscible. If one of these conditions be wanting, endosmose does not take place. As far as experiments show, the direction of the current is neither determined by any difference in the density of the liquid, nor by that which possesses the greatest force in

ascending capillary tubes. The current is generally towards that liquid which has the greatest affinity for the substance interposed, and which it imbibes with the greatest rapidity.

What has been said of this phenomenon will be sufficient to convince you, that it is perhaps the most important of physical facts, as regards its application to the functions of living bodies. Microscopical observation has put it beyond doubt, that in all vegetable or animal tissues, and in those fluids which are generated by the changes in organized and living bodies, at a certain period of their formation, microscopic corpuscles are constantly found, which have been named cellular or elementary. These corpuscles consist of an excessively fine membrane of a spherical form, enclosing a liquid, upon the internal walls of which is found a small organized body, which is called the *nucleus* or *cytoblast*. The cells have their origin at first in a fluid, to which Schwaan has given the name of *cytoblastema*, and they end by becoming compressed and nearly blended together on the fluid becoming more or less dense. According to the different tissues, the elementary cells more or less approximate; the *cytoblastema*, or intercellular substance, is invariably the bond of union between the cells. We shall recur more fully to this important subject, and have only glanced at it here, for the purpose of rendering the importance of the phenomenon of endosmose more evident. The life of the elementary cells certainly forms the most essential part in the development and preservation of the tissues of living bodies; and since these cells are found in favourable conditions for endosmose, there is no reason why it should not take place. A vesicle containing a fluid, and floating in another fluid, may imbibe the one that surrounds it, and part with that which it contained in a way analogous to endosmose. It should, however, be added, that but little has been done as yet in the application of these phenomena to physiology, of which it appears susceptible. It was necessary for this purpose to vary the fluids between which endosmose takes place, and choose the membranes in those conditions which offer analogies between this phenomenon and those which take place in the interior of living bodies. This Professor Cima and I endeavoured to do. I will now describe to you our experiments.

I shall divide the membranes which we submitted for experiment into three classes. In the first I shall place the skins of the frog, torpedo, and eel; in the second, the stomachs of a lamb, cat, and dog, and the gizzard of a fowl; and in the third, the urinary bladders of the ox and pig.

We will not pause to give a description of the apparatus, which differed in no respect from the endosmometers of Dutrochet. I may remark, however, that in these experiments we kept two endosmometers in action at the same time, the tubes of which, of equal bore, were both three millimetres in diameter, and had attached to them a scale divided into millimetres. In a glass vessel, sufficiently large to contain the two instruments, we placed a kind of support, upon which we firmly fixed a metallic plate pierced with a great number of little holes. Upon this plate we placed the two endosmometers; and to prevent the possibility of any change in their position, we fixed them by means of a large plate of lead pierced with two holes, having each a diameter equal to that of the neck of the instruments. In the course of the experiments, one endosmometer had the interposed membrane disposed inversely to that of the other—that is to say, supposing we were manipulating with skin, we placed it in such a manner that in one case its external face should be directed towards the interior of the instrument, and in the other, on the contrary, towards its exterior.

All these experiments were conducted at a temperature of + 12° to + 15° centig. In the greatest number of cases they lasted two hours, and were repeated many times. We took care to employ for the two endosmometers destined for these comparative experiments two portions of membrane of equal thickness, both being taken from the same animal, and in two symmetrical regions of its body, or of the organ employed. The fluids which we employed, besides spring water, were the following, of which we give, once for all, the density in degrees, according to the aërometer of Baumé: Sugared water, 19°; solution of white of egg, 4°; solution of gum Arabic, 5°; and alcohol, 34°.

These fluids were usually kept in the interior of the instrument, while the water was generally in the exterior.

Under some peculiar circumstances, which I shall allude to by and by, we changed the disposition of the fluids and instruments, and used a separate vessel for each endosmometer. We also made use of another instrument, which may be thus described:—*B* and *C* are two cylindrical brass receivers, jointed together accurately by grinding their opposed surfaces. *B* has at *a* a plate of brass, pierced with holes, upon which the membrane that is to be experimented upon is placed. *C* has also a plate with holes, which, when the two cylinders *B C* are joined together, as in the figure, closely applies itself to the membrane, which is thus firmly fixed between the two plates. By this means the membrane cannot yield to the greater pressure which may be exerted upon it by a liquid more dense in the one portion of the cylinder than that contained in the other. *mn*, *op*, are two tubes of equal calibre. The first communicates with the receiver *B*; the other with the receiver *C*. When this instrument is used, we begin by introducing the denser liquid into *B*, and filling the tube *mn* to a certain height. *C* is filled by plunging it into a tubful of water; and then the two cylinders are joined together under water, and fixed by a screw, in order that the liquid in *C* shall not escape by the fissure between the joints. The instrument is then placed on a level, and the two liquids are made to stand at 0°, in the scale *S*. With this instrument we at once obtain the measures of ascent and descent of the two liquids, which gives great precision and facility in experimenting with it, as the results are shown, as it were, in two ways.

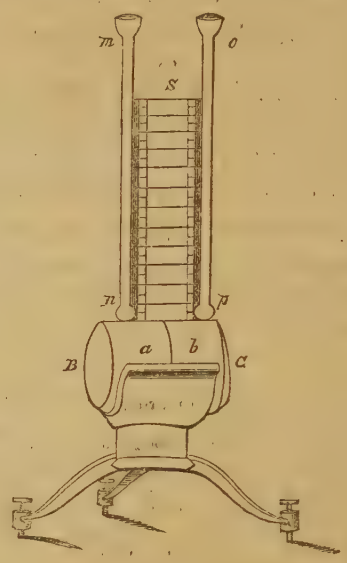


Fig. 2.

I will now communicate the results obtained by employing the skins of the frog, torpedo, and eel, with the solutions before alluded to. In our first trials, we perceived very plainly the marked influence which the position of the membrane exerted upon the phenomena. It was this discovery that first led us to study in this point of view the urinary bladder and stomach of different animals.

With some care we obtained the skins uninjured, and deprived of all their subcutaneous cellular tissue. After having thus prepared them, and by cutting off the parts which, in the torpedo and eel, are pierced with the cutaneous appendages, we succeeded in obtaining membranes well adapted for this kind of experiments.

When employing the skin of the torpedo, we directed its external surface in one endosmometer towards the interior of the instrument, and in another towards its exterior; and on filling the two with a solution of gum Arabic, we observed that the solution in the first was raised thirty millimetres, and in the second, at one time, eighteen, and at another only six. In some instances, the fluid was raised twenty millimetres, and even more, in the first tube, while it was scarcely elevated at all in the second.

These differences were equally evident with syrup, which rose thirty or even eighty millimetres when the external surface of the skin was turned towards the instrument, where the liquid was contained; but which, in the inverse position of the membrane, did not, at the most, rise more than two. In one instance, where it rose eighty millimetres, in the first of the dispositions mentioned, it could only be raised twenty millimetres when the second was adopted. With the solution of albumen, the elevation was twenty-six millimetres, when the external face of the skin was in contact with it, and thirteen only in the opposite direction.

The results obtained with the skin of the frog agree, in

general, with those furnished by that of the torpedo. We remarked that the direction of the endosmotic current was constantly from the water to the solutions of sugar, gum, and albumen. We found also that the membrane possessed the property of increasing or diminishing the velocity of the endosmose, according to its relative position to the two liquids. In placing the skin of the frog in the two endosmometers in the usual manner, we obtained an elevation of thirty-six millimetres when its external face was in contact with the syrup, but only twenty-four in the inverse disposition. In many cases, the first was exactly double the other.

There was an equally well-marked difference, and always in the same way, when using the solutions of albumen and gum. With the first solution, there was an elevation of twenty-four millimetres, and with the second, thirty-two, when the external surface of skin was in contact with them; but when, on the contrary, its internal face was directed towards them, the solution of albumen rose only twelve millimetres, and the gum water, sixteen.

The differences which we previously observed in making use of the syrup, when we employed the skin of the frog and the torpedo, were equally present when using the skin of the eel; but what was singular with regard to this last was, that this difference did not become manifest during the first moments of the experiment. At the commencement, the ascent of the liquid was equal in the two instruments; but, in two hours, we found it thirty millimetres in the endosmometer, in which the external face of the skin was turned towards the syrup; and twenty millimetres in the other. With the solutions of albumen and gum, the differences were observed from the beginning of the experiment, as ordinarily took place; and while, at the end of the experiment, we found that the former was raised eight millimetres when the external side of the skin was directed towards it, and the latter, twenty, we perceived, on the contrary, in the opposite position of the skin, that the first solution rose to four millimetres, and the second to seventeen.

The state of freshness appeared more necessary for the skins of the eel, than for those of the frog or torpedo, when we noted the difference in the elevation of the liquid in the two endosmometers. If the skin of the eel has been detached from the animal two or three days, the difference in height ceases in the two dispositions of the membrane; and the syrup and solutions of albumen and gum were raised, in the same space of time, to an equal height in the two instruments.

In employing water and alcohol, Dutrochet obtained a current in the direction from the former to the latter. This was, therefore, an exception to all the other facts which he discovered, in which the current was directed from the least dense to the denser fluid. The influence of the direction of the membrane was very palpable in our experiments; but the disposition favourable for the current constantly directed from the water to the alcohol, was not the same for the three kinds of skin. Thus, in using that of the frog, the current from the water to the alcohol is more rapid when its direction is from its external to its internal surface. In different experiments, often repeated, we observed a rise of twenty, twenty-four, and forty millimetres, when the internal face of the skin was turned towards the alcohol, while, in the contrary disposition, the corresponding elevations were only four, twelve, and twenty. In analogous circumstances, the disposition of the membrane being favourable, the elevation was twenty-eight millimetres; in the other, on the contrary, there was none. With the skin of the eel, the contrary took place, the current being more rapid from the internal to the external surface; and while the alcohol contained in the instrument is raised to the height of twenty millimetres when it is in contact with the external face of the skin, it only ascended ten in the contrary case.

This difference of elevation always occurs in the same way, and is the same in the skin of the torpedo as in that of the eel. The elevation has been fifty millimetres in one instrument, and twenty in the other.

Some anomalies which we observed in our first experiments led us to study with more precision the circumstances of the phenomenon of endosmose through the skin of the torpedo between water and alcohol. We constantly found the difference above stated, when the skin of the torpedo had been recently prepared, and had not been used for other trials of the same kind; but it only persisted during the first hour of the experiment, or a little after: the elevations then followed a different law, and the ascent in the endosmometer, in which the external surface of skin was in contact with the water, seemed first to diminish, then to cease, and finally the direction of the current became changed.

Among the numerous experiments which we tried, we shall select the following, during which we noted the elevations every hour. We shall mark the endosmometer in which the internal face of the membrane was in contact with the water A, and that in which it was directed towards the interior of the instrument B.

| A. | Mil. | B. | Mil. |
|---|---|---|---|
| Height during the 1st hour | 23 | Height during the 1st hour | 17 |
| „ „ 2nd „ | 25 | „ „ 2nd „ | 3 |
| „ „ 3rd „ | 25 | „ „ 3rd „ | 0 |
| „ „ 4th „ | 25, lowered in the | 4th „ | 3 |

We may conclude then,—1st. That provided the skin of the torpedo be recent, endosmose takes place, as usual, from water to alcohol; with this difference, however, that while, in the case where the internal face of the skin is in contact with the water, the elevation is as three; in the reverse case it is as two. 2nd. That while in the first disposition of the membrane, (A,) the force of endosmose always continues some hours; in the second, (B,) this same force seems always to diminish, and, ultimately, to cease entirely. 3rd. That after a certain time, the direction of the current changes, and takes place from the alcohol to the water, when the internal surface of the skin is turned towards the alcohol, while it remains constant in the contrary position of the skin. It occurred to us that we should attribute the singularities observed when using alcohol, to the chemical action which this liquid exerts upon the membrane, and to the consequent alteration of the structure itself.

The diminution of the intensity of the endosmose observed in the skin of the torpedo, but only in unfavourable positions of the membrane, is verified in that of the frog in every position; but it does not decrease in regular gradation, as we see by this table, in which A and B represent the same endosmometers as in the preceding table.

| A. | Mil. | B. | Mil. |
|---|---|---|---|
| Height during the 1st hour | 23 | Height during the 1st hour | 30 |
| „ „ 2nd „ | 40 | „ „ 2nd „ | 55 |
| „ „ 3rd „ | 12 | „ „ 3rd „ | 15 |
| „ „ 4th „ | 22 | „ „ 4th „ | 35 |
| „ 5th & 6th „ | 56 | „ 5th & 6th „ | 58 |

During the night the liquid overflowed out of the two endosmometres, but there was no inversion of the current, as took place in the skin of the torpedo. Nor was this phenomenon witnessed with the skin of the eel, even when the experiments were prolonged as much as five hours; but the elevations were irregular, as in the skin of the frog.

It was important to discover if the force of the endosmose varied according as the skin had been taken from different regions of the animal. The experiments which we tried with this view were not numerous. We can only say that the endosmotic current did not vary in any manner; that we tried some skin which, in the torpedo, covered the electrical organs, and some from the back, and we did not observe anything further, whether we employed skin taken from the belly or from the back of the frog.

We performed a long series of experiments in order to determine the respective force of the endosmose with different liquids through the three skins above mentioned. For this purpose, three endosmometers were simultaneously prepared: one with the skin of the torpedo, a second with that of the frog, and a third with that of the eel. In the three instruments the skins were arranged in such a way that the external surface was directed towards the interior of the instrument, which contained at one time a solution of sugar or albumen, at another gum-water or alcohol. The endosmometers were placed in a glass vessel filled with spring water. This disposition afforded us the opportunity of immediately recognising the difference in height of these liquids through the three kinds of skin. This table shows the intensity of the endosmose of each of the liquids through the different skins:—

| | Solution of sugar. | Solution of albumen. | Solution of gum. | Alcohol. |
|---|---|---|---|---|
| | Mil. | Mil. | Mil. | Mil. |
| Skin of torpedo ... | 100 | 30 | 120 | 35 |
| Skin of frog ..... | 25 | 15 | 22 | 80 |
| Skin of eel ..... | 15 | 8 | 6 | 55 |

It will thus be seen—1st, that with the skin of the torpedo the endosmotic current is strongest with the solutions of gum, sugar, and albumen; 2nd, that with the same liquid it is less strong through the skin of the eel than through that of the frog; 3rd, that with the skin of the frog we have an endos-

motic current from the water to the alcohol, stronger than that with the eel, and still more energetic than with the skin of the torpedo; 4th, that the stronger current, from the water to the alcohol, through the skin of the frog, persists even in the more unfavourable positions of the skin, with regard to the liquids, for the production of the phenomena; 5th, that the intensity of the endosmose in the same skin varies at each change of the liquid. It follows, then, that with the skin of the torpedo these liquids must be ranged in the following order, proceeding from that which gives the strongest current to that which gives the weakest:—

With the skin of the torpedo: solution of gum, solution of sugar, alcohol, solution of albumen.

With the skin of the frog: alcohol, solution of sugar, of gum, and albumen.

With the skin of the eel: alcohol, solution of sugar, albumen, and gum.

These last results prove that the order in which Dutrochet arranged these liquids, according to the velocity of the endosmose which takes place between them and the water, must not be regarded as true in all cases; we shall see that it can only be considered as invariable in the single case of the urinary bladder, which this skilful experimenter made use of.

Reserving for another time the general conclusions to be drawn from what we have already shown, I shall now pass on to the observations which we made when using the membranes coming under our second category—namely, the stomach of the lamb, dog, and cat, and the gizzard of the fowl.

In all these experiments we always began by dissecting off, with the greatest care, all the muscular fibres of these organs, before applying them to the endosmometer, preserving only the mucous membrane. The greater number of our researches were made with stomachs taken from the animals immediately after death, and we were careful in noting the cases in which it was otherwise, as they occurred.

In using the stomach of the lamb, prepared as we have just stated, and the solution of sugar in the interior of the endosmometers, by placing the membrane with its internal or stomachal surface towards the instrument, the ascent of the liquid was 56 millimetres in one case, and 54 in another. In the reversed position of the membrane, it was 72 millimetres in the first, and 66 in the second. These two experiments lasted only an hour and a quarter; the endosmose was increased then by employing syrup, and by directing it from the internal to the external surface of the stomach. But when the solution of white of egg was used, and placed in contact with the internal surface of the stomach, it was raised 23, 28, and 35 millimetres. In the contrary case it only mounted 11, 20, and 22 millimetres in the space of two hours, as usual.

On introducing a solution of gum Arabic, the elevation in the two contrary dispositions of the membrane was sometimes nearly, and at others exactly, the same, and only eight millimetres in each instrument. In one case, out of many experiments, when the internal surface of the membrane was in contact with the solution of gum, the ascent was twelve millimetres; and in another, in the contrary disposition of the membrane, it was eight. The intensity of the endosmose between the water and the gum solution was excessively feeble when it took place through the stomach of the lamb. It was necessary, therefore, to prolong the experiment more than usual to obtain any very palpable elevations. Those which I have just alluded to were obtained after carrying on the experiment more than four hours. Besides this, it should be remarked, that the endosmotic current through this membrane quickly ceased, when we employed these two liquids. It often happened, in fact, that the gum solution, after having attained a little elevation, did not rise higher after the lapse of two hours, and even more.

The favourable position for endosmose between water and syrup, which was remarked in the case of the stomach of the lamb, is not the same as with those of the dog and the cat. With the stomach of the cat, the height of the syrup in the tube was thirty or fifteen millimetres, according to whether the internal face of the membrane was towards the interior of the instrument, or in the opposite direction. With that of the dog, in the first case it was sixty-eight, and in the second eight millimetres.

With the stomach of the cat, the endosmose from the water to the gum solution is equally directed from the external to the internal surface of the organ. Thus, when the mucous surface is in contact with the gum-water, the elevation of the liquid attains to thirty-eight millimetres, while in the other position of the membrane it is not more than fourteen. This difference is only observed when the stomach is very fresh. If it belong to an animal which has been some time dead, we then perceive, in the first moments of the experiment, a slight elevation, and sometimes an equality, in the two instruments. At one time it is greater, at another less, in the same endosmometer; but it quickly redescends. By changing the disposition of the liquids, by placing the gum-solution outside, and the pure water within the instrument, this last descends. These phenomena are also produced when we employ the stomach of the dog.

We did not make any experiments with the stomach of the latter animal immediately after death, nor did we employ the solution of albumen as the internal liquid. Those, the results of which I shall now state, were made many hours after the death of the animal. The albuminous solution was raised to an equal height in the two instruments, in four different experiments. In one of these this elevation was twenty millimetres in an hour, and it did not vary during three hours longer in the endosmometer, when the internal surface of the stomach was turned from the interior of the instrument; while in the same interval of time it sunk to twenty-five millimetres in the other. In general, it rarely happened that the liquid column remained stationary in either of them. In the greatest number of cases (we still speak of the stomach of the dog that was not fresh) the liquid descended in the two instruments after it had attained a greater or less elevation; but the diminution in height is double, and even treble in the endosmometer which presents the external face of the membrane towards the solution of albumen. In changing the position of the liquids, by placing the solution of white of egg in the exterior of the endosmometers, and the water in their interior, we find that the internal liquid descends equally in both. These descents are occasioned by the cessation of the endosmose, in consequence of the alteration in the structure of the membrane some time after death; only the effect of the disposition of the two surfaces remains, to a certain degree, even in the altered membrane. In fact, we have remarked that the descent of the albuminous solution in the endosmometer is double, and even treble, when the external surface of the membrane is turned from the interior of the instrument.

With the mucous membrane of the gizzard of a fowl, using syrup and pure water, endosmose takes place from the external to the internal surface of the membrane, although generally the difference in elevation between the two endosmometers is not great. Thus, when the inside of the membrane was directed towards the interior of the instrument, the elevation was forty-eight millimetres; while in the opposite direction it was forty-three millimetres. It is not unusual to see a certain elevation—for instance, seventeen or twenty millimetres—when the membrane is in the first position; while when it is in the second the liquid is immovable. It is worthy of remark, that the current from the water to the syrup, through the gizzard of a fowl, very quickly ceases. Generally within two hours the liquid column becomes stationary in both the tubes.

Endosmose between water and a solution of albumen, through this membrane, seems to go on equally, whatever may be the position of the surfaces with regard to the liquids. We have verified this result in a great number of cases. In a single instance we found the liquid ascend fifteen millimetres in the endosmometer, in which the internal surface of the membrane was turned towards the interior of the instrument, while in the other it only rose five millimetres.

The same results are obtained with a solution of gum. In both the positions of the mucous membrane of a fowl, the elevation of the liquid is the same, even if the experiment be prolonged during the whole night. When, in some rare exception, a slight difference of, at most, one or two millimetres is perceived, it is always in that endosmometer in which the inside of the membrane is in contact with the gum.

To complete this account of the results obtained by employing the membranes belonging to our second category, it only remains for me to mention some phenomena observed in using alcohol for the interior liquid, by putting it in contact successively with each of the faces of these membranes.

With the stomachs of a lamb, cat, and dog, the endosmose was constantly directed from the water to the alcohol, and it was most active from the internal to the external surface of the membrane. In fact, we have seen in the endosmometer in which the external face of the mucous membrane of the stomach of the lamb was turned towards the interior of the instrument which contained the alcohol, the elevation was eighty-eight millimetres and ten only in the opposite direction; and that, after this time, the liquid continued to rise forty

millimetres more in the first endosmometer, but remained stationary, or even fell somewhat, in the second.

With the stomach of a cat, the alcohol ascended twenty-two millimetres in the tube during the ordinary space of time—namely, two hours, when the external face of the membrane was directed to the interior of the instrument; but in the opposite arrangement, the elevation was not more than two millimetres. In the first position of the membrane, it was sometimes even from twenty to twenty-four millimetres, and in the second it did not rise at all.

With the stomach of a dog, the rise of the alcohol was twenty-four millimetres when the mucous surface was in contact with the water, but was sixteen only when disposed in the opposite direction. Six hours after, the liquid rose forty more millimetres in the first case, and twenty-five only in the second. In another experiment, after the time stated, the elevations were, in the first, 130, and in the second, six millimetres.

With the stomachs which we have hitherto employed, the endosmose was more energetic from the internal to the external face of the membrane, and was always from the water to the alcohol, as with those which Dutrochet used. It is singular, that with the lining membrane of the gizzard of a fowl, endosmose took place, on the contrary, from the alcohol to the water, and even so in every relation of the membrane to the two liquids. This exceptional fact, which we at first attributed to default of integrity of the membranes employed, has been proved by us in a great number of instances; at one time, by introducing, as usual, the alcohol in the interior of the instrument, when we saw the level of the alcohol fall; at another, by placing it at the exterior, and then the water rose constantly in the tube. The influence of the direction of the membrane is rendered equally plain in this case. I shall begin by giving the diminutions in height noted in the case where the alcohol was in the interior of the instrument. When the internal surface of the mucous membrane of the gizzard was turned towards the interior of the endosmometer, the diminution in height of the alcohol in the tube was twenty-four, twenty-eight, and even more, in the space of six hours, whilst it was only eleven and twelve in the opposite direction. In another experiment that I select from a great number, the pure water being placed in the interior of the instrument, the elevation was thirty-two millimetres in that where the external face of the membrane was turned from the interior of the endosmometer, and sixteen with the other, in the space of about three hours. The endosmose between the alcohol and the water was therefore most rapid from the internal to the external surface of the gizzard.

We will proceed, lastly, to the exposition of what we observed when employing, for the intermediate membrane, the mucous membrane of the urinary bladder of the ox, in the fresh state, and deprived of its muscular layers, as we had done with the stomachs. By employing this membrane, and introducing the syrup in the interior of the endosmometers, the liquids ascended in the tubes to eighty and even 113 millimetres in the usual space of two hours, when the internal surface of the membrane was in contact with the syrup; but only to sixty-three or seventy-two in the contrary direction. The velocity of the current was then greater, in this instance, from the external to the internal face of the membrane. The contrary was the case with the gum solution. The elevation was eighteen, and sometimes even only seven millimetres, with this solution, when the internal face of the membrane was directed towards the interior of the instrument; while in the opposite direction it was fifty-two, and in some cases twenty millimetres.

With the gum Arabic solution, the liquid sometimes at first descended in the two tubes, and afterwards, after a certain time, ascended to nearly the same altitudes as we observed with the syrup. In one case the liquid descended in the two instruments seven millimetres during the first hour of the experiment; it afterwards began to rise, and in three hours after, the elevation was twelve millimetres in the endosmometer in which the internal face was in contact with the gum solution, and eight millimetres in the other instrument, where this face was in contact with the water.

With the solution of albumen and pure water, the endosmose did not take place through the mucous membrane at this time employed: the liquid fell in the two tubes, whether the solution was in the interior or in the exterior of the instrument. It should, however, be observed, that when the internal face of the membrane was in contact with the albumen solution, and was directed towards the outside of the instrument, the diminution in height was less than when in the reverse position, and that the contrary took place when this solution was in contact with the external surface of the membrane, and within the instrument.

Lastly, with the alcohol and pure water, the endosmose was from the latter to the former, as in most of the cases; but the elevation was at one time twenty-four, and at another fifty-nine, millimetres, when the external surface of the membrane was in contact with the alcohol, and twenty-six or thirty-seven in the contrary direction.

Some differences, as evident as those observed when using fresh membranes, disappeared totally or nearly so by employing them when dried or altered by putrefaction more or less advanced. We did not vary much the experiments proper for determining the influence of the dried condition or putrefactive alteration of the membranes, but postponed this inquiry for other circumstances. It is certain, nevertheless, that by employing the ordinary fluids, and for the membranes interposed between these and water, the dried bladders of the pig and ox, softened before the experiment, so that we could attach them to the endosmometer, there is either no difference in the elevation of the liquids in the two tubes even after many hours, and whatever be the disposition of the faces of the bladder; or else, if there be one, in all cases it is very little, and exists at one time in that instrument in which the internal surface of the bladder is towards its interior, and at another time in the other apparatus, where the disposition of the membrane was different. By employing the same bladders, after being some hours in water, we sometimes observed a certain regularity in the effects, as takes place with the dried bladders; but if we employed them in a very soft state, after keeping them a night in water, we could not perceive any elevation in the fluids of the endosmometers, or that it was equal in the two tubes. We could not, in some cases, explain the anomalies presented by the bladders in this state; in fact, we readily perceived in a softened bladder how its muscular fasciculi are swelled, and that this increased the longer it remained in water. These muscular fasciculi required also a certain thickness, approached one another, and returned to some extent to a state resembling those in the fresh bladder. But we saw many times that endosmose did not take place with bladders, gizzards, and stomachs in the fresh state, from which we had not previously removed the muscular layers. If the bladder be a little softened, the muscular fasciculi are, it is true, a little more dilated; but at all times there exists between them some interstices through which endosmose can certainly take place; but the inequality of these interstices, even in two symmetrical portions of the same bladder, must give rise to vague and uncertain results.

For the purpose of discovering the influence of putrefaction in the phenomenon of endosmose, we only employed the gizzard of the fowl. A great uncertainty prevails in the results furnished by it in this state; at one time the fluid did not traverse it at all, and at another it attained an equal elevation in the two instruments. Whatever fluids we employed, or the disposition of the membrane, the endosmose was energetic, at one time in one way, at another in another; in short, there was sometimes a descent of the fluid in the two instruments. In speaking elsewhere of what we observed when using the skin and stomachal mucous membrane of certain animals, we remarked how the phenomenon of endosmose varied according as we employed these membranes immediately after the death of the animal, or else some hours after. All these facts show clearly the close relationship which exists between the phenomenon of endosmose, and the physiological condition of the membranes.

The phenomenon of endosmose, like all those which are carried on in organized tissues, does not present that constancy and regularity in its appearances, which are remarked in physical phenomenon carried on elsewhere. It is owing to this variable and accidental organic condition of fresh membranes, that we must certainly attribute the singular phenomenon which we witness in certain cases, with the same fluid, the same membrane, and the same relative disposition, sometimes that the fluid rises to eighty millimetres, for example, and at others, only to ten. And we must in the same way refer to a constant anatomico-physiological state, and in relation to the function of the same membrane, the constant difference of elevation which exists in the two different positions of the membrane, whatever difference there may be in other respects. It will be important to study the phenomenon with a view to ascertain the accidental circumstances which occasion this variety in the endosmose through fresh membranes, such, for example, as depriving an animal of nourishment, or the administration of certain substances before killing it, &c. Having in view these objects, we made

one comparative experiment only, which led us to admit that the endosmose through the skin of the eel is more energetic when taken from an animal that had been kept some days out of water.

The novelty of these results, and their importance, must be my apology for stating them to you in their full extent. The following are the general conclusions which we deduced:—

1st.—The intermediate membrane exerts a very active part in the velocity of the endosmotic current, as well as in its direction.

2nd.—There is, in general, with each membrane, a certain position in which endosmose is most active. The cases are very rare in which, with a fresh membrane, the endosmose is the same, whatever be its disposition with regard to the two fluids.

3rd.—The direction most favourable to endosmose through skins, is generally from the internal to the external surface, with the exception of that of a frog, through which the endosmose between water and alcohol takes place more vigorously from the external to the internal surface.

4th.—The direction most favourable to endosmose through the stomach and urinary bladders, is much more variable than through skin, according to the different fluids.

5th.—The phenomenon of endosmose is closely connected with the physiological state of the membranes.

6th.—With membranes dried, or altered by putrefaction, there is either no endosmose, or if there be any, there is no difference in different positions of the skin.

To give a full account of the results of our experiments, and of the conclusions we have deduced from them, it is necessary to consider *exosmose* in a manner differing from that in which it has hitherto been regarded. The increase of volume presented by the internal fluid, which is generally the more dense, is considered by Dutrochet as the result of the difference between the *strong current going in, and the weak one coming out.* According to this view, that fluid which receives from the other more than it gives back, should increase in proportion to the excess, or rather to the difference between the strong current and the weak one. All the facts that we have observed lead to the conclusion that the different membranes allow the water to pass more readily towards the fluid contained in the endosmometers if their surfaces are directed after a certain manner, and according to the fluid contained in the instruments. But a great number of difficulties, which we shall abstain from mentioning, because they will present themselves to every one who has followed us in our relation of the facts we have observed, accompany this mode of considering the phenomena. We shall only remark, that with a solution of gum or of sugar in the interior of the endosmometer, endosmose alone cannot account for all the phenomena which are presented by the internal membrane of the stomach of the lamb, and by the mucous membrane of the urinary bladder of the ox, and that these phenomena are susceptible of a more easy and natural explanation, by admitting that by exosmose, the different membranes give to the different fluids a more or less easy passage towards the water, according as they are in contact with one or the other surface; always supposing the constant passage of the water towards the denser fluid, in obedience to the general law of endosmose. It was necessary, however, to have recourse to experiments, to determine whether this be the true solution of the phenomena; we were obliged, not only to prove the existence of exosmose, as had been done by M. Dutrochet, but also to measure it in the same way as endosmose.

In these researches, we preferred using the skins of frogs and eels, and, for the denser fluid, salt water, or, in some cases, a solution of sugar.

We began by preparing two endosmometers as usual, placing the skin in one with its internal surface towards the interior of the instrument, and in the other in the opposite manner. Equal quantities of salt water, of known density, were put into both endosmometers, and the instruments were plunged into separate glass vessels, containing distilled water equal in volume to the salt water. After some hours, the quantity of fluid contained in the endosmometers, as well as that of the distilled water remaining in the vessels, were measured, and it was also observed which of the two fluids was highest in the tubes. It was found that endosmose from water to salt water through these skins goes on most freely from the internal to the external surface. On examining the densities of the fluids contained in the two instruments, and of the water contained in the vessels, it was found that in the endosmometer in which the volume of salt water was most increased, its density had been better preserved than in the other; and, *vice versâ*, it was seen that in the vessel in which the distilled water had been more diminished, a smaller quantity of solution of salt was found to have been introduced by exosmose, than in the other vessel in which a smaller quantity of the water had disappeared.

In the following table are given the numbers furnished by two of the numerous experiments which led us to form these conclusions. The first column shows, in tenths of cubic centimeters, the volumes of liquid in the endosmometers after the experiment; the second column the weight of a given volume of the fluid; the third, the volume of distilled water found in the external vessels; the fourth, the weight acquired during the experiment by a given volume of water in the vessels. The weight of an equal volume of salt water before the experiment was 17gr.,350; that of an equal volume of distilled water was 16gr.,025.

| | I. | II. | III. | IV. |
|---|---|---|---|---|
| Frog's-skin | 150 grs., 0 | 17 grs., 835 | 112 grs., 5 | 16 grs., 165 |
| | 149, 0 | 17, 680 | 113, 5 | 16, 405 |
| Eel's-skin | 222 grs., 5 | 17 grs., 145 | 200 grs., 0 | 16 grs., 170 |
| | 217, 5 | 47, 130 | 205, 0 | 16, 220 |

In some cases we precipitated the salt contained in the external vessels by nitrate of silver. The last column of the second table gives the quantity of chloride of silver thus obtained.

| | I. | II. | III. | IV. |
|---|---|---|---|---|
| Frog's-skin | 172 grs., 0 | 17 grs., 190 | 160, grs., 0 | 0 grs., 190 |
| | 171, 0 | 17, 175 | 161, 0 | 0, 280 |

We obtained similar results with syrup and the skin of an eel; the weight of a given volume of syrup before the experiment was 18 grs., 180.

| | I. | II. | III. | IV. |
|---|---|---|---|---|
| Eel's-skin | 193 grs., 0 | 18 grs., 035 | 181 grs., 0 | 16 grs., 045 |
| | 191, 0 | 18, 010 | 183, 0 | 16, 050 |

These facts cannot be explained by supposing that the elevation and increased volume of the fluid in the two endosmometers are only the difference between the current of endosmose and that of exosmose. If it were so, the endosmometer in which the volume of salt water is the most augmented, ought to contain a liquid less dense than the other, in which it has increased less. On the contrary, it is completely explained by admitting that the endosmotic current is equal, or nearly so, in the two positions of the membrane, and that the difference arises entirely from the current of exosmose, which is more feeble in the endosmometer in which the elevation is the greatest, and more active in that where the elevation is the least.

These results show the great importance of the action of the membrane interposed between the fluids; in fact, merely by its peculiar nature and physiological function, we can explain, more or less easily, the passage through it of different fluids of a certain density towards another which is less dense.

We acknowledge the necessity of further experiments to exhaust so important a subject as the phenomena of endosmose, which operates through the different lining membranes, and principally as regards the comparison between different species of animals, particularly between the carnivorous and herbivorous. Yet we can assert that the results we have obtained by this series of experiments, and our method of considering exosmose, lead to a more just application of the phenomenon of endosmose to the functions of organized bodies.

The exosmose of solutions of sugar, albumen, and gum, towards water, is most active from the internal to the external surface of all the skins that we examined. It is precisely in the same direction that an abundant secretion of mucus passes through the skins of the torpedo, the eel, the frog, and other animals. Endosmose from water to these solutions is less intense, from the external to the internal surface of the skin, than in the contrary direction. Consequently, even if it be not admitted that this direction of the mucous secretion, and this feeble absorption of the water in which these animals live—functions which, by a general law, must always bear a certain proportion to each other—are not entirely due to the phenomena we have discovered, it cannot, at least, be denied, that they are extremely favourable to it. Doubtless this function of the skin could not be carried on, or would be very imperfect, if, in animals which live entirely in water, this membrane acted by endosmose in a direction opposed to that we have discovered.

We dismiss, for the present, what takes place with water and alcohol through the skin of the frog. Alcohol is a liquid which has no analogy to those which are found in the bodies of animals; and the anomalies we observed when employing it as an endosmometric fluid, if they hold good with regard to

human skin, belong rather to the science of therapeutics than to physiology.

The direction constantly observed to be most favourable to endosmose and exosmose through the skin is no longer found to be so when the mucous membrane of the stomach of different animals is employed. But every one knows that the function of the stomach is extremely complicated, and that all the substances conveyed into this organ are not absorbed there, or are so very unequally. Besides, we repeat again, this subject ought to be elucidated by further study. When it is found, for example, that the direction most favourable to endosmose between water and syrup, is not the same in the stomach of a ruminant as in that of a carnivorous animal, it is clearly demonstrated by this fact, that the phenomenon of endosmose is intimately connected with those essential modifications by which the digestive functions of these two orders of animals are regulated.

I was anxious to relate in detail the experiments I made with Professor Cima on the subject of endosmose, being convinced of the great importance of this phenomenon in the functions of life. It is by endosmose that physiologists now explain the nutrition of the ovules of mammiferous animals in the ovaries, and how the sacs containing the germs of the cephalopodous mollusca (or spermatoferes) open as soon as they come in contact with water. The life of the cellule, which is certainly the elementary organ of all the vegetable and animal tissues, ought to include the action of endosmose. This shows how these phenomena ought to be studied, in order to make all the applications of which they are capable. I will not close without relating the recent experiments of Poiseuille, in order to explain by endosmose the purgative effect of certain substances. He found that endosmose takes place through the animal tissues, from the serum to Seidlitz water, sulphate of soda, and sea salt. This is precisely what happens when these medicines are used internally. The excrements contain an unusual quantity of albumen; in this case it must be admitted that endosmose has taken place from the serum of the blood to the saline water in the intestine, through its capillary vessels. But to place beyond doubt the correctness of Poiseuille's application, it is necessary to show, that endosmose goes on when one of the fluids is in motion, and is continually renewed. This has been recently done by Dr. Bacchetti, who has shown that the rapidity of endosmose is considerably augmented when one of the fluids is continually flowing. This result also is in accordance with the principles of the theory of endosmose. The changes of the fluids constantly going on through the membrane certainly tend to check the action of endosmose; or, in other words, the conditions of this phenomenon are better preserved the longer the fluids are kept without mixing. Poiseuille has also demonstrated, that endosmose ceases through a membrane after it has gone on for a certain time; but that this property may be restored to it after having used it with other fluids. The most remarkable fact of those discovered by Poiseuille is that of the influence of hydrochlorate of morphine. This substance, when added to saline solutions, greatly diminishes the endosmose from the serum to the solution, and at last changes the direction of the current. This fact has been confirmed by Dr. Bacchetti. How can this fact be entirely overlooked in explaining the action of morphine and preparations of opium as remedies for diarrhœa, and the constipation which they produce?

ERRATA.—In p. 605, line 25, first col., *for* depressed and elevated, *read* elevated and depressed; in line 27, *for* convex or concave, *read* concave or convex; and in line 23 from bottom of second col., *read* quickly draw the liquid through all their mass—that is to say, become saturated with it. In p. 607, line 9, first col., *for* fluted, *read* luted.

# Hospital Reports.

## UNIVERSITY COLLEGE HOSPITAL.

June 4th.—John H——, aged thirty-seven, had the elbow-joint excised by Mr. Liston, for disease consequent on an injury received five months before. Dr. Snow, who administered the ether, placed his apparatus in the cold water of the operating theatre, which was 65°, and put into it two ounces of ether which was there, a quantity which generally suffices for an operation. The patient inhaled quietly, and the operation was commenced at the end of five minutes without causing any sign of pain. It was found soon after, that the ether was finished, and some one went to another part of the hospital for more; in the meantime, the incisions and directions preparatory to sawing the bones having been completed, the man began to complain, and Mr. Liston waited till he was rendered again insensible, which was in about a minute after the inhalation was resumed, and the operation was then completed, the patient sitting perfectly still and quiet. He began to recover his consciousness directly the operation was concluded, but was rather inebriated for a few minutes.

Mr. Liston, after remarking on the nature of the case, said that the operation was of a kind to be most painful, but had been performed, as they saw, without pain, except a very trifling amount of it, when the ether ran short, and as there was no hæmorrhage, he had waited a minute or two till he was again insensible.

June 5th.—Mr. Richard Quain amputated the thigh of Charles P——, aged twelve years. He became insensible without struggling, and the operation commenced when he had been inhaling between three and four minutes, and was performed without his uttering a cry.

Mr. Quain said, that the disease of the knee-joint was of a scrofulous nature, and had existed some years. There had lately been extensive suppuration; this of itself was not always a sufficient cause for amputation, but it was accompanied in this case with hectic fever and there was reason to fear that this might carry off the patient or excite scrofulous disease in other parts of the body, if the source of it were allowed to remain. The ether had been administered by Dr. Snow, who had had great experience in the application of it, and had given it with complete success in some previous operations there, by Mr. Liston, as they were aware. The vapour of ether was calculated to be a great blessing, when we knew the right application of it. It had been indeed a great blessing to this little boy, who, as they saw, felt nothing of the operation, and without the ether, judging from his temper, his cries would have been such that it would have been almost impossible for any one to have remained in the room.

June 7th.—Mr. Liston performed lithotomy on John A——, a fresh and healthy-looking man, from the country, aged seventy. The inhaler was placed in water at 67°. There was a short cough excited by the vapour, notwithstanding the gradual admission of it at first, and this caused the patient's face to become red, and the veins to be distended, but the cough subsided as he became insensible, and the operation was commenced five minutes after the inhalation began. The calculus was very soon extracted, and was a small one, as Mr. Liston had pronounced it to be on sounding the patient. Eighteen drachms of ether were used in this case.

Mr Liston said, that the stone was of such a size that it might easily have been seized by the lithotrite; it was so hard, however, that it would not readily have been crushed, although, certainly, the hardest calculi might be crushed in the bladder. He thought that the inhalation of ether would probably alter the relation between lithotomy and lithotrity. The patient could now, as they had seen, get rid of his calculus without pain by lithotomy, but not so by lithotrity, for it would be impossible to be giving the ether for a fortnight, whilst the fragments were coming away. By lithotomy, also, the patient at once got rid of the source of irritation, and his bladder was put in a quiet state, another advantage which this operation possessed over lithotrity; but the choice of the operation would have to be left to the patient, and the surgeon must be prepared to perform either.

On the same day, Mr. Liston amputated the forefinger of Mary M——, aged twenty-six, for disease of the bones and synovial membrane. The ether was given in this, as in the former case, by Dr. Snow. This patient found the ether disagreeable, and wished to leave it off when partly under its influence, but with a little trouble she was partly persuaded and partly compelled to persevere, and soon became quite insensible, and had her finger removed without feeling it. Nine drachms and a half of ether were used in this case.

## MIDDLESEX HOSPITAL.

CASE OF ATTEMPTED POISONING; RESUSCITATION BY GALVANISM.

Reported by THOMAS PEREGRIN JAMES, Assistant Apothecary.

A FEMALE, aged twenty-nine, was brought into this hospital a few minutes after twelve at noon, May 24th, reported to have swallowed, about an hour before, three twopennyworths of laudanum, (one ounce.) She was immediately taken to a surgeon, who applied the stomach-pump; but as no person accompanied her from whom satisfactory information could be obtained, Mr. Corfe deemed it advisable again to have recourse to it, as the usual symptoms of loss of consciousness, contracted pupil, and placid, though ghastly countenance, were unusually manifest. Several pints of water were injected; but during this operation, as is usually the case in such instances of extreme narcotism, the large quantity of

tough ropy mucus which collected around the pharynx and glottis rendered it doubtful whether she would not die of asphyxia before we had emptied the stomach, and the tube was of necessity withdrawn before the whole of the contents were removed. The ejected fluid was only slightly discoloured, and tainted with scarcely any perceptible smell of the poison. During and after this operation, pinching, slapping the face and chest sharply with the corner of a damp towel, &c., produced but momentary and imperfect consciousness; indeed, so transient, as scarcely to draw forth the monosyllable "don't." She was now put on her legs, but fell down like a lifeless carcass. The galvanic battery was then got in order, and whilst the wires were being adapted, she fell off into a still deeper state of unconsciousness than she was previously in. When the sponge-directors were applied, for a few minutes no sensible effect was produced, but soon afterwards the muscles of the neck began to quiver, when sensibility appeared gradually to return, and after twenty or thirty minutes the stimulus produced undoubted discomfort, evidenced by shrugging of the shoulders, and attempts to avoid contact with the sponges; but the first marked influence of its effect was the ejection of a large quantity of fluid from the stomach. In another hour she appeared quite lively, answered questions distinctly, and in a moderately loud tone, though in a somewhat peevish manner. The galvanism was occasionally intermitted for a few moments, when she relapsed almost instantaneously, and "dropped off" in the midst of a sentence which she had commenced during the application of the stimulus. The pupils remained unaffected till about two hours had elapsed, when they became somewhat more dilated, and sensible to a strong light. All the symptoms gradually diminished, but it was absolutely necessary to re-apply it at longer intervals until half-past five P.M., when she seemed so far recovered as to allow of her removal to the ward. From the easy diffusibility and quick propagation of the galvanic fluid over the whole system, irritation, capable of exciting action almost *ad libitum*, can be applied to any or even the whole part of the body at one time, and that of a nature void of all the unpleasant results which necessarily follow bastinadoing, cold affusion, searing, the dolichos pruriens, and a whole catalogue of equally brutal resources, which, for the safety of the patient, have necessarily been had recourse to before galvanism was adopted. Dipping the sponges of the directors, on this occasion, in moistened salt, assisted the passage of the current, and increased the conducting power to a striking degree. In ordinary cases, where galvanism is used, the application, if strong, reddens the skin, and even produces some tumefaction, which remains often for hours; but in this instance, although the power was probably three or four times as strong as is generally used, not the slightest discoloration was observable. It should be noticed, that as soon as she was allowed to fall off into a deep sleep, which she was occasionally permitted to do after the extraordinary influence of the battery was fully proved in rousing her instantly from the deepest narcotism to a fretful impatience, the pulse gradually lowered in its power, became slower in its action, and irregular in its movements; but no sooner was this remarkable stimulus laid on again, than the pulse rallied, was regular, fuller, and quicker; and the respirations, previously laboured, slow, and unequal, became more frequent and deeper. The countenance also evidenced, in a striking manner, the singular influence of this agent. When she was admitted, the cheeks were of a leaden hue, and the lips of a tawny colour; but after the expiration of one hour, with the use of the battery, it resumed a somewhat natural tint.

## Original Papers.

ON

# SOME OF THE INJURIES OF BONES, ARISING FROM ACCIDENTS.

By JAMES PRIOR, Esq., M.R.I.A., F.S.A., &c., &c.,
DEPUTY INSPECTOR OF HOSPITALS AND FLEETS.

### No. V.

*Fracture of the Bones of the Leg, (that of the Tibia comminuted.)*

The following case, though the bones did not find their way through the skin, was a severe one of its kind; and besides turning out well under an unpromising condition of the patient, offers another of the varieties common in such accidents. But I have thought it more particularly worth recording, in consequence of another peculiarity occurring in its progress, and which may give rise to some differences of opinion—namely, the probable influence of the irritation of tænia on the intestinal canal, under certain circumstances, giving rise to temporary derangement of the cerebral functions.

Dec. 9th, 1845.—Mark R——, corporal Royal Marines, aged about thirty-four, when descending the stairs from his barrack-room, in a state of intoxication, fell over the balusters, pitching on a stone floor on the third story beneath, a height of twenty-eight feet, striking a large tub of water standing there, one of the stout iron handles of which was bent quite down by the blow. Being dressed for drill, his accoutrements flew about—the unsheathed bayonet nearly wounding one man, and the musket another, in the fall; but as far as could be ascertained, notwithstanding the conflicting testimony of those present, not adding to his own injuries, the most obvious of which, to those who assisted him, was fracture of the right leg.

When brought to hospital, both bones were found to be broken; great deformity existed, the foot being thrown outward; and the lower portion of tibia projecting so acutely on the inner side of the limb, as to threaten egress through the skin. He continued so much under the influence of liquor, as to be wholly insensible to pain or injury, and so violent as to be unmanageable, resisting the efforts of several men to restrain him, while the assistant-surgeon in attendance took the necessary means of extending and securing the limb on a Macintire splint in the best manner such unfavourable circumstances permitted.

I saw him about an hour and a half after the accident. Extensive tumefaction had taken place, considering the short space of time since its occurrence. The leg was about twice its natural size, and shortened, with the tibia still unduly prominent; knee and thigh also much swollen. As far as could be judged from this state of parts, there appeared to be either double fracture of the tibia, or a portion of that bone, about two inches and a half in length, near its middle, splintered and detached; for by placing a finger on either end of this fragment, it could be alternately pressed down and up, giving a slight gurgling sound from effusion into the adjoining cellular membrane. A small wound appeared, about an inch below the patella, but not in communication with the fracture; another on the scalp; severe contusion, followed by extensive ecchymosis, on the left hip; pulse 82. He was still madly intoxicated; threw his arms about violently; endeavoured repeatedly to drag the limb away from its position; so that at length, two attendants being unable to confine him effectually, he being a tall, powerful man, the strait-waistcoat was obliged to be applied, in order to prevent greater mischief. Ordered an emetic, with the view of sobering him, by clearing the stomach, which acted very well. Directed twenty-four leeches to be applied to the limb; and after the bleeding should cease, constant application of a spirit lotion, in the proportion of four ounces to twelve of water, with the addition of half an ounce of solution of diacetate of lead. At ten P.M. was still not sober; leech-bites bleeding freely. At twelve fell off to sleep.

10th.—Is now perfectly collected; had a few short sleeps during the night; a good deal of twitching in the limb, and pain, as he describes it, of a shooting kind; pulse 88; tongue clean. Ordered twenty-four leeches to the leg; the lotion as before; and a fourth part of the following mixture every four hours:—Solution of acetate of ammonia, two ounces; spirit of nitric ether, wine of antimony, and sedative solution of opium, of each two drachms; water, five ounces. Mix. At the midday and evening visits, no material alteration of symptoms.

11th.—Had about three hours' sleep; pain in the limb considerable, and it continues undiminished in size; pulse 116, rather full. Bleed to ten ounces; apply twenty-four leeches; and otherwise go on as yesterday.—Six P.M.: At two o'clock the pulse was 124, is now 130; one natural stool, the first since his admission; slept a good deal during the day; skin of the leg tense, shining, and much distended. Directed an aperient to be given to-morrow morning.

12th.—Slept five or six hours during the night; pulse down to 112, and not so full; pain in the limb greater than previously, shooting to its posterior part; the central portion of tibia before mentioned is quite moveable under the fingers. Apply twenty-four leeches, and otherwise continue as before.—Six P.M.: Pulse, which was up again considerably at midday, is now 114; bowels opened by the aperient.

13th.—Several hours' sleep; pulse 94, firm, rather full; leg hot, shining, and painful, though less in size. Ordered the application of twelve leeches; other remedies as previously,

with the addition of some beef-tea. In the evening, no change worthy of notice.

14th.—Finding the tumefaction sufficiently subsided, I was enabled to accomplish complete reduction of the bones into their places, there having been hitherto some little irregularity, from the causes already mentioned, in the condition of the patient; and it was found they were better retained in place by the limb being straight, than on the inclined plane. Cellular membrane still unusually distended with fluid; pulse 96; tongue clean; extensive ecchymosis of the whole limb up to the hip; much œdema about the ankle; severe pain in the gastrocnemii muscles; anterior tibial artery is felt, but the posterior not clearly distinguishable, probably on account of the swollen state of the parts. From the extreme and sudden tumefaction, I had some grounds to suspect the rupture of a vessel by the fractured ends of the bones. Continue remedies, and let him have some beef-tea.

15th.—An indifferent night; pulse 98, and jerking; limb preserves its length and position, but with frequent and painful startings and twitchings.

16th.—Finding slight irregularity in the fracture, in consequence of extreme restlessness and disturbance arising from these startings, notwithstanding all precautions, I opened and re-arranged it; tongue white; pulse 98, but in the evening down to 82.

17th.—Was much surprised at my visit this morning, after leaving him, as I thought, improved last night, to find serious and sudden disturbance in the cerebral functions. By the report of the nurse, delirium came on between two and three o'clock in the morning, without warning or apparent cause, and with such violence, that after kicking off the cradle with the other foot, added to noisy and incoherent language, he made violent efforts to extricate the injured limb from the apparatus, and get out of bed, so that it became necessary to restrain him by mechanical force. Is quieter at present, though still very incoherent; pulse 104, full, though compressible. His mind wanders a good deal on military matters, evidently influenced by the offence he had committed in being found intoxicated at midday, when ordered for duty, and which, as a non-commissioned officer, would no doubt be followed by reduction to the ranks. Believes, among other delusions, that he is to be tried by a court-martial for insubordination, and hanged; begged earnestly for my intercession to prevent such a fate; but to soothings and assurances that nothing of the kind should happen to him, paid little attention. Constant superintendence required to prevent mischief or disturbance to the leg. Directed the head to be shaved, a cold lotion applied, and the quantity of opium in the diaphoretic mixture reduced to thirty minims. In the evening, found the pulse varying, within a few minutes, from 86 to 100; incoherent, with occasional violent efforts to release himself; but still with that consciousness of persons, as distinguished from circumstances and things, which is frequently seen in delirium tremens.

18th.—No sleep during the night; uneasy and violent; and having attempted, notwithstanding the presence of an attendant, to cast loose the fractured leg, the waistcoat was obliged to be put on for its security; no stool; tongue clean; pulse 96, full. From the delusions he continues to exhibit, I am disposed to believe that this attack arises from mental anxiety, in consequence of the commission of a military crime, as he again made very solemn protestations of due obedience to all orders given him; that he had never been disrespectful to his officers, though now, as he fancied, accused of that offence; had always possessed a good character, and, as before, soliciting my interference. Ordered an aperient, arrowroot, and continuation of former remedies.—Six P.M.: Has been asleep the greater part of the day, awaking only for a few minutes at a time, when he took some refreshment; pulse 82, full, and soft.

19th.—A good night, and more tranquil than hitherto, though still under the influence of delusion.—Six P.M.: Quite rational; pulse 76; hungry; limb painful, he says, which was relieved by the application of the lotion.

20th.—Has slept about eleven hours since last evening's visit, and continues perfectly collected. Before twelve o'clock last night, he passed a family of tape-worms of the broad kind, altogether above fourteen yards, in various lengths, from seven yards, the longest, down to a few inches; but there was supposed to be about another yard, not counted, in pieces of an inch long or less. The whole came away in one stool. Upon questioning him, find he has been subject to the complaint, though without making it known, for more than three years past, having first observed it while serving in China, and frequently coming from him since in short pieces during the exercise of walking. Of this I had previously known nothing; but from the fact of some unusual symptoms having occurred in a few other instances, marked by the passing of tænia, now or recently in hospital, I am inclined to change the opinion originally formed, and to think that this mental disturbance, like the constitutional derangements in question, arose from the influence of the worm while in the act of being detached from its original seat in the upper portion of the intestines; and that this influence or disturbance abated while descending the canal, and ceased, as in this instance, a little before expulsion. Some further remarks on the matter, with the cases in question, will be given at the conclusion of this paper.

The case now went on without peculiarity, though, as I anticipated, slowly, on account of the nature of the accident; for a splintered bone offers many and serious obstacles to the curative process.

Jan. 30th, 1846.—Removed the fracture apparatus, but found the callus still too soft to support a heavy limb, he being, as already mentioned, an athletic man. As he had complained, however, of some pain and much stiffness in the knee, I placed the limb on the common leg-splint, on its outer side, and flexed.

Feb. 20th.—Quitted his bed for the first time, but union less firm than I had expected. Applied the starch bandage.

May 2nd.—Still considerable want of power in the limb, though he has been taking exercise in the ground on crutches and sticks for some time. Find the upper end of the fragment of tibia less disposed to firm union than the lower, there being some slight prominence at that point which did not exist a fortnight ago. The starch bandage, at the end of about three weeks, was exchanged for a circle of "fractured leather," applied, as usual, in its softened state; and both having produced some troublesome excoriations, soap plaster and a roller were substituted. He did not, however, finally quit the hospital and the service till June 16th, the peculiar duties of a soldier in marching, added to his frequently constrained positions, rendering it usually inexpedient to retain in the service men who have experienced such injuries.

From the peculiar circumstances attending this patient on admission, the splintering of the tibia, as distinguished from double fracture, could not be clearly ascertained, although irregularity was obvious, before the subsidence of the tumefaction. It formed a curious complication with a bad oblique fracture of both bones. The period of convalescence will be deemed short, and the termination fortunate, considering that it is commonly found a difficult and protracted case. I was led, however, to believe, that the circumstances under which the injury was received not entitling the man to a pension, he was willing that the limb should seem weaker than it really was, in order to excite a feeling of commiseration sufficiently strong to overcome the decree of strict justice among the military and medical authorities.

*Compound Comminuted (or Double?) Fracture of the Femur.*

On mentioning the previous case, while in conversation with Sir Richard Dobson, inspector of hospitals and fleets, and late the eminent chief of the medical department of Greenwich Hospital, he gave me the following memoranda of an injury of comminuted, or perhaps we may say double, fracture, which came under his care while officiating in that establishment:—

"On 12th July, 1839, William B——, a boy fourteen years of age, belonging to the lower school of Greenwich Hospital, fell from a tree in the park, by which he sustained compound comminuted fracture of the left thigh, about the upper end of its lower third. On examination, found the bone protruding through the soft parts at the outer edge of the rectus muscle. I enveloped the thigh, in part, by straps of hospital plaster, laid on sixfold, longitudinally, which I have found useful on similar occasions, but leaving an opening corresponding with the wound for such discharge from it as might occur; and rolled the leg from the foot upward, in order to prevent swelling. Splints were then applied, and he was laid on a hair mattrass, with the knee slightly flexed.

"In the course of the first fortnight he was very uneasy, suffering frequent and severe spasmodic twitchings, by which the parts were several times displaced. At the end of July the splints and previous appliances were removed, the limb dressed, and supported by an eighteen-tailed bandage. In the middle of August, symptomatic or irritative fever came on to a considerable degree, the thigh becoming swollen, and so painful that he could not bear it being touched without calling out. Poultices were applied, followed by a free discharge of pus of strumous character. On 22nd Sept. the frac-

tured ends of the bone exhibited a tendency to project on the inner side of the thigh, which I tried to obviate by the application of a splint. The wound continued open, and the bone could be distinguished denuded and rough.

"Nov. 6th.—Thigh more swollen, and the discharge more profuse. At this period I was taken ill, and for three months unable to visit him in person; but the assistant-surgeon directed the limb to be rolled up moderately tight, and the patient to take exercise in the ward on crutches, though not to bear weight upon the foot.

"Feb. 26th, 1840.—Found that he had been permitted to try to walk, though the thigh was slightly bent inward; wound open and still discharging, and the bone rough.

"On 14th March, the thigh became again inflamed and painful, with a smart accession of fever. Suspecting a portion of bone to be detached, as seemed probable, for some time, from the nature of the symptoms, I enlarged the wound two days afterwards, and fomented freely.

"May 11th, a small piece of bone came away.

"June 3rd.—Cut down upon a detached piece of bone, which was obviously moveable, but yet too firmly imbedded to come away at the time by such means as could be applied.

"July 7th.—Enlarged the wound, and found that the partially moveable portion of bone was yet so firmly wedged in between the ends of the fractured femur, that it could not be dislodged without more violence than I judged it expedient to use. At each dressing, therefore, I continued patiently to disturb it a little, and on the 17th, extracted a piece of bone two inches long, nearly one inch of which embraced the whole circumference of the femur. After this he went on well.

"On the 1st of August I applied splints; and on the 21st he returned to school, walking well with a high-heeled shoe."

In this case, which offers some points of interest, it would appear, by the result, that the detached fragment of femur acted as an extraneous body, obstructing for twelve months the usual progress of union. In so young a subject, it might have been expected that consolidation would have taken place, and a mass of callus thrown out, sufficient to envelop the whole of the fractured parts. The reason, probably, was, that although still jammed between the larger portions of fractured bone, the smaller comminuted or detached piece or pieces were angularly displaced. Had they retained the exact natural position, we may, perhaps, believe that the want of direct vital power, by the circulation, being cut off for a time, might have been replaced by the activity of the surrounding parts. Or is it a certain law of the animal economy, that a fragment, embracing the whole circumference of such a bone, must come away before the ossific process can go on in its usual satisfactory manner? Or does Nature interfere to prevent double union, in order that she shall not turn out a comparatively weak and inefficient limb, as one so united is likely to be?

*Injuries of the Spine.*

To those who may be employed in investigating the history and treatment of this serious, though not very well understood, class of accidents,—I mean, in reference to its frequently unfavourable results and the best mode of management,—it may not be uninteresting to hear of the termination of the case of Patrick M——, the Irish labourer, printed in THE LANCET, May 31st, 1845.

He was discharged from the hospital April 25th, by his own desire, to rejoin his family, having been an inmate of it nearly four months; and could then get round the exercising ground, upon crutches, though with some effort to himself. While remaining in the neighbourhood, he was supplied from the establishment with the same simple remedial means used for his cure previous to his discharge.

Early in the following August he called upon me; walked very well to the hospital by the aid of a stick, expressing himself as being much better, "no thanks to the union," meaning the workhouse, in which he had been domiciled a short time, and of which he seemed to entertain no pleasant recollections. The right lower limb was still deficient in power, but on a flat surface he could use it pretty well.

November 12th.—Called again; looked well in the face, which is clear and healthy, and says he is daily improving. On desiring him to walk, he flourished his stick with the air of a thorough Irish peasant going into a fight, deposited it upon his shoulder, and walked rapidly to and fro with an ease and a vigour that surprised me.

January 4th, 1846.—Visited me at the hospital; says he continues to improve, which his appearance pretty well indicates; can walk with ease to Greenwich and back, a distance of six miles, and adds that he could go twelve, were it necessary to do so; uses a stick at times, but not always; cannot yet go to work, from finding his back stiff and occasionally uneasy when in the act of stooping, which he was directed to avoid when he could. There is, however, a diminution of the nervous power or influence, which appears in a general coldness of the hips, thighs, and patellæ, which he says are seldom so warm as they should be; and an uncomfortable feeling is thus induced. The spine in some degree participates in this want of warmth, but conveys the further impression of there being, to use his own words, "several joints in his back; or that each bone seemed to form a kind of stiff joint from the neck downwards." He looks well, his countenance full and ruddy, but the muscles of the legs, which I took the opportunity of examining, have not recovered their former fulness.

March 17th.—Had another visit from my patient; seemed as fresh and vigorous now, at the expiration of fourteen months, as if no accident of the kind had ever happened, and said he felt fit for any description of work upon level ground. He could not, however, return to his former occupation of bricklayer's labourer, from being unable to mount a ladder with a weight upon his shoulder. The chief object of his present visit is, to request a recommendation as to character, in order to try for the situation of labourer in the arsenal.

The fixed principle kept in view in the treatment of this case was, as noticed in the former report of it, to do little; to let things nearly alone, or to interfere only so far as to correct what seemed obviously amiss. So apparent was this to the patient himself and to his friends, that they became discontented, and talked of removing him to a London hospital. To this, of course I had no objection, having neither wish nor authority to control his proceedings; but on alluding to my reasons for not doing so much as they might possibly deem necessary for his benefit, and that several months must elapse before he could expect to experience material amendment, after so severe a shock to so important a part of the frame, they begged earnestly that he might be permitted to remain. The result, as we have seen, was most satisfactory in the recovery being comparatively speedy, and as complete as such accidents are ever likely to be. A single case, indeed, or a particular species of injury, proves little. But it is encouraging as far as it goes, the improvement being steadily progressive; and as nothing in its course militated against my preconceived theory, I should again adopt the same plan were opportunities to offer, impressed with the belief that our error, in the majority of such cases, is the attempting to do, by active medical measures, what is best accomplished by simple means, by rest, and by time.

*Compound Fractures of the Phalanges.*

When these occur from machinery or obtuse bodies, where there is perhaps some crushing of the bone as well as of the soft parts, it will generally be in vain to attempt their preservation. The vessels seem to want the necessary power for carrying on the reparative process; sloughing takes place; and the part must eventually be removed. I had found this on previous occasions; but, very unwilling to be foiled in a matter in which I take considerable interest,—and a finger seems so much under the control of the surgeon, without the probability of unfavourable results,—that it was again tried recently, although with no better success.

An Irish bricklayer, Joseph H——, aged forty-four, employed on the new barracks in this vicinity, had the first phalanx of the index finger of the right hand crushed, with some injury to the soft parts, by an iron girder. The usual plan of encircling the finger with lint saturated with blood, supported by slight splints, and kept moist with the spirit lotion, did not succeed, and it was removed, followed by partial suppuration. A clean cut through the bone by a sharp instrument, we have seen, (LANCET, 31st May, 1845,) has better results, at least in young subjects, the vigour of the circulation making up for the small diameter of the vessels supplying blood to the parts.

In reference to one of the peculiarities of the first case mentioned in this paper, the voidance of tæniæ, the consideration of which was then unnecessary in order not to interfere with its main object, a few words here may not be misplaced, as being introductory to instances of *physical* disease in certain organs of the body, arising occasionally from their presence in the alimentary canal.

On observing the ejection of these animals in the corporal's case, it became naturally a source of doubt whether the pre-

vious delirium partook of the traumatic character, arising from the fracture; or from mental anxiety affecting his military position and probable punishment; or from the morbid action produced by these intestinal intruders, not inaptly called *invermination*. The former did not seem probable, from its not occurring till the ninth day. The second appeared to be at first the more likely cause; but after the appearance of the worms, and consideration of all the circumstances, added to his repeated replies to my inquiries afterward, that he had felt no particular depression or anxiety previous to the attack, I felt disposed to attribute the symptom to their peculiar irritation.

The anomalous complaints to which they frequently give rise need not be enumerated here. But if we find them produce occasionally epilepsy, convulsions, hydrocephalus, severe and long-continued headachs, and some other affections of the sensorium, as well as chorea and certain derangements of the nervous system, it will not be difficult to understand that an aggravated degree of the same exciting cause, such as may reasonably be supposed to result from the action of fourteen or fifteen yards of tæniæ in the alvine channel, might, in idiosyncrasies, or under peculiar circumstances, disturb the cerebral functions in the manner which has been detailed. This conjecture, however, is merely thrown out for consideration—not at all urged as a matter which a case or two can decide. And the fact of his mind in its disordered state running upon military matters may be explained by considering that the chain of healthy mental action being once broken, nothing was more likely to take its place than irregular and erroneous ideas upon professional circumstances with which he was familiar.

Of the disturbance produced in the system by their presence, and more especially in the respiratory organs, the following are examples. It will be seen that the expulsion of the worm did not generally take place till two, three, or four days after the more acute symptoms in these, and the mental disturbance in the case of fractured tibia, had subsided. I was therefore induced to believe that they were occasioned by the action of the worm while in the act of being detached or displaced from its original position in the upper portion of the intestines, preparatory to being carried downward. All that came away were of the broad species, and, by the report of the attendants, voided alive.

James F——, private, Royal Marines, aged thirty-two, applied on 11th April, 1845, with slight diarrhœa, coryza, cough, and some pain and weight about the chest; pulse rather quick, tongue coated. At six in the evening a sharp accession of pyrexia came on; pulse full and hard; tongue extremely foul and dry; respiration laborious; countenance anxious. Was bled to sixteen ounces, and the other usual means employed to subdue such symptoms.

12th.—Much as yesterday; bowels moved; vomited several times last night; pectoral affection not improved.

13th.—Better; pulse 96, and small; breathes more freely; has so much tenderness of abdomen as scarcely to bear the slightest pressure.

14th.—Passed above six feet of tæniæ in small portions; abdominal tenderness still considerable.

On the 18th the pulse came down to its natural standard, a few small pieces of worm having passed occasionally; some debility was afterwards experienced; but on the 29th he returned to duty.

Thomas D——, corporal, Royal Marines, aged twenty-seven, was admitted Oct. 20th, 1845, for syphilis. On the 27th he had an attack of pyrexia, with considerable headach and catarrhal symptoms; in the course of the day he passed a portion of tænia five feet long. On Dec. 13th, being still in the hospital from the effects of the original disease, passed, after some constitutional disturbance, three and a half feet of the worm. On the 16th, in the evening, a severe febrile paroxysm came on; pulse full, 112, and not compressible; severe headach; tongue white, with so much oppression at the chest as to induce me to direct a small bleeding; and next day he passed two and a half feet of tænia, followed, two days afterwards, by traumatic erysipelas, affecting an open groin. In this instance it will be seen that six weeks elapsed between expulsion of the first and second portions of worm; and in various respects his constitution suffered very considerably, although a six weeks' furlough restored him perfectly.

William W——, private, Royal Marines, aged forty, was admitted November 24th, 1845, labouring under sharp febrile and pleuritic symptoms; severe pain in right side of the chest; breathing short and laborious; pulse 128 and firm; cough, with rusty-coloured expectoration; tongue coated; nausea and vomiting; tremulous motion in the upper extremities. Confesses to having been guilty of considerable excesses lately. In the evening, from the active remedial measures taken, the pulse had fallen to 112, and soft. On the 24th, he was somewhat better, breathing much more freely, with cessation of vomiting; and next day, (26th,) about eighteen or twenty inches of tænia came away, to which it appears, from his own statement, he is subject.

27th.—Harassing cough, with copious viscid expectoration; passed four feet of tænia. On the following day, five feet came away; and on the 29th, it continued passing in joints.

December 2nd.—Passed eleven yards of the worm, which then ceased to appear for the remainder of the time (three weeks) which he continued in hospital. In this case, the whole train of symptoms, rather alarming in the first instance, were obviously the result of this peculiar irritation, acting sympathetically and chiefly upon the respiratory organs, although in a lesser degree upon others with which they were more immediately in contact. It appears he became first subject to the complaint about two years ago, when serving in the Savage brig of war, on the coast of Syria, several others of the crew having suffered in the same way, which they attributed to the bad qualities of the water. Many portions of the worm came from him then, at various periods, as he says, greater in quantity than even on the present occasion.

26th June, 1846.—Admitted again for ophthalmia; and from the 28th, till his return to duty on July 3rd, joints of the worm continued to pass, though much less in quantity than formerly. I wished him to remain longer in hospital, to try the effect of remedies on this unpleasant affection; but feeling well in all other respects, he was averse to make the experiment.

James G——, private, Royal Marines, aged twenty, applied July 2nd, 1846, with very acute pain in the left side; short and painful respiration; cough; skin hot; pulse quick and wiry, indicating a severe pleuritic attack, for which, among other active remedial measures, he was bled by the medical officer in attendance to twenty-four ounces. In the evening, the symptoms being unabated, and the pulse continuing full, hard, and rapid, venesection was repeated to eighteen ounces, the blood being buffed and cupped.

On the 3rd, feeling little relief from pain, with slight amelioration otherwise, the cupping-glasses were applied, and eight ounces of blood taken away.

On the 4th, found the pulse 104, full, firm; respiration difficult; headach; short and harassing cough; nausea and vomiting, which have existed for above twenty-four hours; bowels free. Applied the cupping-glasses again; abstracted blood to the same amount as yesterday.

5th.—Much better; pulse 110, soft. Continued improving; and on the night of the 7th, voided three feet and a half of tænia. No more appears to have been expelled during his stay in hospital, where he remained till the 24th, though from the occasional carelessness of patient and nurses, small portions pass, and are often overlooked, as I had reason to believe had been the case on the present occasion. This patient had been a labourer in Wiltshire; was only six months in the corps; had not been embarked; and therefore not subjected to any peculiar influences which might be supposed to produce the complaint.

In this instance, perhaps, some may deem it a question whether the disease was idiopathic pleuritis, or arose from irritation produced by the tænia. Of the latter being the cause, I have, however, no doubt, as well from close observation of the circumstances, as from the other cases noted here, and from having also seen similar symptoms in this hospital, though in a much slighter degree, precede the ejection of lumbrici, frequently a foot or more in length. It is a curious, although well-known fact, that the lungs should be so much more affected than organs which are either the seat, or near to the seat, of the irritation. Enteritis or colic, or other abdominal complaints, may be readily conceived; but without frequent experience of the matter, we should scarcely trace peripneumonia to such an origin. Most of these men were strong; two or three of them at least young; and one only had reached to forty, which, from the habitual imprudences of a soldier, makes him often much older in constitution than the same period passed in civil life.

As remedies in these troublesome cases, aloes, calomel, jalap, turpentine, freely by the mouth and by injection, as well as a few other popular vermifuges, were used; but without such marked utility in either case as to claim much credit for efficacy.

Royal Marine Hospital, Woolwich, May, 1847.

# EXPERIMENTS

## ILLUSTRATING THE EFFECTS PRODUCED BY THE INHALATION OF ETHER UPON THE LOWER VERTEBRATE ANIMALS.

By HOLMES COOTE, Esq., F.R.C.S.E.,
AND
THOMAS TAYLOR, Esq., M.R.C.S.E.

With the view of investigating the effects produced upon the cerebro-spinal centre by the inhalation of the vapour of ether, Mr. Thomas Taylor and myself instituted, in the month of January, 1847, upon different vertebrate animals, some experiments, the results of which unforeseen occurrences have prevented our publishing until the present moment.

The experiments were conducted in a room, heated by a stove (the weather being very cold) up to 55° Fahrenheit. The animals—frogs, linnets, guinea-pigs, and rabbits—were placed successively in a glass receiver, containing a flat wooden stage, or platform, which was perforated by a number of holes, through which the vapour of ether ascended from a saturated sponge placed underneath. The cover to the receiver was so constructed, as to admit, if necessary, a certain quantity of pure atmospheric air.

*Experiment* 1.—A frog, placed upon the stage, respired for eight minutes without perceptible inconvenience. The apparatus was then held over a vessel filled with hot water. In two minutes he made efforts to escape, by endeavouring to climb up the sides of the receiver. The eyes became glassy, and the look was distressed. A frothy fluid, of the consistence of saliva, exuded from the groins and the axilla; the movements of the limbs became irregular, the strength failed, and he fell frequently back in trying to raise himself upright; respiration appeared languid, and he swallowed air at longer and longer intervals. In seventeen minutes and a half from the commencement of the experiment, he was removed, apparently lifeless, into pure air. The limbs were free from rigidity; the heart beat about forty strokes in the minute; respiration seemed to have ceased. The pulsations of the heart became gradually more and more feeble and slow, and in a quarter of an hour were imperceptible. The body was then opened. Upon the admission of air to the cavity of the thorax, the heart, which was motionless, suddenly began to contract, with great force, and beat about forty strokes in the minute. At each ventricular contraction, the effect of which was seen extending along the brachial and the femoral vessels, the limbs vibrated strongly. Upon the surface of the encephalon, which was of its normal pale-grey colour, there were two or three large vessels of the pia mater distended by blood; the air-sacs were filled with air; the liver was somewhat congested; the vessels generally appeared full of blood. The smell of ether was of course very strong in every part of the animal, and especially in the blood. Both Mr. Taylor and myself believe that this animal was not quite dead at the time when the body was opened.

*Experiment* 2.—A fine active female frog was placed upon the platform shortly after the removal of the former animal. She made almost immediate efforts to escape. In a minute and a half the movements of the limbs became irregular; the look was distressed; the eyes fixed and glassy, and the lids half closed. A frothy fluid, resembling saliva, was poured forth in abundance from the skin. In two minutes she fell back completely motionless. In two minutes and a half from the commencement of the experiment, she was removed into pure air. After lying apparently lifeless for about two minutes, she made attempts, at long intervals, to swallow air. In four minutes, the lower extremities were slightly moved; in seven minutes, the eyes regained their expression; in fifteen minutes, the lower extremities were drawn up, but the upper extremities hung motionless. In twenty-seven minutes from the moment of removal into pure air, she appeared recovered, though still sluggish, and somewhat stupified.

*Experiment* 3.—The web of a frog's foot having been arranged in the field of a microscope, (one inch object-glass, No. 2 eye-piece,) the animal was enclosed in a bladder, containing in its most depending part a sponge soaked in sulphuric ether. The circulation, which, from some accidental cause, was at first sluggish, became, in half a minute, extremely rapid—the heart beating, with powerful contractions, forty strokes in the minute. In three minutes, the animal became, to all appearance, lifeless; but the flow of blood went on with unabated rapidity, and continued so up to the time when the bladder was removed; and in a quarter of an hour, recovery ensued.

*Experiment* 4.—A frog was immersed for some minutes in carbonic acid gas. The circulation, which, it had been observed, was at first extremely rapid, became sluggish as insensibility came on. Immersion in the vapour of sulphuric ether produced no good effect, and the animal died.

*Experiment* 5.—A linnet, placed upon the platform, was shut up in the receiver. In half a minute, it appeared weak and giddy, and made vain attempts to fly; in a minute, it fell down upon its side; in a minute and a quarter, it was rendered completely insensible. When taken up by the claw, it hung down as if lifeless. In three minutes and a half, the ether being then exhausted, the bird attempted to get up. It was, however, obviously drunk; the eyes winked; the head fell forwards against the breast; it tumbled about from side to side, the legs sprawling, and the wings fluttering. Some more ether was then added. In five minutes, complete insensibility again ensued; respiration became more and more languid; and the animal, though soon removed into pure air, died in the course of a quarter of an hour. Experiments upon other linnets were followed by precisely similar results.

*Experiment* 6.—A guinea-pig, placed upon the platform, ran about for a short time without appearing to suffer inconvenience. In three minutes, respiration was hurried; the animal stood still and panted, and was evidently drowsy and oppressed. Soon respiration became slow and laborious; the pig fell down on its side, and rolled about, as if without life, as the platform was inclined in this or in that direction. In nine minutes, insensibility was complete; in seventeen minutes, the lips became at first blue, and then pallid, and the limbs were observed to be occasionally convulsed. The peristaltic action of the intestines continued; indeed, it seemed stronger, and was more apparent through the abdominal parietes towards the close, than at the commencement of the experiment. In twenty-one minutes the animal was dead. Upon being taken from the receiver, the body was immediately examined.

The vessels of the pia mater were full of blood. There was great congestion of the membranes, and of the sinuses at the base of the brain, and particularly about the medulla oblongata, and the upper part of the spinal cord. The cerebral substance appeared rather more vascular than usual. The lungs were collapsed. The heart contained, both in its right and left cavities, dark fluid blood. Upon the admission of air into the cavity of the chest, there were observed some faint and irregular cardiac contractions.

*Experiment* 7.—A second guinea-pig, placed upon the stage, shortly after the removal of the former animal, became completely insensible in less than a minute. The limbs were rather rigid; the toes were warm; both urine and fæces were passed involuntarily. In a minute and a half, it was taken into pure air, where recovery speedily followed. Four minutes afterwards, it was placed in the receiver a second time, (thermometer 70° Fahr.) In a second it fell, as if dying, with laborious respiration and heaving chest. In less than a minute it was taken out perfectly insensible; recovery speedily ensued. Three minutes afterwards, it was immersed in the vapour a third time, and insensibility ensued in a quarter of a minute. The animal was kept on the platform for an hour and a quarter, atmospheric air being admitted at intervals. The ether was employed only where necessary to keep up the state of insensibility. Upon being removed into pure air, the animal recovered in five minutes, when it began to eat ravenously.

*Experiment* 8.—A rabbit placed in the receiver, filled with the vapour of ether, (thermometer 70° Fahr.,) sprang about violently from side to side, and dropped down lifeless in three minutes. Upon examining the brain, it was found that there was enormous congestion of dark venous blood at the base of the brain, especially about the medulla oblongata; the lungs were natural; the heart filled with fluid blood.

The experiments here related illustrate some of the principal phenomena which the respiration of air impregnated with the vapour of ether may produce upon the animal frame. A feeling of discomfort, indicated by a distressed look, glassy eye, and attempts to escape, is quickly followed by more rapid and more powerful contractions of the heart, by increased rapidity of circulation throughout the whole vascular system, by deeper and laborious, or by more frequent acts of inspiration, and an excited condition of the brain. Then the cerebral functions become oppressed; sensation and the power of motion become more and more impaired; the action of the limbs becomes irregular and wild, and the animal, reeling and staggering from side to side, eventually falls down as if life-

less. But respiration still goes on; the capillary circulation is unusually active; and although the muscular system generally is in a state of relaxation, the involuntary muscles seem preternaturally excited; both the urine and the fæces may be suddenly voided. This stage of complete insensibility is followed, after a time, by symptoms of congestion of the brain; the respiratory act becomes less frequent; the blood, of a dark-blue colour, stagnates in the capillaries; the extremities feel cold; the lips are blue and livid; and if the animal be not speedily removed into pure air, respiration first stops—then the contractions of the heart become fainter and fainter—lastly, the peristaltic action of the intestinal tube ceases. Upon examining the bodies of those destroyed by the inhalation of ether, there is found great congestion of the vessels of the pia mater, and of the sinuses at the base of the brain; the vessels of the medulla oblongata and pons Varolii are especially turgid with dark-coloured blood; both sides of the heart are distended by fluid black blood. The air-sacs of a frog (exp. 1) were full of air; the lungs of the guinea-pig (exp. 6) were in a state of collapse.

Let us, in the first place, see what inferences of practical importance may be deduced from the foregoing remarks:—

1. The vapour of ether, when inhaled continuously, and in considerable quantity, is capable of destroying life, by producing an accumulation of dark blood in the vessels at the base of the brain.

2. The commencement of this state is indicated by slow and laborious respiration—by failing pulse, cold extremities, and blue, livid lips.

3. The arterial blood is, under these circumstances, of the same dark colour as that contained in the veins.*

4. The slow circulation, or the stagnation, of such a fluid in the cerebral vessels may produce effects which the inspiration of pure air will be unable to rectify.

5. Great judgment, therefore, should be exercised in compelling patients struggling for pure air to inhale through the ether apparatus.

6. But a state of insensibility, produced by the proper influence of the ether, may be safely prolonged for a very considerable time, by permitting the occasional inhalation of pure air, and by readministering the ether only when symptoms of consciousness are beginning to manifest themselves.

7. The involuntary muscles, so far from being in a state of relaxation, as are the voluntary muscles, seem to be preternaturally excited, and to act with increased power.

*(To be continued.)*

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ON

## THE PRECAUTIONARY MEASURES WHICH MAY BE EMPLOYED IN DISSECTIONS AND POST-MORTEM EXAMINATIONS.

By THOMAS CATTELL, M.D., M.R.C.S.E.

The very lamentable death of Mr. Potter, from the consequences of a dissection wound, sufficiently indicates the importance of every precautionary or corrective means being familiar to the mind of the medical functionary on occasions like the present. It is with this view I refer,—

I. *To those generally known or ordinarily adopted.*

1. Dr. Duncan has suggested the anointing of the hands with camphorated oil, or with simple axunge, before handling the viscera.

2. The oil, or spirits of turpentine, (commercial,) is frequently used in wounds of this kind. Having once severely suffered from a dissection wound, I took the precaution, ever afterwards, of carrying a small bottle of it in my pocket whenever I visited the dissecting-room; and from the opportunities I had of estimating its value, there is no doubt of its being an efficient prophylactic, if immediately applied.

3. Nitrate of silver. The sudden formation of chloride of silver, whenever the nitrate is brought into contact with abraded parts, may perhaps prevent the absorption of an animal poison; or, by decomposing it, render it inert.

4. Nitric acid, holding in solution a due proportion of camphor, stands recommended by Dr. Copland as very efficient.

5. Spirits of ammonia is sometimes used.

6. A strong solution of alum has been advised by Macartney.

7. Adhesive plaster should be applied to old abrasions.

II. *To others of a more original kind.*

1. The chloride of antimony is a powerful caustic.

2. Chloride of zinc, in a deliquescent or liquid state. From my experience in caustic applications, I am not aware that I could point to one that exerts a more penetrating influence than this does. Should a case of hydrophobia fall under my care, immediately after the wound had been inflicted by the animal, the first application should be, the deliquescent solution of chloride of zinc.

3. Creasote may be found deserving of trial.

4. Concentrated solution of the chloride of soda, or of lime. A diluted solution of chloride of lime ought always to be on the dissecting-table, as well as by the side of the post-mortem examinator, if the motto of prevention be better than cure.

Lastly, I shall refer to the necessity of the use of gloves made of vulcanized caoutchouc, or Indian-rubber, which should be kept on finger or hand-blocks when not in use.

Braunston, Northamptonshire, June, 1847.

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* During the performance of amputation of the forearm, upon a patient under the influence of ether, at St. Bartholomew's Hospital, in the month of March, it was observed that the blood, flowing from the radial, ulnar, and interosseous arteries, was of as dark a colour as that contained in the veins.

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# Original Contributions to The Lancet in Abstract.

## MEDICINE, SURGERY, MIDWIFERY.

### *A New Stethoscope.*

J. S., of Chelsea, states that the stethoscope which he uses, consists of a cylinder of light porous wood, about ten inches long, two inches and a half in diameter, and half an inch thick. Over one end there is a piece of parchment tightly stretched, with the means of keeping up the requisite amount of tension; the other end is fitted with a projecting rim sufficiently large to enclose the whole of the ear. J. S. is of opinion that an instrument thus constructed is better adapted for the transmission of sound than is the stethoscope in ordinary use.

### *Congenital Wry Neck.*

Mr. Lory Marsh, of Nottingham, was consulted in the case of a girl, eleven years of age, who was afflicted with congenital wry neck. When the patient was seen by Mr. Marsh, the neck presented a completely twisted appearance, the head nearly resting on the right shoulder, with the face turned outwards and downwards, the sterno-mastoid muscle being rigid, tendinous, and shorter by nearly two inches than the muscle on the left side, and the left scapula projecting considerably. The sterno-cleido mastoideus was divided soon afterwards by the subcutaneous section, about two or two inches and a half above the sternum; a pasteboard collar, softened and padded, was placed round the neck, and the whole supported by a figure-of-8 bandage. All going on well, the apparatus was removed at the end of a fortnight; the muscle then presented a thickened, irregular feel, which has since gradually disappeared, and the head is now exactly in the mesian line.

### *Strangulated Congenital Hernia.*

Mr. Harvey, of Castle Hedingham, describes, in a communication which he forwarded to us some time since, the case of a labourer, forty years of age, to whom he was summoned in consequence of his having injured, as he supposed, one of his testicles, by a fall with a weight on his shoulders. Mr. Harvey saw him the day after the accident, and on examination, found the right side of the scrotum distended, not very tender, and having somewhat the appearance of a hydrocele. The cord could be distinctly felt, as it passed through the abdominal ring, and with it a portion of intestine; but it was neither tense nor tender. The act of coughing produced the usual impulse communicated to hernial swellings, but it was not perceptible in the lower and larger portion of the tumour, which evidently contained a fluid, through which the light of a candle was dimly transmitted. The man at this time asserted that the scrotum was not enlarged prior to his fall, although he afterwards acknowledged that he had observed that the right testicle was larger than the other, but as it did not cause him pain, he paid no attention to it. He had had, he said, a small rupture for several years, which always returned readily on his lying down. He used to wear a truss, but had lately left it off. Mr. Harvey endeavoured to return the protrusion, but in this he could not succeed, although the opening in the obliquus externus was large enough to admit the point of the finger. The next day, the swelling being larger, and tender, accompanied with vomiting of dark but not faculent matter, and with troublesome hiccough, as well as tenderness of the abdomen, the taxis having again failed to reduce the hernia, Mr. Harvey determined to operate. After cutting

through the integuments, and carefully dividing the sac, he ascertained that there did not exist any stricture at the abdominal ring. Still, however, he could not return the protruded intestine, which was firmly fixed below. On passing the finger downwards, he found a very firm band about midway between the abdominal ring and the testis, tightly binding down the protruded intestine. The point of a finger, and afterwards a director, were insinuated under this with some difficulty, after which it was divided with a probe-pointed bistoury, thus giving vent to a considerable quantity of fluid, and releasing a strangulated portion of intestine lying in close contact with the testicle, but not adhering to it. The intestine was dark-coloured, and sharply marked where the stricture had embraced it, but had not lost its vitality. On its reduction, the wound was dressed and the patient put to bed. The man did not have a bad symptom afterwards, and was well and about by the twelfth day.

Mr. Harvey, in his remarks on this case, observes that the man had from early infancy, probably from birth, been affected with congenital hernia; but this being small, it merely kept the mouth of that sac open which ought to have closed when the testicle descended into the scrotum. It seems to have remained in this state until the accident occurred, when a fresh portion of intestine descended much lower into the sac. The free circulation of blood through the veins of this fresh portion of intestine being interrupted, it could not return by the narrow passage through which it had descended. The same cause which prevented the return of venous blood from the intestine prevented also the due absorption of the fluid which naturally lubricates the inner surface of the tunica vaginalis testis, thus producing, in addition to the hernia, that collection of fluid which gave it the appearance of a true hydrocele. The stricture being situate midway between the abdominal ring and the testicle, and in that canal which should have been closed on the descent of the testicle, satisfactorily explains why the impulse produced by coughing could not be felt at the inferior part of the tumour; and it also explains why the intestine and the cord could be so readily distinguished as they passed through the abdominal ring.

### *Puerperal Convulsions.*

Mr. Caleb Radford, of Uckfield, forwards the details of a case of puerperal convulsions, occurring in the person of a young female, eighteen years of age, robust and plethoric, and pregnant for the second time. She was at the full period of utero-gestation, and daily expected to be confined; in fact there had been already, Mr. Radford says, some watery discharge. On the afternoon of the 28th of May, she was seized with convulsions, for which she was seen in the course of the evening by a young practitioner in the neighbourhood, and bled moderately. He did not, however, it appears, make any vaginal examination to ascertain whether labour had commenced, or was making progress. The convulsive fits continued to recur at short intervals, and about midnight labour pains commenced. The surgeon was again sent for, but did not attend until after the lapse of three hours, the unfortunate patient dying undelivered in a quarter of an hour after his arrival. Mr. Radford adds that the movement of the child was said to have been perceptible after death. The condition of the uterus was not ascertained by a vaginal examination. The dissatisfaction to which the unexpected result of this case gave rise, caused the holding of an inquest, at which the above facts were detailed; and a surgeon, not the medical attendant of the deceased, deposed to having made an examination of the unfortunate woman externally, at the desire of her surgeon, and that, in his opinion, labour had not commenced, or if it had, had not proceeded. The convulsions, he thought, might not have been connected with the labour, but would probably have produced it. He did not consider that labour was sufficiently advanced to justify an operation.

*** The details of this unfortunate case are not of the most creditable character. The surgeon certainly ought to have ascertained the state of the os uteri by a vaginal examination, and to have endeavoured to induce labour, when he found that the convulsive attacks persisted, in spite of the treatment which he had put in force. His neglecting to make a vaginal examination, and thus furnish himself with a true knowledge of the nature of the case, was a grievous error; and his not visiting a patient in dangerous circumstances, in his own neighbourhood, until three hours after he had been sent for, was also very blameable. If he had been absent from home, another practitioner should have been applied to, under the painful circumstances of the case; but no such reason for the apparent neglect is alleged. Again, his colleague, who, without seeing the patient during life, presumed, on the superficial examination which he instituted externally, to assert that labour had not commenced, or at all events had not proceeded so far as to justify an operation, must either possess an extraordinary degree of tact in his fingers'-ends, to ascertain, by the external examination of the abdomen after death, that the os uteri was not partially dilated; or else must be one who would not hesitate to assume a knowledge which he does not possess. We have carefully avoided, in giving the particulars of this case, and in commenting on it, the publication of the names of the surgeons engaged in its management, as we conceive that facts may be elicited, and rendered available for the purposes of science, without inflicting personal injury.

## MEDICAL POLITICS.

### *Medical Graduates and the Licentiate Apothecaries.*

Justitia answers a letter, published elsewhere, under the signature Veritas, by stating, that the graduates in medicine and surgery of the royal colleges and universities in Great Britain and Ireland receive a more extensive classical education than the English apothecary, and are considered by the highest legal authorities qualified to attend her Majesty's subjects in all countries, (not excepting England,) and to be legally entitled to remuneration for their services, without their having obtained the licence of the Apothecaries' Company in London. He concludes his letter by stating, that hundreds of the members of the National Institute are in favour of the Medical Registration Bill, and that many have left the Institute in consequence of the opposition offered by the Council to that Bill.

*** It can hardly be necessary to show, that Justitia is in error, if he fancy that any medical man can legally act as a general practitioner in England and Wales without the Apothecaries' licence, however high his medical attainments and qualifications may be. Nor can any other practitioner, except a legally-qualified surgeon, recover, by action, any remuneration for his professional services. Graduates in medicine of our universities, and members of the Colleges of Physicians, cannot recover their fees by action, unless the ground of action be a special contract. Justitia, however, is perfectly correct in asserting that the classical education of other medical men is on a par with, and in many instances even higher than, that of the mere apothecary.

### *Doctors Touting for Practice.*

A Hater of Humbug writes from Birkenhead to complain of the practice adopted by certain medical men residing there, of calling on strangers when they arrive, in order to obtain them as patients,—we had almost said, to solicit their custom—a phrase not altogether inapt, inasmuch as the proceeding in question is tradesmanlike, and not professional. It is unfortunately the case that this plan of waylaying strangers is not confined to Birkenhead, but is practised throughout the country, and is not altogether unknown even in London. Those who prefer practising their profession in a more gentlemanly manner must rest contented with the assurance, that no irregular and unprofessional mode of obtaining practice will ever be successful in the end. Respectable and educated persons hold such *touting* in contempt; and as in the instance narrated by our correspondent, indignantly dismiss the interloper, and place themselves under the care of a practitioner who is less intrusive.

## Reviews.

*The Works of William Harvey, M.D.* Translated from the Latin; with a Life of the Author. By Robert Willis, M.D. London: Printed for the Sydenham Society, 1847. pp. 622.

We shall hereafter take an opportunity of treating, at some length, of the genius and writings of Harvey, the most distinguished name in medicine, and of estimating the influence of his great and immortal discoveries upon the progress of medical science, and the improvement of medical art. For the present we shall confine ourselves to a consideration of the spirit and manner in which Dr. Willis has executed the important trust reposed in him by the Council of the Sydenham Society. Our task will be a painful one.

A translation of Harvey, with his life, and an analysis of his discoveries, are not light matters, to be undertaken without preparation, and presented to the world as the production of scraps of thought, and odds and ends of time. Harvey's writings should be read even with reverence; but his works should no more be touched with an irreverential hand, than we should dare wantonly to disturb the cerements which enwrap his mortal remains.

Even on the title-page we are affronted with the pert intrusion and self-consequence of the present translator. In the splendid quarto edition of the life and works of Harvey, published by the College of Physicians nearly a century ago, the names of Akenside and Laurence, who were employed by the College to superintend this honourable labour, are kept modestly out of sight, as if these men, though not without reputation and fame, were unwilling to brave a comparison between their own names and that of their great master. In the present edition, however, the editor and translator takes up more room and state than his illustrious author. "WILLIAM HARVEY, M.D.," is only "Physician to the King, Professor of Anatomy and Surgery to the College of Physicians;" but "Robert Willis, M.D.," parades himself, by style and title, as "Member of the Royal Colleges of Physicians and Surgeons of England, Corresponding Member of the Royal Academy of Sciences of Göttingen, of the Imperial Society of Physicians and Surgeons of Vienna, and of the National Institute of America," ending with a flourish of small arms, in the shape of "et cetera, et cetera."

The preface is conceived and written in the same braggart spirit. The writer begins by confessing his "unwary" credulity respecting the scholarship of Harvey, admitting, that when he commenced his labours, he "knew little or nothing" of any of the former English versions. He tells us, a very short acquaintance convinced him that they were "rebutting in point of style," "full of egregious errors," and in fact, that "nothing short of an entirely new translation" by his own pen could "do justice" to the works of Harvey, or secure the attention of the public.

Then he goes on to relate how, fired with the noble task of translating, and "full of zeal," he went on with his "labour of love," until he had completed a new translation of the Exercitations on the Heart and Blood, "with equal pleasure and profit" to himself. Having dismissed the discovery of the Circulation, we are told, in pompous phrase, that "the work on Generation next came under *review*." Here Dr. Willis sets up a hearsay ignorance of his own, and then proceeds to a *discovery* founded upon the ignorance he had so easily assumed. We give the passage entire.

"The work on Generation came next under review. The English version of this, I had heard it positively asserted was the original, was Harvey's own; here, therefore, my business of editor would properly begin. But I had not gone through a couple of pages of the text, before difficulties like those already experienced met me again. That the statement referred to was erroneous, speedily became apparent; and a little inquiry enabled me to *discover* that the English version of the Exercises on Generation was the work of a physician named Llewellin."

This discovery is of the kind called, in the critical world, a "splendid flimflam." A very "little inquiry" must have been sufficient, though the writer did "know little or nothing," "to enable him to discover" the truth, seeing that, in the library of the College of Surgeons, at which the translator was long librarian, there is an original copy of Dr. Llewellin's translation, published at the sign of the Rose, bearing date 1653, two years after the publication of the original Latin, in 1651. So much for Dr. Willis's bibliographical discovery. Of course, he felt bound, after this, to present this part of the works of Harvey in "the most appropriate and attractive form possible," and he announces his great resolve in terms considerably more important than those in which his great original announced the discovery of the circulation itself Referring to his task, he says:—

"I even girded myself up for the long and laborious enterprise of translating anew, into our mother tongue, the work on Generation, and at length achieved my task, not without difficulty."

By this time he is getting tired; it is no longer a "labour of love," but a "task" and a "difficulty."

But the crowning and most flatulent egotism still remains: our Quixote of a translator has rendered his profession a further debtor to him, and to an extent it can never hope to repay. He says, while at his work the portrait of Harvey was continually meeting him. He must have seen his own picture quite as often. Hear his vaniloquent passage, not of the Alps, but of a mole-hill.

"The short paper on the Anatomy of Thomas Parr appears in the *Philosophical Transactions*, in English; but it stands there as a translation; and having now translated so much myself, *I even thought it would be well to translate that also, and so it was achieved.*" (!)

And all this about three pages of straightforward translation, such as a schoolboy might do as a morning exercise. We do not know elsewhere of a more profound self-gratulation. A new Æneid or Iliad would hardly warrant so much chuckling; one might imagine the writer the saviour of his profession. Veni, vidi, vici, is nothing to it.

After so much heavy self-complacency, the translator descends from the heroic to the amiable. Nothing was now left him but the letters, and these were not a "long and laborious enterprise," neither were they "achieved." Dr. Willis even slackened his girth from his loins, and simply proceeded to "render" them as "a light and pleasant task;" he pats the Sydenham subscribers with a playful air, and winds up with a—"There now, you are presented with an entirely new translation of the works of William Harvey; be grateful and happy as you may."

So much for the different steps of this great translatorial triumph. From the latter portion of the Preface it is evident that the work should never have been given to Dr. Willis, or it ought to have been taken out of his hands, from circumstances which subsequently arose. He has written a Life of Harvey, and in deprecation of criticism, the following excuses are made:—

"Incessantly engaged, by night and by day, in the laborious and responsible duties of a country practice; enjoying nothing of learned leisure, but snatching from the hours that should rightfully be given to rest the time that was necessary to composition; remote, too, from means of information which I must nevertheless send for and consult—for I could not draw entirely upon memory and old recollections of Harvey," (we should think not,) "I have been much longer about this work than its length might indicate."

The plain story is, that Dr. Willis removed from London to Barnes, after he had undertaken to edit the works of Harvey, and if his "laborious and responsible duties" unfitted him for their completion, he should have at once resigned them into other and better hands. Duty to himself, to the Sydenham Society, and, above all, respect for the great name who was to suffer from his failure, should have prompted him to this step. The Life of Harvey was not a thing for any man to compile in snatched hours and sleepy moments, when the writer was wearied out, as Dr. Willis describes himself to have been. But this vain man is not content without constantly parading his unfitness for his labours.

Every one knows how many promises were broken, and how much discredit fell upon the Council of the Sydenham Society from the delay attending the publication of Harvey. This delay is accounted for in the most nonchalant manner:—

"The work was, in fact, nearly three-fourths done more than a year ago, but with the change made in my sphere of action about that time, all aptitude for literary labours seemed to forsake me; the bow, to use a common metaphor, became unbent, and for awhile resisted every effort to string it anew; and then, when restrung at length, how constantly was I hindered in my purpose to use it!"

The note of admiration is in the original; the only admiration of his readers will be at the cool assurance of the writer in viewing his own incapacity with such admiring wonder. It is with the Preface as with the title-page—Robert Willis is a more important personage than William Harvey. At the very time, while he is in one page lamenting his unstrung dulness, and in the next speaking of his translation as a thing achieved with girded loins, we find him saying—

"To have carried out and completed the history of Harvey's two grand subjects (the "Circulation" and "Generation") would also have been easy; but this would have been almost as obviously out of place as commentary, *and the inclination towards such an agreeable undertaking was also resisted.*"

Thus much for the title-page and preface of this most modest editor and translator.

To compose the biography of a great man requires many qualifications—correct taste, knowledge of the subjects in which the greatness was achieved, of the era in which the work was done, and above all, an insight into the workings of human nature, so that the biographer may not mistake or misinterpret the actions he is called upon to describe. These, and many other solid qualifications, are imperatively called for in the artist who shall venture to portray in language, the mental and moral features belonging to a great genius of former generations. Dr. Willis's first self-congratulation, on the conclusion of the life he has written, is, "I have included everything of moment in my narrative of the life of Harvey;"—as though the production of an inventory was the thing demanded of him; or as though the prosy detail of every hackneyed anecdote and fable which two centuries have woven around the discoverer of the circulation could constitute a "Life." The inferences and deductions made by the biographer are most amusing. He tells us that—

"At ten years of age Harvey was put to the grammar-school of Canterbury, *having doubtless already imbibed the rudiments of his English education at home, under the eye of his mother.*"

Now we are at a loss to know why Dr. Willis should thus pry into the domestic matters at Folkestone, and speculate upon small things, which can never be settled on this side time. Harvey might have been taught by his "mother," or his grandmother, or he might have had a Dominie; he might have acquired his "rudiments" at "home," or at school; it might have been his father's and not his "mother's" eye: there is no certain evidence either way, or Dr. Willis would not have put in his "doubtless." Harvey was the eldest son of a large family,—seven sons and two daughters,—and the natural inference is, that his mother could have had little time to superintend the preparation of her firstborn for the Grammar-school at Canterbury. There is evidence that the mother of Harvey was a good and noble Englishwoman, strong of mind, and pure of soul, worthy in every way of such a son; but Dr. Willis goes out of his way to toady this lady with superstitious flattery, while he consigns "Harvey's male progenitor," as he calls his father, to an unceremonious oblivion. Our biographer gives us the epitaph upon her tomb, lately published by Mr. Paget; and, prone to guessing, he tells us that it was penned, "maybe, by her illustrious son." There is a rural satire upon "maybe" as old as Harvey, and belonging to his county—"May bees never fly," which is a good answer to such guessing. To show that he is not given to credulity, he makes the oracular observation, that epitaphs are not always to be relied on; but, adds, "we unhesitatingly accept of everything to the credit of Harvey's mother, as a portion of our faith." Truth, fact, fair inference, is all we should give credit to; and we hope we may believe Dr. Willis's silly sayings, or not, without forfeiting our "faith."

Of the want of judiciousness and taste, so apparent in this "Life," it is worth while to quote the way in which some words of Harvey's loving gossip, Aubrey, are twisted, almost to the emasculation of the former.

"In temper," Aubrey says, "he was, like the rest of his brothers, very choleric; and in his younger days, he wore a dagger, as the fashion then was, which he would be apt to draw out upon every occasion."

Whereupon Dr. Willis steps in, and says—

"We cannot suppose that this was used offensively, but merely in the way of gesticulation, and to lend force to his words; for, in his public and literary life, Harvey showed anything but a choleric nature; he seems, indeed, to have had his temper under entire control. The way in which Harvey himself speaks of the robbery of his apartments and the destruction of his papers has nothing of bitterness or acrimony in it."

The idea of Harvey using his dagger as an oratorical aid to his conversation and lectures is rich indeed. Fancy the physiologist, at the College of Physicians "lending force" to the immortal words in which the discovery of the circulation was promulgated, or the physician, in attendance upon the high-born dames at the court of Charles the First, "lending force" to his prescription by the eloquence of his dagger-point! Dr. Willis writes as a peaceable man, quite oblivious of the rude period in which Harvey wore his dagger—a time in which few men passed through the world without need of self-defence. From what we know of Harvey's spirit, we should readily suppose the young doctor "apt to draw" in self-defence, or in defence of others, notwithstanding his gown, be it always remembered, "upon occasion." With respect to Harvey's temper, we have every evidence that it befitted a truly great man; he was noble-spirited, generous, and free, but he knew how to resent a wrong, or assert what he held to be his duty. To have railed at the republicans for the loss of his papers would have been childish—he appeals to the world of letters, and to posterity, for the condemnation of the wrong that had been done to him, and no less to science.

The rough handling he gave the "poor chirurgeons" of St. Bartholomew's, as Dr. Willis call them, shows well enough that he could be choleric "upon occasion;" and "upon occasion," too, Harvey called things by their right names in a good, wholesome fashion, which shows that he could be bitter enough against that which deserved "bitterness or acrimony." That we do not speak without rule, we quote a passage from his second disquisition upon the circulation, addressed to John Riolan, in itself a full and noble defence of physiological experiments, which some mawkish persons of our own day have foolishly attempted to decry:—

"There are some, too, who say that I have shown a vainglorious love of vivisections, and who scoff at and deride the introduction of frogs and serpents, flies, and others of the lower animals, upon the scene, as a piece of puerile levity, not even refraining from opprobrious epithets."

"To return evil speaking with evil speaking, however, I hold to be unworthy in a philosopher and a seeker after truth; I believe I shall do better, and more advisedly, if I meet so many indications of ill-breeding with the light of faithful and conclusive observation."

And then, his just resentment and indignation overstepping the limits he had placed upon it, he breaks forth—

"It cannot be helped that dogs bark, and vomit their foul stomachs, or that cynics should be numbered amongst philosophers; but care can be taken that they do not bite or inoculate their mad humours, or with their dog's teeth gnaw the bones and foundations of truth. Detractors, murmurers, and defilers with abuse, as I resolved with myself never to read them, satisfied that nothing solid or excellent, nothing but foul terms, was to be expected from them; so have I held them to be still less worthy of an answer."

Here we cannot help exclaiming—How have the discoverers of our own day been abused and vilified when they have, in more guarded terms, described the Riolans, Parisanuses, and Primeroses of a later age! Harvey, it will appear, was no soft-tempered person, such as Dr. Willis has described, who could mildly omit to stand up stoutly for the truth, or brand a detraction, or a lie, or a theft, as such, when it came before him. If he did not rail at the parliamentarians

it was for some better reason than mere placidity of temper.

We might go on to a much greater length to show that in every requisite Dr. Willis has utterly failed; but we refrain. We have given some proofs upon which we may rest the assertion, that the heavy, clumsy, tasteless performance, dignified by the title of "The Life of William Harvey, M.D.," is most discreditable to our profession and our professional literature, unbecoming the memory of the great man whom it outrages, and disgraceful to the Society under whose auspices it has been produced, and that upon an occasion when they might have won great praise and honour.

And for the translation, that is as ill-favoured as the Preface or the Life; it is Harvey put in irons; his clear and majestic Latinity is wrought into crooked German-English, knotty, gnarled, and most unsuited to his nervous and lucid thoughts. Everywhere, grimace and contortion of language is preferred before simple and dignified ease of expression. The translation of Dr. Llewellin, though sullied by what we should now consider vulgar readings, but which were the fault of the age, not of the man, is infinitely more beautiful in many of the finest parts of Harvey, than that of his modern successor. Dr. Willis speaks of the translation of the circulation with great contempt. He calls it "rebutting in point of style." No words could better describe his own, which is, in truth, the very Ariesque of composition. The entire production is worthy of the man who could publish the absurd discovery that Harvey was a suicide!

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*Observations on the Treatment of Lateral Curvature of the Spine.* By Edward F. Lonsdale, F.R.C.S.E., &c. London: Churchill. 1847. pp. 116.

In the treatment of distortions and deformities of the body we may mark a very considerable advance in the art of surgery in modern days. Many who, but a few years back, would have been suffered to have gone about crippled with club feet, or other deformities of the limbs, have now only to submit to some trifling operation, and to some simple treatment, to acquire their natural utility, or to restore them to their pristine healthy condition. These remarks apply particularly to distortions of the extremities, which are very common, and, as we have intimated, many of them very amenable to treatment; but the subject—lateral curvature of the spine—which Mr. Lonsdale brings under notice in his treatise is one which is still more common, and more closely concerns the comfort and well-being of the individual. "So common is it," says the author, "that were it practicable to examine the spines of all those who are above what is called the labouring classes, I believe we should find, in by far the majority of them, some deviation from the natural erect line, causing a greater fulness on the right than on the left side, both in the ribs and shoulder; it may be so slight, however, as not to be perceptible with the dress on." Further, it is by far more common in females than in males, and in the former "may be altogether a primary affection, the girl being in good health at the time of the curvature commencing, and having had no previous disease to which it can be traced."

Does not the foregoing point to some great error in the bringing up and education of the female part of our population to a great neglect of physical education, whereby the ligaments and muscles of the spine become enfeebled, and susceptible of otherwise inoperative causes tending to produce lateral curvature? In this country the bandaging and distortion of the feet of Chinese ladies is looked upon as a monstrous piece of barbarism, marring the human form divine; but the English public are blind to a worse form of barbarism, constantly enacted before them in the present system of female education and dress, whereby not merely are the limbs crippled, but the body is distorted generally, the functions of its organs impeded, and its natural development prevented; and withal, a sickly progeny results, whose career on earth is soon cut short. We have given vent to these remarks—although, perhaps, they may be here rather out of place—from the conviction that the terrible evils resulting from the neglect of physical education are not set prominently enough before the public by the profession, whose duty it is to do so.

To return: Mr. Lonsdale enters into an inquiry why lateral curvature is almost confined to females, and why it should be, in by far the most cases, to the right side. The first part of the inquiry is answered by reference to their sedentary habits, their neglect of exercise, and the faults of dress—causes all acting so as to weaken the ligamentous and muscular systems generally, and the spinal column especially. The cause of the weakness being admitted, why should the curvature be to the right side?

"Observe a girl at her needle: she sits for hours together with the head hanging forwards; the left arm is but little used, and drops the shoulder of this side downwards, and tends to make the chest of the left side contracted, by weighing and pressing on the ribs. The reverse, however, is taking place on the right side: the right arm is in constant use, being principally employed in a position before the chest; the weight of the upper extremity is taken off the ribs, both by the pectoral muscles, as well as by those muscles which raise the clavicle and scapula. These circumstances favour the curvature of the spine in two ways: first, they increase the expansion of the right side of the chest, by giving freer motion to the ribs; and, second, the opposite, or left side, becomes gradually more contracted, owing to the dead weight which is thrown upon it from the arm being so little used, and constantly dependent. Combined with these, there is another and internal cause acting—viz., the greater expansion of the lung on the right than on the left side, owing to the pressure on the ribs; and to this I attach much importance, where the above position described is continued for a length of time."—page 5.

Again, says Mr. Lonsdale,—

"That the want of expansion in one lung, and consequently of the ribs of the same side, is a cause sufficient to destroy the natural balance of the spine, is seen in cases of collection of fluid within the chest, in empyema, or hydrothorax," after the fluid has been absorbed or removed. He also would suggest, that the naturally less capacity of the left lung may predispose to that side of the chest more readily acted on by causes tending to produce constriction, "independently of any position the body may be placed in, which, under other circumstances, might be the principal cause." Tight lacing with stays all admit as productive of spinal curvature; but although the compression thence resulting be exerted on both sides equally, the causes just spoken of, but chiefly the smaller capacity of the left lung, will determine the curvature to the right; and with the author we would add, that this disposition of the curve is still further favoured by the support which the right side of the thorax derives from the liver, and by the less degree of compression which it thence admits of. Another cause favouring the production of curvature to the right side Mr. Lonsdale believes to be found in the greater use which is made of the arm of that side in all right-handed persons. The lateral curvature being produced, it may at once be seen, as shown in the treatise before us, how the several muscles of the back, both the deeper and the more superficial, will act in concert to increase it.

"The lateral curvature may take place in the dorsal portion of the spinal column only, and then generally in its upper half; or it may be accompanied with one in the lumbar region in the same or opposite direction, more commonly in the latter. There is also sometimes a third in the cervical region. The lumbar and cervical nerves I believe to be secondary to the dorsal, constituting the compensating curve, to preserve the centre of gravity of the head and trunk."

The symptoms of lateral curvature, in its earlier and later stages, are well sketched, and clearly interpreted—especially the alteration of the angles of the ribs, and the differences which often occur where the lumbar curve is marked. The second section of the book is taken up with the treatment of this spinal deformity—a matter on which much has been

written, and concerning which many different views have been advocated. The mode of treatment, and our hopes in its success, must depend much on the character of the case before us, as to its degree of curability, to determine which our author lays down some very good criteria.

The indications of treatment resolve themselves "into these points:—1st. There is weakness of the vertebral column. It has, then, to be artificially supported. 2nd. There is displacement of certain bones,—the vertebræ, the ribs, scapulæ, and clavicles, which lose their natural relative position to one another, at the same time that the ligaments on one side become shortened. These bones, then, have to be replaced, and the resistance of the ligaments has to be overcome. Finally, there is irregular muscular development of the two sides of the body, existing both as a cause and as an effect. These points have to be combined in the treatment; no one attended to alone will suffice." To fulfil the first indications implied, mechanical means are resorted to, which should combine mechanical pressure with mechanical support. To gain these ends, Mr. Lonsdale employs a firm pelvic hoop of iron, to which is affixed a crutch, made to rest in the axilla of the left arm, so as to afford support to that side. The crutch is so fixed to the hoop by a slide as to allow of different elevations. At the same time, the right side is pressed upward by a lateral plate, adapted to the curve of the thorax beneath the axilla of that side, and so attached by a flattened rod to the pelvic hoop, as to act on the principle of the lever. The instrument thus imperfectly described, and which may be much better understood by reference to the drawings of it in Mr. Lonsdale's book, or, better still, to the instrument itself, appears well adapted to fulfil the objects desired in its construction, and to be as little cumbersome as possible. The last-named indication—viz., the equal and natural development of the muscles, is to be attained by exercise; but our author "is opposed to the exercise of the muscles before the curvature has either been completely cured, or as much relieved as the nature of the case will admit of," as otherwise it will only tend to increase it.

But we have yet to name the mode of treatment peculiar to Mr. Lonsdale, so far as the position of the patient is concerned. He says,—

"I recommend that the patient should be placed on the side on which the projection formed by the curve exists, instead of on the back, and allow the legs, the head, and upper extremities, to fall to a lower level than the trunk. By this means a sufficient power is at once gained, by the simple weight that is then exerted at either end of the trunk, to gradually act upon the spine, and to regulate itself—imitating, in fact, the straightening of a bent rod or stick."

To obtain and support this position in as agreeable a manner as possible, an ingenious but simple couch is contrived, of which some drawings are given. The position is retained but for one or two hours daily; but as soon as it is relinquished, the instrument of support and pressure, above described, is reapplied—the above position being employed only "as an adjunct to the rest of the treatment."

The last section of this interesting work, of which we have presented an analysis, is occupied with the consideration of the exercise of the muscles as a means of cure. The author recommends the weight to be suspended behind the patient exercising, and to be raised by bending the body forwards; since this tends to throw "the whole spine more backwards than forwards, and to redress the curvature, at the same time that the muscles of the spine are brought into active play."

The treatment, of which the foregoing is an outline, Mr. Lonsdale states he has found very successful, and would recommend to his professional brethren to put it to the test. We would wish that this treatise on lateral curvature of the spine were generally read, since much ignorance prevails concerning that subject, and, consequently, it presents an ample field for the quack, and an opprobrium to the profession.

# Medical Societies.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

MAY 25.—J. M. ARNOTT, ESQ., F.R.S., PRESIDENT.

### OBSERVATIONS ON THE COEXISTENCE OF VARIOLA AND SCARLATINA, WITH REMARKS ON THE COEXISTENCE OF OTHER ERUPTIVE FEVERS. By J. F. MARSON, Surgeon to the Small-Pox and Vaccination Hospital, London.

DURING the last eleven years, the author of this paper has seen, at the Small-Pox and Vaccination Hospital, seven persons who had variola and scarlatina simultaneously. These patients were apparently suffering from small-pox only on their admission, but, in the course of a few days, scarlet fever also developed itself. In each case, all the leading symptoms of scarlatina were well marked, and the eruption was evidently different from the roseola, which frequently precedes the eruption of small-pox, and also different from the erythema, (somewhat resembling it,) arising from the miasm of hospitals; in fact, it was the florid red eruption peculiar to scarlatina, which no other eruption exactly resembles. Three of the patients were unprotected, and four of them had been vaccinated. All recovered but one, the particulars of whose case were given in full. Three other patients with variola and scarlatina existing at the same time, have been seen, within the last few years, at the London Fever Hospital. Reference was made to the opinion so strongly expressed by Mr. Hunter, that no two fevers could be coexistent. Several cases were then alluded to, that have been published by different observers, in France and England, of the coexistence of variola and scarlatina, variola and rubeola, variola and pertussis, variola and vaccinia; rubeola and scarlatina, rubeola and vaccinia, rubeola and pertussis; varicella and vaccinia; pertussis and vaccinia. The individuality of erysipelas, as a special eruptive fever, was commented on, this disease being shown to arise, almost invariably in hospitals, from the impure air produced by morbid animal effluvia. The French were acquainted with the fact, fifty years ago, of small-pox and scarlatina existing together occasionally, some cases being referred to by the author, published by M. G. Vieusseux, at that period, but the subject has nearly escaped attention, or at least, remark, by writers of this country.

### REPORT OF SOME CASES OF MOLLUSCUM CONTAGIOSUM, WITH REMARKS ON ITS HISTORY AND PATHOLOGY. By RICHARD PAYNE COTTON, M.D., Member of the Royal College of Physicians, London.

The author commenced by a description of the disease, as lately seen by him in a respectable family, in which the mother and three daughters were affected, and the father and two sons exempt. It first attacked the eldest girl, and subsequently all the female members of the family, commencing in the form of prominent, rounded, moveable tumours, smaller than a pin's head, which after a few months increased to the size of a large pea, and throughout presented a small central depression resembling that of a small-pox pustule; they were red, soft, and shining, but in the process of growth became hard and warty; their attachment was often pedunculated, but more commonly by a broad base. No inconvenience attended them unless they were exposed to friction; and the surrounding skin was never inflamed; they were usually arranged in groups, but never coalesced. At first, an opaque, creamy-looking, inodorous matter escaped from the central depression upon pressure, but as the tumours grew this secretion became indurated.

A drawing of the microscopical appearances of the secretion was exhibited, by which it appeared to be made of two distinct structures, one cellular, the other fibrous—the former composed of elliptical or spherical cells; the latter, of waved fibrils resembling the white fibrous element. From the central depression being formed by the contracted opening of a duct, the absence of the tumours upon the palms of the hands and soles of the feet, where sebaceous glands do not exist, and the lobulated form of the hard secretion, the author concluded that these organs were the seat of the disease. An account of the microscopical appearances of the contents of comedones, or retained sebaceous matter, was then given, and shown to be dissimilar to that of molluscum. The origin of the disease in the cases reported was referred to some peculiarity of organism inherited from the mother, and not to contagion. The rarity of the affection was then spoken of, and a reference made to cases already described by Bateman, Cazenave, Erasmus Wilson, and Drs. Henderson and Paterson, from which it was in-

ferred that some were really propagated by contagion, whilst others seemed incapable of becoming so; that the secretion in some cases was simply sebaceous matter, but in others a peculiar and independent organism. Hence, it was concluded by the author that the disease is contagious or not, according to the nature of the secretion, its seat remaining the same; that Bateman's division into molluscum contagiosum and molluscum non-contagiosum would therefore be insufficient, as he had applied the latter term to an affection distinct from the one described in the report, and not spoken of by subsequent authors, but probably some follicular tumour; and it was proposed to limit these terms to the disease hitherto called molluscum contagiosum. The affection terminated either by an escape of the secretion, which was rare, or its induration, and the formation of a permanent warty tumour. The treatment consisted merely in removing the tumours, and checking the tendency to their development by friction of the skin and ablutions, the general health being remarkably good. As soon as the tumour appeared, pressing out the secretion, and the subsequent application of nitrate of silver, produced a speedy cure; but for those more advanced, three methods were adopted—1, removal by scissors; 2, ligature; 3, the evacuation of the secretion through a small puncture, followed by the application of nitrate of silver. The last treatment was the most successful.

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Case of Malformation of the Heart, in which Death Resulted from Obstruction of the Trunk of the Pulmonary Artery. By Thomas B. Peacock, M.D.

The subject of this case was a boy, fifteen years of age, who had from early life exhibited slight appearances of cyanosis. Twelve months before his death he was thrown from a cart, and after that period the lividity of the countenance became much more marked, and he was subject to frequent attacks of chest affection, and to palpitation. His last illness was of eight days' duration, and commenced with rheumatic symptoms, followed by difficulty of breathing and pain in the chest. When admitted into the Royal Free Hospital he exhibited very marked cyanosis, and a loud murmur, accompanying the impulse of the heart, was audible in the præcordia and along the sternum. At the situation of the base of the heart the murmur masked all other sounds; but towards the apex, and the lower and right side of the sternum, it was followed by a loud second sound. He died a few hours after his admission. On examination, the aorta was found to arise in part from the right ventricle, and the orifice and trunk of the pulmonary artery were of very small size. The right ventricle was also separated by a supernumerary septum into two cavities, one being the infundibular portion, giving origin, as usual, to the pulmonary artery; the other consisting of the sinus of the ventricle, communicating with the aorta. The abnormal septum was incomplete over a space about equal in size to that by which the aorta communicated with the right ventricle. The orifice of the pulmonary artery was provided with only two valves, and these were so thick and rigid as to occasion a further contraction of the aperture. The trunk of the vessel was entirely obstructed by partially decolorized coagula, which were laminated and adherent to the thickened and diseased valves and coats of the vessels. The author remarked that the case was closely allied to the ordinary form of malformation, in which, with congenital contraction of the pulmonary artery, the septum of the ventricles is defective at the base, so as to allow the aorta to receive its supply of blood from both ventricles. Its great interest, however, lay in the division of the right ventricle into two cavities communicating with the aorta and pulmonary artery respectively, and the free admixture of the venous and arterial currents of blood, which must consequently have taken place throughout the whole of the boy's life. So far, however, from this having been productive of marked cyanosis, it was stated that there was but little peculiarity in the boy's appearance till the supervention of secondary disease in the pulmonary artery after the fall, twelve months before his death. The cause of death was also, it was remarked, unusual. Though obstructions in the terminal branches of the pulmonary artery had been shown by Baron and Paget to be of frequent occurrence, the writer was not aware of any other case in which the trunk of that vessel had become obstructed.

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On Porous Rarefaction of the Bone, consequent upon Gout. By Alexander Ure, Esq., Fellow of the Royal College of Surgeons, and Surgeon to the Westminster General Dispensary.

The author observed that, upon making a transverse section of a digital phalanx, taken from a gouty subject, a peculiar speckled appearance was perceptible. The medullary canals were seen preternaturally enlarged, and filled with a cretaceous matter, which effervesced with acids. The Haversian canals were, in like manner, irregularly enlarged and choked up with this substance. The osseous lacunæ or corpuscles were, in some places, increased in size, and rounder than ordinary, but for the most part, less distinctly marked. The canaliculi, more especially in the vicinity of the medullary canals, were replete with the above deposit, thicker than normal, and in obvious communication with the medullary canals. There was thus induced porous rarefaction of the bone. The author stated that the matter in question consisted chiefly of carbonate of lime, while a portion of tophus, detached from the adjunct phalangar joint, was almost wholly composed of urate of soda. In reference to the above peculiar condition of the osseous structure, he remarked, that Dr. Gerlach, of Mayence, whose coöperation he had in the above research, subsequently ascertained that precisely the same appearances were present in the section of bone taken from a person who had been afflicted with morbus coxæ senilis. Arthritic osteoporosis is an affection of a very insidious character. It commences almost imperceptibly, creeps on stealthily, year by year, and is accompanied by occasional pain and swelling. Although usually occurring in individuals hereditarily predisposed to gout, it is not necessarily preceded by a fit of that malady. While the author believes it to be but little amenable to treatment, he is of opinion its progress may be somewhat retarded by judicious hygienic measures; and the attendant pain and uneasiness relieved by topical steam baths, in conjunction with the vapour of mineral naphtha, and by various other soothing means.

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## British & American Medical Journals.

### Case of Complete Occlusion of the Vagina; Subsequent Conception, and Delivery.

The following case, recorded by Dr. Simmons, in the *Philadelphia Medical Examiner*, presents some of those anomalies which perplex the physiologist and the medical jurist. The details can be given in a condensed form, without interfering with the completeness of the history. Mrs. E. B. W——, a respectable married woman, gave the following particulars of her case:—

"In the month of July, 1844, she was confined with her first and only child; had a laborious and very protracted labour; the child was still-born, and unusually large. In a very few days after her accouchement, acute phlegmonous inflammation invaded the soft parts, terminating in sloughing, with excessive and long-continued suppuration; and it was not till the middle of October following, that she could begin to date her recovery. Some time during the succeeding month, (November) she became aware, for the first time, of her peculiar and unhappy condition—a complete closure of the vagina.

"Mrs. W—— is a native of Ireland, aged forty years, possesses a good constitution, and never failed to menstruate at her regular monthly periods, *as well since, as previous to, her long confinement*, in 1844, except when she was pregnant, and at the period immediately preceding this examination, which she missed, and which ought to have been, as she said, about the middle of March, 1846.

"We could perceive nothing defective or unnatural in the labia externa, clitoris, and fourchette, but on separating the labia to their fullest extent, we found the nymphæ almost entirely obliterated, and a dense fibrous structure extending from the orifice of the urethra to the fourchette, and across from the base of one labium to that of the other, blocking up the mouth of the vagina completely, and resembling more than anything in appearance, the palm of one's hand, when in an extended position. Dim tortuous lines of cicatrices were perceptible, and the whole surface of this structure presented to the touch a smooth, dense, elastic feel, but no opening or cavity whatever could be perceived. Impressed as we were, however, that an orifice or orifices did exist, from the circumstance of the menstrual discharge not being interrupted, we continued the examination for more than an hour, with the greatest care and minuteness; used the smallest sized probes; applied them to every point of this structure, and in every direction to its surface; also to the rugæ of mucous tissue lining the clitoris, fourchette, and orifice of urethra, but we were unable to discover a single orifice or fissure communicating with the cavity of the vagina or uterus. The orifice of

the urethra was of usual size, and occupied its natural situation —admitting the easy introduction of a medium-sized catheter, and its ready passage to the bladder. Our attention was then directed to the exploration of the urethral canal, believing it possible that a fistulous orifice might be found near the opening of that tube, through which the menstrual fluid made its way from the uterus. Probes of various forms and sizes were used, but without obtaining the object of our pursuit; and ascertaining from the woman, that at no time during her menstrual flow did she perceive the discharges, either per urethram or per anum, even in the slightest degree tinctured with that fluid, we declined the further prosecution of our inquiry.

"Unwilling at that time to give a conclusive opinion with regard to the propriety of an operation for the restoration of the vaginal tube, I deferred doing so from time to time, until the latter part of July following, when the husband of this woman called to inform me that his wife began to suspect herself pregnant. I supposed at once that her fears arose from the suppression of menstruation, which I was aware had not appeared since the middle of February, this period being about six weeks previous to my first examination. I advised the man to go home, and say to his wife that she was mistaken, assuring him, at the same time, that such an event was a total impossibility; and he, poor man, having too long had sufficient proofs of his wife's inaptitudes in this way, readily acquiesced with me in opinion. I called to see Mrs. W—— on the 8th of August following; perceived that she had increased in size since I saw her last, and was about as large as one at the middle period of gestation. She repeated to me that she had not menstruated since the middle of February, and said that "she felt something move within her belly." The first time, as near as she could recollect, was about the middle of July.

"The case now became exceedingly interesting, and although I still doubted the possibility of pregnancy, I offered no further objections to her own diagnosis, based as it was on evidence so conclusive to her, and which the issue of the case has proven, was more certain than the lights by which I was governed in physiological science.

"A further examination was made, and the catheter was introduced into the bladder, as on a former occasion, but we could find no track from the urethra to the vagina, or to any other cavity. Neither was there any malformation of the anus or fistulous orifices about its margin.

"On the 20th of October, I was requested to visit Mrs. W—— as a patient. She had been very ill the night previous, and complained of distressing pains in the back and loins, rendering her unable to rest in any position more than fifteen minutes at a time. She was as large as if very near the full period of gestation, and by placing my hand on the abdomen, I felt, for the first time, the motion of the fœtus. During the continuance of a pain, I made an examination, and found the structure referred to presenting to the touch the same feel that it did on former examinations. There was no fulness or distention of the parts, which the descent of a fœtus and collected waters within the membrane would indicate. I was, however, fully convinced that the poor woman was pregnant, and presuming, on her own calculations, that she had not arrived at her full period of gestation, I took from the arm twenty ounces of blood, and gave thirty drops of laudanum. She was much relieved, and continued comparatively easy for several days; but the annoying pains returned, and continued with more or less severity up to the time of her accouchement.

"On the 19th of November, at six o'clock A.M., I was summoned to visit Mrs. W—— in haste. I found her in labour, and on making an examination per os externum, I discovered a fulness, with great tension and pressing down of the smooth fibrous structure blocking up the vagina; and this condition of the parts increased on the return of every succeeding pain, till, in the space of two hours, I could perceive evident fluctuation of the waters within the membranes, and by forcible pressure with the fingers could feel a hard body low down in the pelvis, which I supposed was the head of the child.

"The parturient pains continuing with force, the patient was placed on her back, with the thighs separated, and opening the labia externa with the thumb and fingers of the left hand, I carefully divided the integuments with the scalpel, to the extent of one inch, commencing the incision at the most prominent part of the tumour, and on a direct line from the orifice of the urethra to the perinæum. The structure divided was about three-fourths of an inch in thickness, and of a firm fibrous texture, clearly indicating that the occlusion was not the result of simple adhesion of the sides of the vagina, but of a new formation of tendinous tissue. Whether the membranes containing the liquor amnii had previously ruptured, or whether they were punctured with the point of the scalpel on passing through the structure with the knife, there was a free jet and flow of water for a moment, and also considerable hæmorrhage. I found the os uteri dilated, the margin thin, and of a natural feel, with the head of the child presenting. The soft parts readily and safely dilated as the head advanced; and although the labour was both tedious and laborious, until the head emerged from the inferior strait of the pelvis, not an untoward event occurred, and the woman was safely delivered, at five o'clock P.M. same day, of a well-formed and living female child, weighing eight pounds. At this date (Jan. 2nd, 1847) both mother and child are living and doing well, and the poor woman feels doubly compensated for all her past afflictions by the entire removal of her physical impotency, and the new source of moral happiness which has been lighted up on becoming a mother.

"It may be proper to add, that great care was paid to the subsequent management of this case, and by means of a tent, and other necessary applications, the newly-formed vagina has been maintained. Suppuration has entirely ceased, and new mucous tissue partially formed on the internal sides of the divided structure.

"The physiological questions involved in this case are—How did the menstrual fluid make its exit from the uterus? and by what law of the animal economy did conception take place? The woman's own statement (her husband also concurring in the same facts) was, that since recovery from her long confinement in 1844, which was about the end of November of that year, her condition had been at no time different from what it was at my first and subsequent examinations; yet, notwithstanding, she menstruated regularly up to the middle of February, and at that time was as much unwell as usual.

"She could give no account of it, except that the discharge issued from between the labia externa, was small in quantity, continued about three days, and during these periods she never experienced any pain or difficulty whatever."

Were it not for the great care with which the examination was made in this case, we should have believed in the existence of some minute opening.

### LARYNGISMUS STRIDULUS; INHALATION OF ETHER.

M. Image records, in the *Provincial Journal*, a case in which the application of ether, by means of a sponge, to the nose and mouth, arrested the progress of fits of this disease, on each occasion of their access, until they ceased altogether.

The child affected was a year old; and the fits, which occurred before the ether was applied, were exceedingly severe.

### ON THE USE OF MURIATE OF MORPHINE IN TOOTHACH, FRONTAL NEURALGIA, AND NEURALGIA OF THE FIFTH PAIR OF NERVES.

M. Ebrard has always found toothach yield, in from half an hour to two hours, after friction of the gum, on the affected side, with muriate of morphine in powder. The first friction should be performed in the evening, at least three hours after the last meal, unless the severity of the pain prohibits delay. The patient should take a quarter of a grain of the salt on one of the fingers, previously moistened; rub it gently on the gum for about three minutes, then incline the head towards the affected side, avoid spitting or swallowing the saliva, so as to favour the contact of the salt with the affected part, and maintain this position for at least ten minutes. This process should be repeated in two hours, if relief is not obtained. Should the pain return the day following, the application should be repeated. Half or three-quarters of a grain of the salt may be employed, if necessary. The friction should not be repeated, if headach, disposition to sleep, &c., occur.

When neuralgia occupies the forehead, or any immediately adjacent situation, M. Ebrard recommends from a quarter of a grain to a grain of muriate of morphine to be snuffed up the nostril on the affected side, daily. It is, in these cases, desirable that the mucous membrane should be cleansed by some emollient application.—*Medical Press.*

### VACCINATION IN TURKEY.

The Sultan has recently issued, at Constantinople, a decree, to extend to all parts of the empire, that all children born are to be vaccinated. Considering the various prejudices of the Mohammedans, this may be looked on as a long step in the advance of the Turkish nation towards that degree of civilization existing in other European states.

THE LANCET.

LONDON, SATURDAY, JUNE 19, 1847.

THE labours of the Registration Committee speak for themselves. The many hundreds of petitions presented to Parliament through their immediate exertions bear witness to the energy with which they have applied themselves to their honourable task. One thing is certain—never before was there developed such an extended system of petitioning among the medical profession. Medical practitioners are finding their voices; they are learning how to petition, and their efforts are making themselves felt among members of parliament. Many honourable gentlemen, too, are learning, for the first time, that they have medical men among their constituents. An organized system of petitioning is a new power—one fraught with good to the oppressed followers of medicine. The man who has once petitioned will find it easy to petition again, as occasion calls; and the walls of Parliament will never hear the last prayers of medical petitioners until an honest measure of medical reform has been dealt out.

In this highly civilized country, there are now many so-termed professions, and many trades and callings; but we speak advisedly when we say, that among no other body of men is there such habitual and extensive infraction of the laws of the land as with the medical body. If we examine ourselves, we shall see that we are A PROFESSION OF LAW-BREAKERS! We are sure that a majority of the whole profession is constantly outraging the law. Physicians are acting as surgeons and apothecaries; surgeons are acting as apothecaries and physicians; apothecaries, in their turn, are acting as physicians and surgeons; apothecaries with the country licence are acting in London; physicians are practising in London and the country in an overwhelming majority—at least, in the latter, without being members of the College of Physicians; extra-licentiates are practising in London: in all of which cases there is either direct infraction of the law as it now stands, or the practice is without legal qualification. Then, again, even those who are most highly qualified according to law—we mean the members of the College of Physicians—are constantly breaking their own laws by meeting unqualified persons in consultation. This is done constantly and habitually to a very great extent. Such habitual infractions of law among the members of the medical profession is productive of the worst results. We believe it is almost impossible for a truly conscientious man to practise medicine, surgery, or midwifery, without constantly wounding his conscience. However little it may be confessed even to ourselves, this sentiment of acting illegally weakens our hands immeasurably, in dealing with quacks and persons who are unqualified, both legally, and by want of medical education. It tacitly permits a horde of miscreants to fasten upon the profession, and from thence to prey upon the public, who are utterly ignorant of all that relates to the practice of our art. We cannot shake them off. While so many of us are conscious of failing in strict legal qualification, our hands are palsied towards these odious and nefarious interlopers. This monstrous evil acts in a two-fold manner; it eats into the reputability of the profession, lowers the standard of men entering it, and, on the other hand, is a source of great injury to publicmorals, and a great bane to public safety and public property. Owing to this state of the medical profession, we ourselves suffer, and the people are injured in pocket, in health, and in morals. Is not this a strange spectacle for the nineteenth century? One of the three learned professions a source of robbery and demoralization on the largest scale!

And we say it is not the fault of medical men, but of bad medical laws, that these things are so. Legal qualification and the qualification of education are come to be altogether different things. In fact, the lowest medical qualification as regards title—the licence of the Apothecaries' Society, gives a more extensive qualification than any other English diploma; while the highest educational qualification which can be obtained in this country—the doctorate of the University of London—confers no legal qualification whatever. This is absurd enough; but still more so are the legal enactments which call for so many different qualifications in the different parts of the British islands. Disease does not alter to accommodate itself to our chameleon-like legislation. It still obstinately remains the same, whether the patient be in Oxford, or London, or Edinburgh, or Glasgow, or Dublin. England, Ireland, and Scotland, are not very large places, and the facilities of communication are such, that medical men, now-a-days, are liable to very distant calls. We should like to see the man who is really a British practitioner, qualified to practise everywhere throughout the three kingdoms; to become, for instance, the travelling attendant of a patient determined to penetrate every nook and corner. Such a man would be one of the greatest wonders of the age. Unfortunate medicine, which alone still preserves the feudal laws, which suited centuries ago, in an age of far advanced civilization. We were the first to throw off the cap and gown, and take up with science for its own sake; but if we could really see ourselves, we are, morally speaking, still in the old uncouth garments and trammels, still in the ruff and jerkin and pointed shoes of the centuries behind us. The barber-surgeons' pole and ribbons have become the insignia of another class, but the legislation which fitted them still remains in spirit with the profession.

It is to remove some of these vicious and vitiating anomalies that the medical mind is in a state of agitation—an agitation which will never cease till a sound remedy has come to pass. Medical men wish to relieve themselves from the stain of illegality, and for this they see no other—and there is no other—remedy, save in a legal Registration of all men qualified either by law or by the possession of a regular licence or diploma to practise medicine. Every petition in favour of Registration is a letter towards the law which shall bring about such a happy consummation. If our medical brethren proceed as they have done, that law must be written among the statutes of the country.

THE case to which we have recently given so much attention, in which the diploma of the College of Surgeons was obtained, is one of great importance to the profession. We pursue the matter, not with any animus against Mr. OSBORNE, but with a conviction that if such a flagrant case is suffered, after the particulars are so fully known, to pass without severe animadversion, and even punishment, the value of medical education will sink very low indeed. The members of the College of Surgeons expect the Council to move in the

matter; the profession consider, that after the decision of the Council in expelling BLAKE, there can be no excuse for a close examination into the more reprehensible case of OSBORNE. We have no doubt that time was a very great element in the different decisions of the Council upon the two cases brought before them by Mr. FOSBROOKE and Dr. WOODFORDE. We have good reason to know that our own exertions in setting forth the state of the profession, had somewhat aroused the College in the interval, and we have little doubt that were the case to happen again, OSBORNE would be unmade as promptly as BLAKE. The Council ought to have an opportunity of re-considering the matter, or rather, of considering for the first time; for it does not appear that any very energetic means were taken by the Council to sift the correctness of OSBORNE's certificates. Is there no branch of the Provincial Medical and Surgical Association at Nottingham who would take the matter up after the manner of the Taunton branch? If not, then some independent members of the College ought to take the necessary steps, and memorialize the Council. With the facts of the case brought out so clearly as they have been, the Council could not refuse to entertain such a memorial, unless, indeed, they desire to bring the College diploma into utter contempt. Now the facts are known, no squeamishness ought to prevent parties who are desirous of upholding the respectability of the College and the profession from acting in such a manner as to ensure justice. The party offending has merited the most severe punishment which the profession can award, and to suffer him to go unscathed is winking at fraud and forgery; it is holding out the reward of immunity to all others who have acted, or who may in future act, after the same manner.

It is but fair and just that we should point out the different circumstances of the Hall and the College in this case. OSBORNE had already obtained the College diploma, the application was made to the College just before their vacation, and when there was some difficulty in coming to an immediate decision, in consequence of the absence of Dr. KNOX from this country. But the case was laid before the authorities at the Hall long before he presented himself for examination; they had plenty of time for the investigation, and they were bound, in honour and duty, by their own Act of Parliament, and their obligations to their own licentiates, to have taken care that OSBORNE should not present himself at the examination table until his hands were cleared from all he stood charged with. The result exhibits them as wilfully breaking the provisions of their own Act of Parliament, and, more than this, as declaring that they reserve to themselves a right to do so whenever it may suit their convenience.

As regards the College of Surgeons, and the proceedings which may be expected to take place, it is right that we should recapitulate the evidence against the truth and honesty of OSBORNE's schedule. That schedule contains certificates that OSBORNE was serving an apprenticeship with his father, and attending lectures by KNOX at the same time; while other, and, we believe, more credible evidence, testifies that he was at this time a boy at school. It contains certificate of his attendance on surgical lectures and hospital practice at Glasgow, respecting which other evidence testifies most strongly that the surgical lectures were never delivered; and that Messrs. HANNAY and LAWRIE were not surgeons to the Glasgow Infirmary at the time they certify for; and, moreover, direct evidence is adduced to prove that he was at Long Clawson, in Leicestershire, during the greater part of the whole of his pretended attendance in Glasgow; and that he was not in Glasgow at all during the whole period in which the surgical lectures were signed for by Mr. LYON. That schedule also exhibits a certificate of hospital practice in Nottingham for many months, during which it can be proved he was acting as an assistant at Chesterfield.

Surely these facts are grave enough to arrest the attention of the most careless. We should not have done our duty, if we had not seconded the exertions of Mr. FOSBROOKE to the utmost of our ability, and the authorities will fall short of theirs, unless, not only Mr. OSBORNE, but every man who has signed a suspicious or notoriously false certificate upon his schedule, be brought to a full account.

## MEDICAL REGISTRATION COMMITTEE, & SECESSIONS FROM THE INSTITUTE.

THIS Committee held a meeting last Monday at the Freemasons' Tavern. A report was handed in, which showed that the work of petitioning was going on with the most gratifying success. A large number of communications were read from town and country, expressing a hearty approbation of the Registration Bill, and indignation at the opposition of the corporations, and of the Council of the National Institute. As regards the latter body, the following letters, out of many such addressed to the sub-committee, will show the feeling of disgust and outraged confidence general amongst its members, and also prove, that if the constitution of the National Institute were well examined into, their number, though apparently considerable, would be found reduced to a few interested individuals.

Wentworth, June 11th, 1847.

GENTLEMEN,—I should have had great pleasure in allowing you to append my name to the protest against the conduct of the Council of the National Institute, with regard to the Medical Registration Bill now before Parliament; but I am happy to say I have not wasted my money by paying the subscription, and therefore do not consider myself a member.

I am, Gentlemen, your obedient servant,

To Messrs. Jones, Bowman, and O'Shea. ERASMUS STONE, Jun.

Buckworth, Newcastle-on-Tyne, June 5th, 1847.

SIR,—Some eighteen months ago I became a member of the National Institute, and paid one subscription. Some time after observing in one of the resolutions of that body a pretty clear premonitory indication of the grasping monopoly which they now more openly evince, I sent a note to request that my name as a member be forthwith cancelled. From documents, however, subsequently received from head-quarters, I have reason to believe that my name is still retained on the list of members; but be this as it may, you may rest assured that no more subscriptions of mine shall go to the promotion of any such hollow-hearted purposes. To Mr. Wakley, for his almost perfect measure of the Registration Bill, the thanks and lasting gratitude of the liberal-minded of the profession are due. Let all therefore who would desire to see the destruction of the arch-fiend Monopoly, rally round our great medical reformer with their generous support.

I have been in the field petitioning for some time past, and have not yet done.

In the fervent hope that your labours may receive the crown of your wishes, I remain, Sir, your most obedient servant, R. CRAIG, Surgeon.

J. D. Jones, Esq., Freemasons' Tavern, London.

10, Union-street, Ardwick, June 11th, 1847.

GENTLEMEN,—Yours came to hand this morning; and I can assure you it would have given me much pleasure to have allowed you to append my name to the Protest; but as I am no longer a member of that body, it would not be fair or honest to do so.

I wrote to Mr. Ross a few days ago, requesting he would erase my name from the list of members; but I have considered myself dead to them almost since the commencement of the miscalled National Institute of Medicine, &c. I think

they have evidently shown they do not care for their constituents, otherwise they would have asked their opinions previously to deciding to oppose the Bill. The Bill was printed in the first number of THE LANCET for January, consequently they had plenty of time to have called for the individual opinion of their members upon its merits, and then decided either to petition in its favour or against it. Had they done so, I think they would have found nearly all their members in its favour, not as a perfect Bill, but as a step in the right direction, which would not have to be repeated in the event of another being passed, possessing larger and more defined powers towards settling this long-agitated question—medical reform.

The conduct of the Council towards Mr. Wakley is of so shameful a nature, that I think it will prove their own downfall; and I now begin to see, that instead of adding to our licensing boards, we could very well dispense with some we already have.—I am, Gentlemen, yours obediently,

JOSHUA ROWBOTTOM, M.R.C.S.E. & L.A.S.L.

To Messrs. Jones, Bowman, & O'Shea.

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Tring, June 10th, 1847.

GENTLEMEN,—Having seen a Protest, numerously signed by members of the National Institute of Medicine, Surgery, and Midwifery, against the Address of the Council of that body, I should have much pleasure in having my name affixed, did I consider myself still a member. The truth is, on the breaking up of the National Association of General Practitioners, and previous to having seen Mr. Wakley's Registration Bill, I assented to the enrolment of my name as a member of the Institute; but disapproving, as I have done, almost *ab initio*, of the proceedings of the Council, I have omitted to send in my subscription, and therefore feel that I could not, with propriety, sign the Protest, with the sentiments of which I nevertheless most cordially concur. I have forwarded to one of our county members, a petition in favour of the Medical Registration Bill, and I would suggest to you the expediency of, in addition to our petitions to Parliament, at once getting up a Memorial, addressed to the Right Hon. T. B. Macaulay, and to the other members of Mr. Wakley's Committee, in favour of his Bill, as I firmly believe that by it, not only the profession, but also the public, will best obtain that protection against the horde of infamous quacks and ignorant pretenders that is so much to be desired. We shall then do very well without either "the head or home," and be able to effect much more good by our own individual efforts and influence, than by the formation of any "Assembly," "Association," or "Institute" whatever.—I have the honour to be, Gentlemen, your most obedient servant,

EDWARD POPE, M.R.C.S.E.

Messrs. Jones, Bowman, & O'Shea.

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70, Northumberland-street, Liverpool, June, 1847.

GENTLEMEN,—I cannot too strongly express my disapprobation of this act of the Council of the National Institute, without previously communicating with and obtaining the sanction of its members; and I much regret that my guinea subscriptions to that Institute should have been applied in opposing a measure so decidedly, in my opinion, to the general interest of the profession. ROBERT FIDLER.

P.S.—You may depend on my strenuous support.—R. F.

To M. K. O'Shea, Esq.

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Castle House, June, 1847.

Another gentleman, in giving authority to append his name, says:—

"———— that is, if I can fairly be considered a member of the Institute, never having been foolish enough to subscribe to its funds. WILLIAM THOMAS BORTHWICK.

To M. K. O'Shea, Esq.

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*To the Editor of* THE LANCET.

SIR,—As the Council of the National Institute of Medicine &c. have given their opposition to the Medical Bill introduced by you, and which the general practitioners appear to be very desirous to see passed into a law, may I be permitted to suggest to you whether the favourable opportunity, by the power of compelling parties to produce evidence possessed by the medical committee, should not be taken to ascertain the number of legally-qualified medical practitioners who belong to the National Institute, whether there are in reality a greater number than the so-styled Council. I was a member of the National Association, but your exposé of the close connexion between the working or managing parties and the Apothecaries' Hall prevented me from placing any further expectation of good resulting from such a source, and I did not join the Institute.—I am, Sir, your obedient servant,

A SUBSCRIBER TO THE LANCET, AND ONE OF THE
June 14th, 1847. PETITIONERS IN FAVOUR OF THE BILL.

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*Copy of Letter to G. Ross, Esq.*

Whitby, June 12th, 1847.

SIR,—I beg to withdraw my name from the National Institute of Medicine, Surgery, and Midwifery, and to express my shame and vexation at having been induced to join such a concern, whose chief object appears to have been, to counteract one of the best and soundest measure that was ever brought forward for the profession—I mean, the Medical Registration Bill.—I am, Sir, your obedient servant,

G. MERRYWEATHER, M.D.

To George Ross, Esq., 294, Regent-street.

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*To the Editor of* THE LANCET.

Horsham, June 1st, 1847.

SIR,—I think that, as such opposition is made to the Medical Registration Bill, by the Council of the National Institute of Medicine, Surgery, and Midwifery, it behoves all who approve of that measure to get their names erased from the list of members of that Society, or they may find themselves anomalously placed, both pro and con, which will defeat their intentions respecting the Bill, and the Council of the Institute should consider those only as members who have paid their subscriptions.—I remain, your obedient servant,

J. S. BOSTOCK, Surgeon.

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TACTICS OF THE INSTITUTE.

17, Mount-street, Lambeth, June 2nd, 1847.

SIR,—As it may be useful, at the present juncture, to acyou with the logic (?) and internal arrangements of the National Institute, I herewith send you copies of a letter addressed by me to Mr. G. Ross, with the secretary's answer thereto.

(COPY.)

SIR,—In an Address to the members of the Institute, published in the *Transactions*, bearing date 25th March, 1847, the following passage occurs:—

"The National Association, consisting of upwards of four thousand general practitioners, still exists as a body which can be called together when the voice of the profession is demanded on any great emergency. And it would be the duty of the Council of the Institute to summon, upon any such emergency, the Committee of the Association, consisting of a hundred individuals, and as a medical convention."

As a member of the Institute, permit me respectfully to ask whether the Council have, in accordance with the said expressed duty, called the said convention, or whether they intend doing so in the present emergency?

Perhaps you would do me the favour of also informing me what mode, if any, exists for calling a general meeting of the National Institute?

And as I perceive, on the 2nd of December, 1846, at a meeting of the Council, that a committee was appointed to draw up a code of by-laws for the government of the Institute, may I further inquire if such by-laws have been enacted; and if so, may I request the favour of a copy, in order that I may understand the nature of my obligations to the Institute?

Or not having had any such copy of by-laws transmitted to me, as a member of the Institute, am I to take it for granted that none such exist?

Expecting the courtesy of an early reply, I remain, &c., your obedient servant, M. K. O'SHEA.

To G. Ross, Esq., Sec.

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*The National Institute of Medicine, Surgery, and Midwifery.*

Office, 4, Hanover-square, May 27th, 1847.

SIR,—I beg to acknowledge the receipt of your letter of the 25th instant, requesting to know whether the Council of the National Institute have called together the members of the Committee of the National Association, as a medical convention, in the present emergency of medical affairs; and also whether the by-laws of the National Institute have yet been enacted?

I can inform you, in reference to your first question, that the Council agreed *unanimously* to the objections which they have published against the Medical Registration Bill; and therefore, I apprehend, would not consider that there can be, at present, such an *emergency* as would require them to call together the Committee of the National Association, at a

great inconvenience to those gentlemen, for the sake of obtaining their opinions.

The House of Commons has also appointed a Special Committee to inquire into the general question of medical reform, during which time the proceedings in Parliament, in reference to the Medical Registration Bill, will, of course, be suspended.

The fact of the sitting of this Committee removes every emergency such as you assume to exist; but it may be presumed, that if this Registration Bill were vigorously pushed in Parliament, and there were a chance of its injurious provisions being enacted into a law, the Council of the Institute would take some decisive steps in the manner you desire.

In reference to your second question, I can assure you that the by-laws have been the subject of frequent consideration, and are nearly prepared for publication.

I have no doubt that but a short time will elapse before they are submitted to the members, and in a state to be acted on.

I trust that you will find this explanation satisfactory to you; and am, Sir, your most obedient servant,

To M. K. O'Shea, Esq., Lambeth. GEORGE ROSS, Secretary.

## SELECTIONS FROM THE PETITIONS

### IN FAVOUR OF THE MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL, AND AGAINST THE CONDUCT OF THE CORPORATIONS IN OPPOSING THE MEASURE.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,—*

The humble petition of Henry William Sandell, residing at Potton, Bedfordshire, member of the Royal College of Surgeons of England, showeth,—

That your petitioner is of opinion, that the Medical Registration and Medical Law Amendment Bill, now before your honourable House, will, if enacted into a law, prove not only a boon to the profession, but to the public at large, and will greatly tend to arrest that tampering with human life, which recent events have so painfully testified, resulting from the unlimited practice of unqualified persons. Your petitioner is also of opinion, that the opposition emanating from the London Medical and Surgical Corporations, to the aforenamed measure, is not prompted by any wish to serve or exalt the profession, but to perpetuate to themselves that monopolizing and tyrannical power which they have invariably wielded to the benefit of their own selfish and exclusive interests. Your petitioner, therefore, confidently looks to your honourable House for protection, and fervently hopes that the said Bill will be passed into a law in the present session of Parliament.

And your petitioner, as in duty bound, will ever pray.

HENRY WILLIAM SANDELL.

*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.*

The petition of the Governor and Company of the Apothecaries' Hall of Ireland, humbly showeth,—

That your petitioners view with satisfaction a Bill introduced into your honourable House "for the Registration of Legally Qualified Medical Practitioners, and for Amending the Law Relating to the Practice of Medicine in Great Britain and Ireland." That your petitioners look forward to that Bill, if carried out into law, as the base from which a general system of medical reform, calculated to prove beneficial to the profession, and advantageous to the public, may proceed, your petitioners attributing the failure of all attempts hitherto made to legislate for the medical profession to the want of an enlarged foundation, such as the present Bill proposes to lay. Your petitioners therefore pray that it will be the pleasure of your honourable House to pass the Bill into a law in the present session of Parliament.

And your petitioners will, as in duty bound, ever pray,

(Signed,) CHARLES H. LEET, M.D.,
Sec. to the Company.

Dublin, June 12th, 1847.
(Sealed with the seal of the Company.)

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of William Price Evans, residing at Mile End, near Swansea, member of the Royal College of Surgeons of England, showeth,—

That your petitioner views with interest the proceedings of your honourable House, in relation to "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," and earnestly prays that this Bill may without delay be passed into a law. Past history shows that irresponsible power has been corrupt and tyrannical, and present history proves that it is a great curse. Your petitioner, therefore, views the opposition of the London Medical Corporations with feelings rather of scorn than regret, they are "following their vocation,"—working out their own damnation with fear and trembling. When the whole mass of the profession unites to petition for a Bill so well adapted as the present, to secure not only its own interests, but what is of even greater importance, the best interests of the community, it is inevitable, that close and irresponsible Corporations should combine to oppose it; their craft is in danger: but your petitioner earnestly prays that their cunning may not deceive your honourable House, and thus prevent the passing of a Bill, without which, all sanatory regulations must prove less efficient.

And your petitioner, as in duty bound, will ever pray.

WILLIAM PRICE EVANS.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of Edward Arundel Verity, Clerk, L.D.C., Incumbent of All Saints, Habergham, in the parish of Whalley, dio. Chester, county of Lancaster, humbly showeth,—

That your petitioner has carefully examined the provisions of a Bill now before a select committee of your honourable House, intituled "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland;" and your petitioner anxiously hopes the said Bill may be passed into a law in the present session of Parliament. That your petitioner has deeply deplored the want of an efficient system of registration of qualified medical practitioners, by which the public can more easily distinguish the regularly educated from mere pretenders to the science of medicine. That your petitioner, in the discharge of his daily pastoral duties, has witnessed too evidently the sad effects and consequences arising from the fraudulent and dangerous practices of designing men, who, without the smallest amount of medical knowledge, are in the habit of imposing on the public, and otherwise endangering the lives of her Majesty's subjects. That the said ignorant pretenders oftentimes assume the characters and titles of legally qualified medical men, and thereby deceive the public, to their great injury, as also to the detriment of a highly useful and honourable profession. That your petitioner therefore hails, with much satisfaction, the measure now before your honourable House, insomuch as provision is therein made to restrain the false assumption of professional titles, as well as to punish the nefarious proceedings of unqualified pretenders; and cannot but view with surprise and regret the fact that so excellently adapted a measure as the present should meet with the slightest opposition from the Colleges of Physicians, Surgeons, and Apothecaries' Hall, London, as it is considered more especially their province and duty to support every measure calculated to uphold and respect the interests and welfare of those gentlemen who, at great sacrifice of time and money, have legally qualified themselves for their profession.

And your petitioner, as in duty bound, will ever pray, &c.

EDWARD ARUNDEL VERITY.

*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned graduates in medicine, extra-licentiates of the Royal College of Physicians of England, residing in the borough of Bristol, showeth,—

That your petitioners have observed, with much satisfaction, the introduction into your honourable House of a Bill for the Registration of Legally Qualified Practitioners in Medicine and Surgery, which Bill, in the opinion of your petitioners, is calculated to be of essential service to the medical profession and the public: to the former, by affording protection to its legal members, and discouraging illegal practitioners; and to the public, by protecting them from the evils which arise from the practice of medicine and surgery by persons who have not received the necessary medical education. Your petitioners therefore pray your honourable House to pass the said Bill during the present session of Parliament.

And your petitioners, as in duty bound, will ever pray.

GEORGE ROGERS JOHN STAUNTON
E. J. STAPLES H. A. P. ROBERTSON.

*To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.*

The humble petition of the undersigned practitioners in medicine, &c., showeth,—

That your petitioners are deeply convinced that the "Medical Registration and Medical Law Amendment Bill," brought forward by the honourable member for Finsbury, would prove of much advantage to the members at large of the medical profession, and be of essential service to the public; and your petitioners, therefore, earnestly hope that no opposition brought forward by the Colleges of Physicians and Surgeons, or by any other incorporated bodies, seeking to defend privileges in their possession, for the benefit of a few, unmindful of the whole body of the profession, and also, of the public good, may be allowed to obstruct the passing of the aforenamed Bill during the present session of Parliament.

And your petitioners, as in duty bound, will ever pray.

THOMAS KEEN, King's-road, Chelsea; JOHN PARR SCATLIFF, 48, Sloane-square, Chelsea; W. BATTEN, 74, Westbourne-street, Pimlico; W. M. NEALE, 8, Sloane-square, Chelsea; WILLIAM MARTYN, 14, Brompton-row; S. J. BOULTER, 11, King's-road East, Chelsea; THOMAS BLANCHARD, 79, Warwick-square, Pimlico; CHARLES WHITING, 58, Upper Ebury-street, Pimlico.

## Correspondence.

### A WORD IN REPLY TO MR. BECK.

(SEE PAGE 615.)

*To the Editor of* THE LANCET.

SIR,—Mr. Snow Beck has at last fulminated. What a wretched production! Five columns—one thought! Much misrepresentation and misreasoning thereon. Of a truth, it is very gelatinous. There is a oneness about it certainly. It is consistent, but soft.

It would be well if Mr. Beck would try to understand the thing he writes about before he takes his "pen in hand."

Who ever now uses the phrase, cerebro-spinal system?

Who ever supposes that the contraction of the uterus "is caused by the reflex action of the spinal cord" alone?

Who, besides Mr. Beck, would talk of the reflex functions being "annihilated," the respiration, the action of the sphincters, &c., continuing all the time?

The cerebro-spinal system is now demonstrably shown to be two distinct systems.

The contractions of the uterus, like that of the œsophagus, are demonstrably twofold, the result, 1, of reflex action; 2, of muscular irritability, besides certain auxiliary forces arising from the influence of emotion and volition on the muscles of expiration, the glottis being partially or entirely closed.

It would seem that Mr. Beck is as much at sea in his physiology as in his anatomy; both are of a gelatinous character.

If these remarks appear severe, let it be remembered that the occasion calls for severity. Mr. Beck should first learn the a, b, c, of his subject. He may then be permitted to attempt the x, y, z. But not till then.—Yours, &c.,

June, 1847. SCALPEL.

### LUNATICS CHARGEABLE TO THE PARISH OF ST. MARYLEBONE, MIDDLESEX.

A DOCUMENT has this week passed through the press, under the name of a Report (the Auditors of Accounts) of the Parish of St. Marylebone, containing the following particulars, (necessarily abridged, for convenience, as regards our own space,) which, not being otherwise generally accessible to the public, we insert in this place:—

The majority of lunatics becoming chargeable to the parish of St. Marylebone were heretofore sent to the county asylum at Hanwell, but, four years since, it was found, though capable of containing above 1000 pauper lunatics, that asylum was far from adequate to meet the increased demands of the county, and many cases were therefore sent to the different licensed houses, in and near London, at an increased charge to the parish; but soon the licensed houses also became full, and that frequently caused serious delay before patients could be received—by the patient not having the advantages of curative treatment in the early stages of the disease. As a remedy for these evils, the directors and guardians of St. Marylebone availed themselves of the Acts 8 & 9 Vic. cap. 100 & 126, passed in August, 1845, and applied to the Commissioners in Lunacy to grant a licence for the reception of lunatics in certain wards of *the workhouse*, rendered suitable for the purpose; the licence was accordingly granted for 50 females and 35 males. The date of the last licence is November, 1846, extending to thirteen months ensuing.

An analysis of the lunatics in reference to the *county asylum*, the *licensed houses*, and the licensed wards of *the workhouse*, establishes the fact that great relief must have been afforded to the county by the course pursued, important benefits to the patients, and great satisfaction to their relatives.

Since the opening of the *county asylum* in 1831, there have been sent there by St. Marylebone, 255 patients: of these, 106 died, 58 discharged, 1 escaped, 90 remaining on 31st December 1846—namely, 43 males and 47 females; total, 255. Of the 90, 74 are lunatics and 16 idiots; 22 are dangerous to themselves or others, and 68 harmless; 78 are deemed incurable, and 12 doubtful as to cure.

The weekly rate of maintenance, as fixed from time to time by the visiting justices of the county asylum, has varied per week for each lunatic from 5*s.* 3*d.* in 1837 (the lowest year; in 1833 the amount was 9*s.* per week each patient) to 10*s.* 7*d.* (in 1840); the charge at present is 9*s.* 0½*d.*

The total paid by the parish to the county asylum for maintenance from 1831 to 1846, has amounted to £20,191.

The *licensed houses* to which lunatics have been sent from the parish, are, Hoxton House (Sir J. Miles's); Peckham House (P. Armstrong's); Grove House, Bow (E. Byas's); Bethnal Green Asylum, (Warburton's.)

Since July, 1831, there have been 294 cases sent to the above licensed houses: of these, 56 died, 105 were discharged, cured, 21 partially recovered, 87 were transferred to the county asylum, 23 were transferred to the licensed wards of the workhouse, 2 remaining; total, 294. The charge to the end of 1844, was 9*s.* per week, and afterwards advanced to 10*s.* and 11*s.* per week, for each patient.

Since the opening of the licensed wards of the workhouse in March, 1846, 96 patients have been admitted: of these, 8 died, 18 discharged, cured, 4 discharged, relieved, 66 remaining on 31st December—41 females, 25 males; total, 96.

Independently of the above, there are 51 harmless lunatics and idiots in the workhouse, not subject to the restraint of the licensed wards of the establishment, so that the pauper lunatics and idiots chargeable to the parish, on 31st December, 1846, were as follow:—In the county asylum, 90; in private asylums, 2; in the licensed wards of the workhouse, 66; in the other wards, 51—84 males, 125 females—total, 209.

The magistrates of Middlesex are at present advertising for a site on which to erect a second county asylum, for chronic lunatics, with a view to the more speedy reception of cases in the early stages of disease in the present asylum. When the new asylum is erected, in all probability the licence for the wards of the workhouse will be withdrawn, and the parish will be compelled to transfer their lunatic patients to such asylum, unless, meantime, the authorities obtain an Act of Incorporation, by which the parish might be placed in the same position as a borough with a recorder, under the provisions of the Lunacy Acts, 9 & 10 Vic. cap. 126, and have an asylum of its own. Among the considerations in favour of such measure are these:

That not a moment would be lost in bringing cases under remedial treatment in the early stages of disease; thereby increasing the probability of cure.

That the control over the discharge of the patients would be vested in the parochial authorities; whereas at present, when admitted into the county asylum, the discharge of patients depends on the sanction of the visiting justices.

The probability, founded on the opinion of the commissioners in lunacy, that cures would be more frequent, by admitting better classification in an establishment for 200, than in one for 1000.

### THE AGE OF MANUALS.

*To the Editor of* THE LANCET.

SIR,—It was by no means my intention to criticise any *one* of the Manuals with which our students are supplied. My object is to oppose the *system* of Manuals; and I do so for the reasons which I have alleged—viz., because such books cannot raise, but must, if trusted to,—as they are, in fact, by many,—degrade the professional mind, and *keep* it low.

Manual reading is a sort of cramming, and all knowledge so acquired speedily evaporates. Manual reading can only supply facts. It can infuse into the mind no spirit of philo-

sophy; no spirit of investigation. It degrades the intellect, and makes mere machines of our students.

Instead of such Manuals, I would urge the young pupil to take up works which, while they detail facts, give to them a sort of living and breathing interest, by stating *how* they were discovered; by what observation; by what course of investigation.

How different is the impression on the mind of one who merely learns by heart Kepler's laws, for example, or the appearances of the planets and their satellites, and that of another who shall read the accounts given by Kepler himself and by Galileo, of the manner in which all these things were *made out;* the detail of the difficulties encountered and overcome! I say, what a different kind of mind is so induced!

Will any one dispute this point with me? None but an idiot would do so! Then let us rescue our profession from the Manual system.

We hear much of the trade in drugs: but there is a trade in books, quite as much, if not much more, to be rooted out of our profession—the trade of Manual-writing, and the trade of Manual-printing and publishing; the trade in cyclopædias; and last, not least, the trade in reviews—recently become the trade in calumny; trades more calculated to demoralize our profession than all the trade in drugs since the world began.

Imagine, Sir, a mind made by the reading of Manuals, dictionaries, and reviews! What a degraded, crammed, and perverted state of intellect and feeling must it be! What a preparation for intercourse with gentlemen and the educated portion of society!

Such are *not* the kind of studies of which it is said,

"Emollit mores, nec *sinit esse feros.*"

I rejoice to learn that one book of slander is coming to a close. It is the *British and Foreign Medical Review* of Dr. Forbes; of which I will say, that the minds formed by it *must* be degraded indeed. Never were cliquism and calumny carried to such a height and such a length. I wonder that, in so noble a profession, writers and readers could be found to foster such a debasing production.

Surely its place will be taken by something worthy of us; something elevated and just in science and morals; something calculated, not to poison, but to purify and ennoble the minds of our students,—yes, and of ourselves; something calculated to inspire a love of investigation, and a high moral feeling, throughout the profession. I would have no biblio-physiologists or pædo-critics employed to criticise (!) the labours of the experimentalist—labours, which, without witnessing, none *can* comprehend. I would have no cliquish laudations nor spiteful attempts to "write down;" no trading in slander; but a pure, honest, hearty truthfulness, benevolence, and love of justice.

Let our students possess their Manuals; only let them use them and not abuse them. As knowledge presented in a tabular form, they may be useful for reference, or to refresh the memory; but let all candidates for medical honours be *examined* in Harvey, and Bell, and in Jenner's own works. Let them be taught to read, not for facts even, only, but for philosophy, in its etymological sense; and let them so read as to become enamoured of their profession, of its science, of its benevolent objects and feelings, and (repudiating envy, hatred, malice, and all uncharitableness, and all slander) of good fellowship and kindly affections amongst its members, so that they may no longer be "hateful, and hating one another."

I will one day sketch a system of Logic and of Ethics, such as ought to guide us. I will endeavour to show how *facts* should be gathered together, and how *principles* should be deduced from them; and I will show how kindly feeling and truthful and honourable conduct should prevail amongst the members of our profession and towards all men; and I will endeavour to explain the position we ought to hold in society, and the treatment we ought to receive in return.

I am, Sir, your obedient servant,

June, 1847. A Looker-On.

## PROFESSIONAL ETIQUETTE.

*To the Editor of* The Lancet.

Sir,—I shall feel much obliged by your furnishing me with an opportunity of submitting the subjoined letter to the consideration of those members of the profession who are anxious that our relations with each other and with the public should be placed upon a sounder basis than they are at present. I was in attendance upon the patient to whom it relates, when I learned that Mr. Clayton, of Percy-street, had been called in by a friend; and that although on hearing that I was treating the case he at once abandoned it, he made some very severe comments upon the treatment I had thought proper to adopt. I called upon him, and, not finding him at home, wrote the following letter:—

"23, Great Coram-street, May 29th.

Sir,—Upon consideration, I think the purpose I had in view in calling upon you yesterday will be best answered by a written communication. My object was to complain of what I considered some most unwarrantable observations you were represented to me to have made upon my practice in the case of Mr. Low, of Charlotte-street. I had been attending this patient, at intervals, for some time past; and having told him on Thursday afternoon that I thought he ought to lose some blood, I called in the evening for the purpose of abstracting it. Finding they were busy in the shop, I deferred doing this for an hour or two, as I returned from seeing another patient, when I bled him. On calling on Friday, I learned you had that moment left; and was then told, that during the interval of my two visits in the preceding evening, some over-officious friend had sent for you, and that you had seen and prescribed for the patient. I was also informed that you were not aware until Friday that I had already been in attendance; and on being told so, declared your intention of at once resigning the case. So far so good; and had matters stopped here, the only communication you could have received from me must have been one thanking you for your professional courtesy.

But I found the confidence of my patient had been materially shaken, and soon learned that this had arisen from comments which you had made upon the treatment I had adopted. These were again and again represented to me to be to the following purport: 'That Mr. Clayton said he ought on no account to have been bled; that he was not a subject admitting of the loss of blood; that if bleeding had been required, it should not have been performed upon the arm to which the inflamed wrist belonged, but upon the opposite one, when probably the pain in the former would have been relieved, whereas now he would have the rheumatism flying all over him. Mr. Clayton added, that he had seen much of such cases, he being surgeon to the police force. He seemed very angry that the bleeding had taken place, and expressed a desire that Mr. Chatto would call upon him.'

This representation I received from Mr. Low's wife, upon whose veracity—having known her for several years—I have reason to rely; and I asked her again and again, whether she was certain as to its accuracy, and as to its having been made after you were aware that I was in attendance upon the patient before you had seen him at all. Such a statement was the more injurious in its tendency, as from the nature of the case it was exceedingly likely, under any treatment, that painful action would be set up in successive parts of the body, and from the fact of the opinion you expressed against bleeding being exactly in accordance with that of the non-professional person who had been the cause of its being sought for.

I called upon you, not to explain or apologize for my practice, in nowise admitting, as I told the patient, that your having been longer in the profession, and your being surgeon to the police, gave you any right whatever of commenting upon, and criticizing, my practice; and my sole object in calling, was to expostulate with you for having allowed yourself so to do. The date of my diploma unfortunately proves to me that I can no longer expect to enjoy the immunities of a junior, and I do not feel disposed to submit to comments from any practitioner, of whose competency to make them I may entertain any doubt. Indeed, no practitioner, be his acquirements what they may, ought to feel himself justified in so commenting to a patient.

Denying the competency of the tribunal, I should not feel called upon to enter into any justificatory particulars of this patient's case; but for the satisfaction of any friend to whom I may think it proper to show this note, I may state that I had had the man under my eye at intervals for many months, treating him originally for a very bad ulcerated leg, for the healing of which I had to prescribe alteratives, and even tonics. Since the leg, (wound,) which had been discharging copiously, has been nearly healed, he has had anomalous pains in various parts of the body, with latterly here and there patches that much resembled those of erythema nodosum. One of these a few days since formed on the back of the forearm, some two or three inches above the wrist-joint. This latter and the back of the hand consecutively became painful and swollen; but under the use of laxatives and alteratives, the inflammation of the part subsided, excepting a little induration and puffiness of the integument originally affected. Resuming his occupation as a baker too soon, the hand and wrists became painful again, but were relieved by anodyne embrocations, and

he seemed much better, until he called upon me on Thursday afternoon, stating that his hand, wrist, and forearm had from the preceding night become intensely painful and swollen. Finding he had a hard, full, rapid pulse, although he was a subject whom, from his long disordered general health, I should have wished to avoid bleeding if possible, especially as the part now put on somewhat more of the rheumatic character than it had done, yet from the antecedents I have mentioned, and the symptoms, such as the pulse described,—a white tongue, and intense pain,—I deemed it right to prescribe a venesection, a scruple of Dover's powder, and an aperient of carbonate and sulphate of magnesia, in the morning. If the case were brought before me again, the only change in this treatment I should be inclined to adopt would be the substitution of a full dose of opium for the Dover's powder.

Whether this is the best practice that might have been followed may give rise to much difference of opinion amongst medical men; but I hold the announcing such difference of opinion to a patient undergoing the treatment, not even in consultation, and that with criticisms upon its adoption, is a very unprofessional act, and one alike mischievous to the patient and practitioner, as tending to destroy that confidence which is an element of cure. Your not bleeding the patient was a tacit condemnation of my having done so, and with that you should have rested content. As to your statement, that I have risked prolonging the disease by bleeding from the side affected, I must confess I do not understand it, I having selected that side for exactly the contrary purpose.

I am, Sir, your obedient servant,

To —— Clayton, Esq., Percy-street." JOHN CHATTO.

Mr. Clayton favoured me with a call to-day, expressing his regret at having given me pain; and had I received any acknowledgment from him of the impropriety of canvassing this subject before my patient, or a denial of having done so, there would have been an end of the matter, and I should have felt a pleasure in discussing with him the grounds of any difference of opinion. But when I told him that whatever we may think of each other's practice, it is not allowable to deprecate this before each other's patients, he replied that it was always best to speak the truth! It certainly seems to me there are cases in which it is still better not to speak at all; while I am far from being aware that the mode of treatment of rheumatic affections is so indisputably settled as to admit of any of us declaring that our treatment is the true one. Having again represented to Mr. Clayton that the opinion he had expressed had a tendency to weaken the confidence of the patient in my treatment, and that that it most decidedly ought not to have been expressed, he left me rather abruptly, declaring that "if the circumstances were to occur again, he would act in the same manner; he would express his own opinions, and let every one else express theirs." If such sentiments had fallen from the lips of a young man battling his way into practice, and not over-particular how he secured this, they would be intelligible, although not excusable; but coming from a gentleman who, at least in point of age, is a senior, and who has been chosen one of the Council of the new "Institute"—one of whose prominent objects professes to be the establishment of a better understanding among medical men, I confess they surprise me exceedingly. I think we have quite enough to contend with in the ignorance and ingratitude of the public, the inroads of the uneducated, and the charlatanry of the present age, to induce us, at least, to behave liberally towards each other.

I trouble you with this letter, because the principle it involves concerns us all, and especially junior practitioners. If because, in an art so uncertain as ours, we witness practice adopted in cases different to that which we ourselves should put into force, we are to allow ourselves to declare to the patients that it is improper and mischievous, there will be an end of all satisfactory professional relations.—I am, Sir, your obedient servant,

Great Coram-street, May, 1847. JOHN CHATTO.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions in favour of the Bill, received for Presentation by Mr. Wakley, M.P.:—*

J. H. Hedley, Gateshead; W. R. Potts and J. D. Pridie, Stockton-on-Tees; John Dixon Ward, Bodsock, Woodhouse, Nottinghamshire; Surgeons of Northumberland, (four signatures;) John Parkin, High Town, near Leeds; Practitioners of Weymouth, (six signatures;) J. Halley, Wingate, Durham; H. Douglas, Wymondham; Medical Practitioners of Hitchin, Herts, (four signatures;) Medical Practitioners of Pimlico, (eight signatures;) H. G. Hardy, Medical Assistant, Byers-green, Durham; Alfred Stephens; Apothecaries' Hall, Ireland; H. W. Sandell, Potton, Bedfordshire; Medical Practitioners of West Bromwich, (eight signatures;) Benjamin Greenwood, Bradford; Benjamin Robinson, M.D., and Edw. Robinson, Rotherham; John Cowburn, Tenbury, Worcestershire; Richard Johnstone and Henry Taylor, London; Wm. Reeves, Egremont; W. M'Donald, M.A., M.D., Glasgow.

## BOOKS RECEIVED FOR REVIEW.

A Register of Experiments, Anatomical, Physiological, and Pathological, performed on Living Animals. By James Turner, Veterinary Surgeon. Part I. Longman and Co.

A Register of Experiments, Anatomical, Physiological, and Pathological, performed on Living Animals, disclosing New Views of the Circulation of the Blood in Man and Quadrupeds; with an Exposition of some Fallacies in the Harveian Doctrine. By James Turner, Veterinary Surgeon. Part II. Longman and Co.

A Register of Experiments, Anatomical, Physiological, and Pathological; disclosing a new and striking Fact, demonstrative of a (Probable) Universal Principle pervading the Human Organization and all Animal Life, not hitherto Expounded by Comparative Anatomists and Teachers of Human Physiology. By James Turner, Veterinary Surgeon. Part III. Longman and Co.

A Treatise on the Human Ear, with New Views on the Physiology of the Tympanum. By J. W. Moses, M.D., St. Asaph, 1847. Pamphlet.

Report of the National Philanthropic Association, (instituted March, 1842,) for the Promotion of Social and Sanitary Improvements, and the Employment of the Poor. 40, Leicester Square.

A System of Surgery. By J. M. Chelius. Translated by South. Part XVI. Renshaw.

Lee on Hydropathy and Homœopathy. Churchill.

The Medical Reform Question. By Edwin Lee. Churchill.

Medical Reporting. By Samuel Crompton. Printed in Phonotypy. Isaac Pitman.

Transactions of the Provincial Medical and Surgical Association. New Series, Vol. III. Churchill; Sherwood and Co.; London. Deighton, Worcester.

A New, Universal, Etymological, and Pronouncing Dictionary of the English Language, embracing all the Terms used in Art, Science, and Literature. London: Gilbert, Paternoster-row. Parts XVI. to XX.

Gilbert's Modern Atlas of the World. Part X.—**** This Number contains delineations of various races of mankind.

A Table of Urinary Deposits, with their Tests, for Clinical Examination. By Ray Charles Golding, M.D.

Cold and Consumption; or, Consumption, its Prevention and Cure, by Cold, &c. With a Sketch of the Anatomy and Physiology of the Respiratory Organs. By Henry C. Deshon, Member of the Royal College of Physicians and Surgeons, London. London, Renshaw; Exeter, Balle. 1847. 8vo, pp. 153.

## Medical News.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 3rd, 1847.—George Roper, Colby, Norfolk; William Elleray, Bolton-le-Sands, Lancashire; Mark Hazelwood Clayton, Stratford-on-Avon; Robert Megginson, Yorkshire; John Bourne, Barnard Castle, Durham; Charles Wankford Currie, Bungay, Norfolk; William Denton Dibb, Hull; Robert Muriel, Ely, Cambridgeshire; Squire Sprigge, Bury St. Edmunds; George Houseman Macnamara, Uxbridge, Middlesex; Henry Slade, Royal Navy; George Bruce, Old-street, London.—On Thursday, June 10th: Ernest Powell Wilkins, Newport, Isle of Wight; William Pollard Roberts, Yarmouth, Norfolk; Joseph Richard Morgan, Maidstone; Edward Bunbury Passmore, Lyncombe, Bath; William Pearson Ward, Royal Artillery; John Parkin, Hightown, near Leeds; John Maund, Bromsgrove, Worcestershire.

ROYAL COLLEGE OF SURGEONS.—His Royal Highness the Grand Duke Constantine of Russia, attended by the Rev. Dr. Buckland, the Dean of Westminster, Sir Roderick Impey Murchison, the President of the Geological Society, and the

gentlemen comprising his suite, visited the Hunterian Museum of this College. Professor Owen was in attendance, and explained the valuable contents of the Museum to his Royal Highness, who remained upwards of an hour, and appeared greatly pleased. We regretted to see the Professor with his hand in a sling—the result, it is stated, of an injury received in dissecting, on Monday last, the large elephant that died at the Zoological Gardens, Regent's Park.

Experiments in Bread-making.—Some experiments have just been made at Bourdeaux on the making of bread from maize and potatoes. Either of these substances, singly made into bread, gave very gratifying results; but the mixture of the two was attended with the most complete success and satisfaction. The proportion used was two of maize and one of potato. Fermentation was allowed to go on for four hours and a half. The bread was very light, and agreeable in taste, keeping fresh for several days. The potatoes are first cooked over steam, broken up, and reduced to powder, before they are mixed with the meal.

Honours to Medical Men in Persia.—The shah of Persia has recently honoured his physician, Dr. Ernest Cloquet, who went out to Persia from France, by conferring on him the order of "the star, the lion, and the sun." The badge is a jewel of diamonds, and is as a recompence for the services he rendered to the shah's subjects during the prevalence of the cholera in Persia during the past year. To the enterprising and active young members of our profession in England, much more brilliant prospects and richer rewards are offered, we believe, in many foreign countries than in our own, which is certainly overpeopled with doctors, and in many respects is behind other nations in the honours it confers on medical men.

Unhealthy Condition of Austria.—The *Cologne Gazette* announces that the sanitary state of Austria is very unsatisfactory at the present time. The hospitals of Vienna are so crowded with patients that no more can be admitted, and the authorities of the city are driven to the necessity of hiring several houses to serve as temporary hospitals. The prevailing disease is scurvy, and it is the military who are the principal sufferers. This suggests that there must be something wrong in their dietary, and in the general sanitary regulations under which they are placed.

University Degrees.—Oxford, June 10th—*Doctors in Medicine:* Henry D. Scholfield, Brasenose; George T. Fincham, St. John's. *Bachelor in Medicine:* James C. Paxton, Brasenose.—Cambridge, June 11th—*Doctors in Medicine:* D. W. Cohen, Gonville; C. T. Hare, Caius. *Bachelors in Medicine:* C. D. Waite, St. Peters; A. W. Barclay, Gonville; D. B. Kendall, Caius.

Late Dr. Ramsbotham.—This eminent physician, John Ramsbotham, M.D., has bequeathed the receipts which may arise from the sale of his medical publications to his wife during her life, and has directed that an annuity of 150*l.* shall be purchased for her, and that she receive the interest of the residue of his property. And at her decease he leaves to his son Francis Henry Ramsbotham, M.D., who is the acting executor of his will, the copyright of all his medical works and all other medical books, and his manuscript cases; and then, after making one or two bequests, he divides between his sons, Francis and Charles, the ultimate residue of his property. He had attained the age of eighty, and had purchased, only a year before his death, an annuity of £180 for his life, which was insured in the Equitable and London Life Assurance Offices.

College of Surgeons.—Friday night's *Gazette* (June 11th) announces a meeting of fellows of the Royal College of Surgeons, to be held at the hall of the College, Lincoln's-inn-fields, on the 1st of July, for the election of three fellows into the Council. Notice is also given that Mr. F. C. Skey will be balloted for as one of the members of the Council.

Obituary.—The late Edward Pilcher, Esq., who died at Liverpool, on the 3rd of May, aged 73, from disease of the heart and hydrothorax, resided at Margate for many years, and was distinguished for honourable principles, sound good sense, and unaffected piety. It appears that the post-mortem examination was performed at the urgent desire of the deceased, who left, annexed to his will, the following sensible memorandum, written in firm and very neat characters:—

"Having by the annexed will disposed of such worldly effects as I may possibly die possessed of, I commend my soul to Almighty God, in the humble hope of a joyful resurrection to an eternity of happiness by his forgiveness, and free pardon of all my manifold sins through the atoning sacrifice, merits, and mediation, of our blessed Lord and Saviour Jesus Christ, in whom the spirit of one eternal God was made manifest. My body I desire may be decently interred at a moderate expense; but previous to interment I most earnestly request it may be opened and examined under the direction of such surgeon or physician as may attend my last illness, and in presence of two or three students for the faculty, in order that the immediate cause of death may be ascertained. This I deem a duty of so much importance to society, to the experience of young aspirants for the medical profession, and to my own *peace of mind*, that I firmly trust and intreat that its operation will not be prevented by any false notions of delicacy or any other infatuated prejudice, being fully convinced of the necessity of giving every opportunity of additional experience to the students of surgery.

"Liverpool, 13th October, 1845." "Edw. Pilcher.

Education of Idiots.—A philanthropic spirit characterizes the present age. Many who, by Nature, have not been so gifted as their fellows, who labour under some defect of development, or the impairment of some faculty, instead of being mere outcasts of society, and passing a miserable existence, are, by the means made use of, set in operation by philanthropic individuals, made useful members of society, and have their existence rendered comfortable; such are the deaf and dumb, and the blind. But there is a class of unfortunates—viz., those of weak intellects, whose condition and capacity of improvement have been hitherto overlooked; but now public attention seems about to be directed to that quarter. A pamphlet has been published by Dr. Scott, Principal of the West of England Deaf and Dumb Institution, showing, from the experiments of M. Seguin, in Paris, how greatly the condition of idiots may be improved, both mentally and physically; M. Seguin having succeeded in evolving, as it were, those latent germs of intelligence and moral feeling, which exist to a greater or less amount in all such pitiable beings. In other words, M. Seguin has contrived to educate them; to impress on their feeble minds the first rudiments of knowledge, in reading, writing, &c.; to call forth moral emotions; to develope, indeed, to some degree, the faculty of reasoning or induction. Thus they have been awakened, as it were, to a new world; and the energies called forth have been applied to the performance of various useful operations of life; and hence, they have become of use, instead of a burden and a charge to others. All idiots are not alike improveable, but all are to some degree; and, consequently, to let them remain, as at the present time, in a state of utter hopelessness, uselessness, and misery, would be a reproach to the people of this civilized country. It is an honour to France, that she has been the first to make the attempt to improve the condition of these luckless beings; and Germany is before us in the good work. The pamphlet we have alluded to should be perused by all who are willing to evince their humanity, by paying attention to the case of the helpless, drivelling idiot.

## CORRESPONDENTS.

*A Subscriber.*—There is such an establishment. The medical officers of the St. Giles's and St. George's Bloomsbury Infirmary are—Dr. Reid, Bloomsbury-square, physician; Mr. William Bennett, surgeon; Mr. William Lewis Dudley, assistant-surgeon. Mr. Godfrey has never held the appointment of assistant-surgeon to the Infirmary, though, some years since, he did duty there for one of the medical officers, during the temporary absence of that gentleman.

The paper of *Mr. Haines*, on "Hydrophobia," shall be published, without fail, in the next number of The Lancet.

The publication of a series of papers on "Semeiology; or, the Physiognomy of Diseases," by Mr. Corfe, upwards of fifteen years resident medical officer at the Middlesex Hospital, will be commenced in The Lancet at an early period.

*Dr. J. C. Jackson.*—We shall take some early opportunity of analyzing the conflicting statements of Mr. Morton, Dr. J. C. Jackson, and Mr. Wells, respecting etherization.

*Mr. Wiglesworth* (Swansea) will find the necessary correction made. We beg to thank him for his most able communication.

*Dr. Rayner.*—The letter on insurance fees shall be published.

*Dr. Westall.*—A physician cannot recover without a special contract. A surgeon can recover legally for attendance. Will this information be sufficient?

Erratum.—In p. 628, lines 3 and 4, first column, read thus: In this case the Government is not our opponent, it is our own flesh and blood.

Communications have been received from—Mr. Mackarsie, (Clay Cross, Chesterfield;) Mr. F. S. Garlick, (Halifax;) One of Them; Mr. Mayo, (Winchester;) Dr. Coley; Mr. Clarke; Dr. Charles J. Jackson, (Boston, U.S.;) Mr. Acton; A Looker-On; M.D.; Dr. Mereweather, (Whitby;) Mr. Wiglesworth, (Swansea;) H. M. H. on Life Assurance Fees; Dr. Rayner, (Uxbridge;) Mr. Samuel Hare; Mastigia; Tyro; An Assistant-Surgeon in the Royal Navy; Mr. F. S. Garlick, (Halifax;) Mr. W. J. Mackenzie, (Clay Cross, Chesterfield;) Mr. G. Busk, (Frome;) Dr. Lockart Robertson, (Yarmouth;) Dr. Westall, (Manchester,) &c. &c.

# A Course of Lectures ON THE PHYSICAL PHENOMENA OF LIVING BODIES.

## DELIVERED IN THE UNIVERSITY OF PISA.

By PROFESSOR MATTEUCCI, F.R.S.

(*Translated, for* THE LANCET, *by* S. J. GOODFELLOW, M.D. Lond., *late Physician to the Cumberland Infirmary.*)

## LECTURE IV.

*Absorption in Animals and Vegetables.*

THE preceding lectures upon the phenomena of capillarity, imbibition, and endosmose, were principally intended to prepare you for the study of absorption and exhalation. It is not my place to give you a long history of the researches made expressly for the purpose of deciding which of the different organic apparatus is specially endowed with these functions: in the different treatises on physiology, you will find them at one time assigned altogether to the veins, and at another exclusively to the lymphatics.

It is difficult to account for so much discussion when we consider the structure of the different tissues, and the necessity for absorption and exhalation in a large series of inferior animals which do not possess lymphatics.

Absorption, considered as a function of living animals, does not consist in the simple imbibition of a fluid by a tissue, but also its transmission into the bloodvessels with which the tissue is in contact. It is into the blood that the absorbed matter must ultimately come: this is the completion of the phenomenon. We should, then, distinguish two things in absorption—the passage of a substance through the interstices of some organized tissue, and then its introduction into the circulation.

It is easy to demonstrate the existence of the first part of this function. Here is a frog, the inferior extremities of which have been immersed for some hours in a solution of prussiate of potash. If we remove it from the liquid, wash it carefully with distilled water, and cut it in pieces, you will readily perceive that the solution has penetrated the whole body. Wherever we touch the viscera or the tissues with a glass rod dipped in a solution of chloride of iron, a blue stain, more or less deep, appears. I would also demonstrate in this way the reality of absorption, since it clearly shows the two parts of which we said the function consists. A living frog, after having its lower extremities immersed for a short time in a solution of prussiate of potash, was killed; and on applying immediately the chloride of iron to the heart and lungs, the presence of the prussiate was plainly detected, whilst scarcely a trace of it could be discovered by the same means in the muscular mass of the legs and thighs.

In another experiment, precisely the same result was obtained: I immersed another frog, which had been dead some moments, in the same solution, and allowed it to remain the same time. When touched by the reagent, the heart and lungs exhibited no more of the prussiate than every other part of the frog. The solution was introduced into the body of the frog by simple imbibition; and this phenomenon, which took place equally in the living as in the dead frog, certainly cannot be considered as different from the imbibition which we have studied, and which belongs both to organic and inorganic bodies, and is the consequence of their cellular or vascular structure &c. But besides this, we find, in the heart and lungs of the living frog, a much more considerable quantity of the solution than in the other parts, although they may be nearer to the point of immersion. These viscera are the centre of the whole circulatory system; in them the great lines of bloodvessels either commence or terminate. The solution of prussiate of potash had therefore penetrated into the bloodvessels, become mixed with the blood, and so arrived at the heart and lungs.

It has long been a subject of discussion, whether the lymphatics alone possess the power of absorption, or whether this function belongs only to the veins; or, to speak more clearly, whether a body can be directly introduced into the bloodvessels by penetrating their walls; or whether, to reach them, it must pass through the lymphatics. Since there is no portion of an organized body that has not the property of imbibing water, saline solutions, and serum, it is clear that the first part of absorption can take place as well in the walls of the lymphatics as in those of the bloodvessels. Microscopic anatomy, by revealing the manner in which the bloodvessels and lymphatics terminate, has confirmed the preceding conclusion. I am led here to cite the principal results of the observations of our countryman Panizza.

There is not a single fact in nature which demonstrates the existence of free extremities in the ramifications of the bloodvessels, which everywhere present a very close and continuous reticulated texture. The arterial network is always continued without interruption to the venous network, which in general predominates over the former. The lymphatic system also never terminates in independent extremities, but is always presented to us as a very fine and close trellis-work. Anatomy, agreeing with experiment, leads us to conclude that the first part of absorption can only be effected by the aid of porosities peculiar to the structure of organized bodies. In this way absorbed bodies become mixed with the blood, chyle, and lymph, and by their common movement are distributed over all the body. I shall regard it now as nearly superfluous to mention to you the experiments of Majendie, Ségalas, and the latest of Panizza, by means of which they have shown that absorption not only can, but that it does, take place, principally through the agency of the bloodvessels alone. See the manner in which the last of these physiologists operated. He made an incision of ten inches in length in the belly of a horse, and drew out a fold of small intestine, in which several small veins had their origin, which, after a short course, terminated in one large mesenteric trunk, without any vein, proceeding from the glands, emptying itself into it.

This fold of intestine being cut off by a double ligature in such a manner that it could receive blood only by one artery, and that no blood could be returned to the heart except by the venous trunk, a hole was made in the fold for the purpose of introducing a brass tube, which was fixed by means of a thread, in such a manner that the substance introduced should not be brought in contact with the bleeding edge of the opening. This being done, a ligature was passed under the vein, which received the blood flowing back from the fold. The ligature was closed, and in order that the circulation should not be impeded, the vein was immediately opened to give exit to the blood returning from the intestine. Then, by means of a glass funnel and brass tube, a certain quantity of concentrated hydrocyanic acid was introduced into the portion of intestine, and the tube closed. On receiving the venous blood, we immediately found it charged with the hydrocyanic acid. Yet the animal did not give any symptom of poisoning, although the nervous ramifications and the lymphatic vessels were left untouched. In another experiment, instead of tying and opening the venous trunk, Panizza simply compressed it at the moment that he introduced the acid. There was no symptom of poisoning; but in a little time after the removal of the compression, the intoxication became manifest, and on the vein being opened, the acid was detected in the blood. Lastly, in a third experiment, Panizza cut off quickly, and with care, all the lymphatics and nerves from a portion of intestine, and the hydrocyanic acid poured upon it was not slow in killing the animal, provided that the vein was left uninjured. Venous absorption is thus proved by the most careful experiments.

We find it stated in many works on physiology, that the presence of substances swallowed has been detected a few minutes after their introduction into the stomach, as a fact opposed to this opinion, that absorption takes place by means of bloodvessels. But this objection soon vanishes, when we reflect on the rapidity of the circulation of the blood.

On the other hand, that absorption can take place also by the lymphatic vessels, is a fact well known, and too evident to render it necessary to demonstrate. If we kill an animal two or three hours after a meal, take out the intestines, and examine the mesentery with attention, we shall see that the lacteals are full of a milky fluid, analogous to that which flows abundantly from the thoracic duct, which is the principal receptacle into which these vessels empty themselves. This fluid is the chyle, which, by the act of digestion, is formed in the intestine, and absorbed from it by the lacteals. How many examples does pathological anatomy afford in which these vessels have been found full of pus from their proximity to an abscess! The lacteals and lymphatics, then, are endowed with the faculty of absorbing. In a word, absorption always takes place under these conditions: 1, a vessel having organized walls; 2, an external fluid, which the tissues

of the vessel are capable of imbibing; and 3, an internal fluid, which is miscible with the external fluid, and which circulates in the vessel more or less rapidly. Nothing, therefore, is more physical than a phenomenon so constituted. I will show you, by an experiment, the truth of this assertion.

Fig. 3.

Here is a considerable portion of a vein, taken from a large animal: it is fixed by one extremity to a tube, which terminates in an opening made near the bottom of a glass receiver; the other extremity is tied to a small, curved, glass tube, furnished with a cock. I fill the receiver with water, and consequently the vein also. I arrange them so that part of the venous trunk is immersed in water acidulated with sulphuric or hydrochloric acid. At first the water in the receiver shows no trace of the acid, but after a certain time it becomes evident. If, instead of waiting some time, and leaving the fluids at rest, I open the cock, and allow them to flow out, I soon discover signs of the acid in the fluid which escapes; but in the receiver it is not yet discoverable. What takes place with a portion of vein may also be seen by using an arterial trunk, or a tube of clay, pasteboard, or wood; and if, conversely, the acid solution be contained in the vein, and some tincture of litmus be mixed with the water in the basin in which it is immersed, the same phenomenon will take place—that is to say, the acid will transude through the walls of the vein with a facility proportional to the rapidity with which the water flows out of the basin. The conditions of the phenomenon are always the same in two liquids capable of mixing, separated by a membrane which can imbibe both, and the movement of the internal or external liquid, as the case may be, which transmits, in a given direction, that which has passed through the membrane. If we were to suppose for a moment, that the circulation of the blood proceeded in an opposite direction to that which it really does, but without any variation in the structure and relative situation of the arteries and veins, we should not say, in that case, that the veins absorbed, but rather, that absorption took place by the arteries.* This is the very simple physical phenomenon of absorption. I wish also to explain to you the laws of this function, which have been discovered by experimental physiology, and you will easily perceive, that they are a necessary consequence of the principles which I have announced.

"1st.—Substances are absorbed more or less readily, according to their solubility, minute division, and disposition to combine with the organic juices, and to become constituent parts of the blood."

Notwithstanding the unscientific language in which this law is expressed, I wished to communicate it to you as it is found in the most esteemed modern works on physiology. This law is an evident consequence of the manner in which we have seen the phenomenon of absorption take place. It would be attended with great value if physiologists were to study accurately the different facilities with which organized tissues imbibe different liquids; this study would certainly produce very important results in therapeutics.

I will now show you some facts which may pave the way for these researches. Here are two rabbits: into the stomach of one I introduce some water, and some oil into that of the other. In two hours no trace of the liquid will be visible in the stomach of the first; but all the oil will be found in that of the second, and even for many hours after. If, instead of pure water, a mixture of water and alcohol be used, the absorption would be still more rapid. An acid or saline solution would also be absorbed, but less quickly than pure water.

"2nd.—The rapidity with which absorption takes place in different organs is principally determined by the number of their vessels, the flaccidity of their tissue, and the conducting quality of the parts which cover them."

I continue to repeat word for word what I find in works on physiology. It is evident that by flaccidity of tissue and *conducting quality of the parts which cover the organs*, nothing else can be understood than that the texture of the solid organs is more or less suitable for imbibition. *The greatest number of vessels* denotes nothing more than as affording the greatest number of points of contact between the body which is to be absorbed, and the liquid with which it is to be mixed and carried away. It is on account of this that the lungs, as we have seen, are the most favourable organs for absorption, and are the first to manifest the presence of the absorbed body. In fact, anatomy teaches us that the lungs, more than any other parts of the animal economy, possess a structure suitable for imbibition, and a very highly developed vascular system. The cellular tissue is also very permeable to liquids; but having fewer bloodvessels than the lungs, absorption takes place less rapidly in it. The skin, on the contrary, being covered by the epidermis, which is of a very compact texture, and without vessels, affords little facility for this function, but this becomes greater on removing the epidermis.

"3rd.—Absorption varies according to the quantity of liquid which exists in an organ; it is in inverse ratio to the plethoric condition of the animal."

Bearing in mind the phenomenon of imbibition, it will be easy for you to comprehend this law of the function. A mass of sand already saturated with a liquid ceases to imbibe further; but, on the contrary, imbibes the more readily the further it is from this state of saturation. Dutrochet left a plant exposed to air until it had lost by evaporation about one-fifteenth of its weight, and afterwards, by plunging it in water, he found that in each of the four first hours of immersion, it absorbed twenty grains and lost eight; a little later it did not absorb more than nine grains, and lost the same quantity by exhalation. Edwards found that frogs absorbed the more rapidly according to the previous loss of weight by evaporation. Magendie reports that a dog, from which he had taken away a good deal of blood, died quickly from poisoning by strychnia, yet in another, into whose veins he had introduced a considerable quantity of water, poisoning did not take place.

4th.—Absorption varies within certain limits, in proportion to the temperature of the absorbing body, and that of the body absorbed.

Every one knows that hot drinks act more rapidly than cold ones. We have also seen that imbibition varies with the temperature. I told you that this variation could only take place within certain limits, inasmuch as beyond these, the structure of organized bodies becomes altered.

5th.—According to Fodéra, the electric current favours absorption.

If we were willing even to admit the experiments of this physiologist, it is not easy to account for it, the more especially, that, on applying the electric current in imbibition, this influence is not remarked. The single fact adduced by Porret, and which consisted in the transit of water from the positive to the negative pole, may in some way explain the results of Fodéra.

6. Lastly, absorption varies according to the rapidity with which the circulation is carried on in the absorbing vessel.

It is unnecessary to state how this rapid circulation accelerates the transit of the absorbed body more or less quickly to a given distance. It is equally easy to comprehend that the molecules of the liquid contained in the vessel will be renewed the more frequently, as the actions of affinity which promote the absorption of the body into the interior of the vessel are the more energetic. It is probably owing to this that absorption takes place more slowly by the lacteals and lymphatics than by the veins. This is why many coloured substances, alcoholic liquids, and saline solutions, introduced into the stomach, are found in the blood, without our being able to discover them in the lacteals and thoracic duct. Frictions on the skin, the peristaltic movements of the intestinal canal, assist absorption in this way,—by favouring the movement of the liquids in the vessels.

The function of exhalation is generally effected by the same

* The meaning of Professor Matteucci is not very clear in this passage. If the Professor means that if the direction of the circulation were changed, it would be proper to say that the arteries alone absorbed, and that the veins did not, it appears to the translator inconsistent with the premises, and with the conditions of absorption, as expressed in the pages immediately preceding. In fact, taking into consideration only the conditions necessary for absorption, there appears no reason why the arteries and capillaries should not absorb also, but, from the difference in structure of their walls, with of course different facility.

mechanism, and is governed by the same laws as those which we have been studying. Where the walls of a vessel possess the property of imbibing the contained liquid, a portion of it is constantly exhaled from them. The portion which escapes will vary according to the nature of the liquid—that is, according to the greater or less facility which the walls of the vessel possess for imbibing it. According as the walls of this vessel are more or less humid externally, so will the internal liquid escape with greater or less difficulty. The exhalation will increase if, on account of the greater mass of the contained liquid, the vessel has to support a very strong pressure. All these peculiarities of exhalation, which result from that which we regard simply as a physical phenomenon, and dependent on the same principles as absorption, are demonstrated by experimental physiology.

Edwards has proved that cutaneous exhalation is, in some cases, ten times more considerable in dry air than in moist, and that it is doubled in passing from 0° to + 20°. Transpiration increases also, if, in the place of being in repose, the atmospheric air be agitated around the body of the animal. These results, obtained by Edwards upon cutaneous exhalation, are very natural consequences of physical principles too well known to render it necessary for me to mention them here.

Some phenomena of absorption and exhalation from living bodies are accomplished by the transformation of the absorbed or exhaled body. The liquid which a membrane imbibes and exhales by its opposite surfaces is not identical with that which has been placed in contact with this absorbing membrane. This happens in most of the cases of exhalation, and principally in the secretions.

We are far from expecting to find the explanation of the phenomenon of secretion in the actual state of physico-chemical knowledge. It must be confessed, that the secretions still form one of the most obscure subjects of the animal economy. With regard to exhalation, we must not omit to mention, that a phenomenon analogous to that of filtration must intervene. A liquid holding insoluble particles in suspension is divided by filtration into two portions; the liquid part is imbibed by the filter and passes through it; the solid part remains upon the filter. Anatomists know that when veins or arteries are injected with a solution of gelatine coloured with vermillion in very fine powder, the gelatinous solution becomes colourless when it passes through the vascular walls. Every contusion produces a stain, the centre of which is a bluish-black, and the periphery green surrounded by yellow. In this case, the clot of extravasated blood is separated from the serum, which is imbibed by the neighbouring tissues.

Do not forget the fact which has been pointed out to you with regard to imbibition: salt water becomes fresh by passing through a bed of sand, but a solution of carbonate of soda, filtered in the same way, becomes more dense. Imbibition, capillarity, the simple play of molecular attractions, can overcome affinities; there is therefore no reason for entirely disdaining the ancient opinion that the secretory organs are merely filtering machines.

In another lecture we shall see how the membranes, and all the organized tissues, are fitted for the passage of gaseous bodies. Fodéra first proved that sulphuretted hydrogen, enclosed in one part of the intestinal tube, spreads through the whole body of the animal, and produces death.

We must also say a few words upon absorption in vegetables. In these small glasses are a great number of plants, all plunged more or less into a very weak aqueous solution of acetate of iron: in some of these are haricot beans, in others, French beans. The leaves of some have been taken off, those of others have been half cut off, and thus immersed by the stem only; some have been deprived of the extremity of the roots, of others the roots have withered before they were put into the liquid; and, finally, some have been placed in it after they had been completely dried up. If we use prussiate of potash, to determine whether the ferruginous solution has really ascended in the interior of the plant above the level of the liquid in which they are plunged, we shall soon find that it has done so, and that it has been imbibed by a part more or less raised above the liquid. It will be seen that in the living plant, which retained its leaves and roots, the liquid has ascended above the level; in that which was withered, and which had regained its freshness in the aqueous solution, the absorption has been greater; and, lastly, that it is most abundant in those from which the roots have been removed. Whatever liquid be employed, it is always absorbed by the vegetable, except some acid, alkaline, or highly concentrated saline solutions, which alter and destroy the structure of the plant.

Almost all that is known upon this subject is contained in the celebrated work of Saussure, "Chemical Researches on Vegetation." This is an abstract of the results at which he arrived: 1. The roots of plants absorb saline substances dissolved in water, but in a much smaller proportion than pure water. 2. The ablation of the roots, or altering them, or, generally, everything which weakens the vegetable force, favours the introduction of salts into the plant. 3. A plant does not absorb all the salts contained in a solution in the same proportion. This last result is confirmed by the fact that certain salts are constantly found in some plants. Professor Piria always found grains of manganese in the *lupinus albus*.

Let us now examine whether the absorption of nutritive juices, which takes place by means of the roots of a plant, and the movement of these juices in the plant, may be considered as simple phenomena of capillarity or imbibition.

At the beginning of spring, the sap rises from the roots to the leaves through the central part of the trunk, and during this time, a liquid, of different composition to the sap, called *the proper juice*, moves in the contrary direction, from the leaves to the roots, through the cortical tissues. If a hole be made as far as the centre of the trunk of a growing plant, a large quantity of sap will flow from it, which is more dense in proportion as it is obtained higher up and nearer to the leaves. If, on the contrary, a ligature is fixed round the trunk, or if a circular layer of bark is taken off, the swelling, which will soon be seen forming above the bandage or the ring on the side next the leaves, will prove the existence of a descending current of proper juice. Hales has proved that the quantity of liquid which a growing plant absorbs, increases in proportion to the superficies of its leaves—a fact which he explains by attributing it to the evaporation carried on by their means.*

The double movement of the juices in the interior of vegetables is inexplicable by the forces of capillarity and imbibition alone. There is something more. Every one has seen, that on cutting the stem of a vine in spring, an enormous quantity of liquid flows from it. Hales applied to this section one end of a curved glass tube, which he left open at the opposite extremity, into which he poured mercury, and saw the liquid rise thirty-eight inches in the open part of the tube, above the level of the liquid on the other side of the curvature, which proves what pressure supports the mercury at the other extremity—a pressure which can only be attributed to the liquid forced up by the plant. This force of impulsion, the escape of the liquid from the plant by an incision, are facts incompatible with the effects of capillarity and imbibition. A liquid mounting in a capillary tube, cannot flow from the tube by the same force which raises it. Dutrochet demonstrated by a very simple experiment, that the force of impulsion which occasions the ascent of the juice of a plant, has its seat in the ultimate extremities of its roots. By making successive cuttings in the trunk of a vine, towards its roots, this distinguished physiologist saw the flow of sap continue, even from those parts sunk in the soil. One of the smallest radicular filaments placed in water, also permitted the escape of the sap. It is, then, in the spangioles that this force of impulsion resides. Dutrochet adds, that he discovered in the cells of the spangioles a liquid more dense than water, and coagulable by nitric acid. He therefore believes that he sees in the spangiole, or, rather, in its cells, filled with this fluid, heavier than the water with which they are surrounded, a group of endosmometers. The phenomenon of the ascent of the liquid in a plant is, then, an example of endosmose. I confess that I should like to see the identity of these phenomena more clearly shown than it is by the observations of Dutrochet. However it may be, the explanation of this author is, in the present state of science, the least improbable.

How does the sap rise in a plant from which the roots have been cut off, and the lower extremity has been placed in water? The great height to which a liquid can ascend in the trunk of a tree is opposed to the explanation which we may give of the phenomenon, by considering it as the effect of imbibition or capillarity—phenomena which we know to be confined within much smaller limits than those which are presented by the trunks of plants.

Hales, having perceived that the quantity of sap which rose in a plant was proportional to the surface of its leaves, concluded that the liquid of the superficial cells of the leaves being evaporated, these, by means of capillarity, absorbed it from the inferior cells, and by this means the secretion went on by degrees, though the extremity was cut off. By drying some mercurial plants to different degrees, Dutrochet has

* This must depend also very much upon the structure of the leaves with regard to the number of stomata which it contains.—TRANS.

proved that the absorption in plants thus dried does not increase in proportion to their dryness; in fact, one of these plants which had lost a third of its weight by evaporation, absorbed much less than another which had only lost a tenth. Notwithstanding its greater dryness, the absorption was less, although the plant had not been dried so as to alter its texture. Evaporation or transpiration through the leaves is not, then, the cause of the ascent of the liquid in the trunk of a plant plunged in water, or, what is the same thing, it is not a vacuum in the superficial cells which occasions the ascent of the sap. This last does not take place unless there be a certain quantity of water in the vegetable tissue, which, perhaps, acts by adhesion upon the fresh water which is to rise, as a sponge is more rapidly soaked with water when it is damp than when it is dry. Dutrochet also tried to dry a plant, to make it reabsorb the water last, and to plunge it afresh in the water: he saw that the ascent did not take place unless the plant had regained the state of turgescence natural to it. This turgescence of the cells of the leaves is caused, according to Dutrochet, by the action of endosmose, by which the liquid would be transpired by the leaves in an active manner, and very different to that of a liquid evaporated in air. I may lastly state that Dutrochet has shown that the influence of light upon the ascent of the sap in vegetables is exercised in respiration, and in the fixation of oxygen in the vegetable tissues.

The phenomenon of the ascent of liquids in vegetables is, therefore, not owing to capillarity and imbibition alone: the cause is principally to be found in the roots, and partly in the leaves. It is probable that an action of endosmose takes place in the extremity of the roots; and it is not foreign to suppose, also, that a similar cause produces the movement of the chyle and lymph in the lymphatic and lacteal vessels —a movement which we know is continued some time after death.

## Original Papers.

NOTE ON THE

### INVERSE RATIO BETWEEN DYNAMICS AND STIMULI IN THE ANIMAL ECONOMY.

By MARSHALL HALL, M.D., F.R.S.

There is no more interesting view of living nature than that which sets forth the reciprocity between the influence of the animal and vegetable worlds on the atmospheric air; whilst animals appropriate its oxygen, and return an equal bulk of carbonic acid, vegetables absorb the latter, appropriate its carbon, and give out oxygen.

There is a reciprocity between these two worlds of another kind: the other excretions of animals become the food of vegetables, whilst these vegetables themselves are the food of a certain class of animals.

It is on this account that fish and water-plants, placed in the same water, provide, as it were, for each other.

Wishing to investigate this matter, I placed some tadpoles in a limited portion of water, in which I also placed some slender water-plants. At length these plants were entirely deprived of their small leaves by these voracious little animals. From that moment they ceased to grow and to undergo their transformation into the batrachian form!

This fact is interesting as denoting the influence of food on growth and development.

But another observation, of great interest to the physiologist, was made: the tadpoles remained in the most lively state in the water, as long as they retained their tadpole state; but from the epoch of their transformation into the batrachian form, they became, if retained in the water, affected with asphyxia, and infallibly died within a day or two.

Passing from the fish state, or the condition of water-breathers, to the batrachian state, or the condition of air-breathers, they became asphyxiated if they remained in the former element. Doubtless, the former condition consists in a higher degree of vital dynamics—the excitability of the nervous, and irritability of the muscular systems; and a lower degree of stimulus—food and respiration: whilst the latter consists in a lower degree of dynamics, and higher degree of stimulus. The tadpole is not only a water-breather, but it is herbivorous; the batrachian is not only an air-breather, but it is insectivorous.

It is not my intention to prosecute this interesting view at present; but I thought it might suggest an important topic of investigation to some professional brother if I placed these facts on record.

There is another fact, of no less interesting kind, bearing upon the same theory; for, though long neglected, a theory, and a beautiful theory it is—and perhaps the most *general* in regard to animal nature we possess.

Frogs taken from their cold bed of mud, in the month of March, are found to be endowed with the most extraordinary degree of excitability of the nervous system and irritability of the muscular system. Caught in the fields in the warm month of June, this excitability and irritability are found to have diminished in an equally extraordinary degree;—so that experiments on these properties, which succeeded admirably in the former season, are far less marked in the latter.

In March, these batrachia are reduced to the lowest degree of respiration, of food, and of temperature; their dynamic properties are therefore at the highest. In June, they breathe and feed highly, and have a proportionately elevated temperature, but a lower degree of excitability and irritability.

*There is an inverse ratio between the dynamics and stimuli in the animal kingdom and economy.*

This law, though set forth many years ago, has hitherto excited little attention—a proof, in opposition to a general remark, that truth, and truth of the most deeply interesting character, will not make its own way. It even requires, for its adoption, to be stated again and again, and so stated as to compel attention, and adoption, and application.

Of the last, I may present my readers with some beautiful specimens on some future day. These are not limited to mere animal physiology, but have their place in human physiology and pathology.

Sleep and infancy are periods of low respiration and other stimulus; and the occurrence of convulsive affections at this tender age, and during the operation of "tired Nature's sweet restorer," attests the high degree of excitability of the nervous system.

But I cannot now pursue this subject. Only, in conclusion, I would just remark, how carefully nature has protected the susceptible fœtus in utero; and may I not add, how incautiously we have all, in testing the existence of a fœtus, or of life in the fœtus, applied our hand, taken fresh out of cold water, or sudden pressure, or succussion, over the region of the impregnated uterus. May not this, and similar acts, or accidents, have been the unsuspected cause of some congenital nervous affections, as podismus (club-foot)?

On the other hand, if we want a remedy against undue excitability, we can have recourse to no more efficacious means than augmented respiration— that is, "air and exercise," which will tend to quicken digestion, and the consequent augmented quantity of food.

On this principle "training" proceeds. It is the highest kind of life which the human subject can live, physically speaking, and cannot be maintained for any considerable space of time. This high health leads to exhaustion of the vital powers—just as an animal dies in an atmosphere of oxygen,—just as a bat, taken from its state of hybernation, dies, if made to fly about; and just as patients, in a state of inanition, or of asphyxia, are killed by too much stimulus—food, wine, or heat. Extremes cannot be long borne, and transitions must be gradual and slow, which may be said of transitions from high to low, as well as from low to high. If an animal be placed in a limited portion of atmospheric air, until it begins to show distress, however it may appear to be well when removed into the atmospheric air, frequently dies of a secondary asphyxia shortly afterwards.

June, 1847.

ON THE

### CONTRACTIONS OF THE UTERUS.

By WILLIAM FREDERICK BARLOW, Esq., M.R.C.S.E.

There can scarcely be a more interesting and important inquiry to the physiologist than the nature of uterine contraction, and certainly it requires further investigation. Perhaps I may be permitted to state some of the most prominent facts which bear upon it, and dwell shortly upon the conclusions to which they seem to lead.

No difference of opinion would appear to exist as to the influence of the brain upon it, and it is clear, that when the functions of this organ are suspended or abolished, labour can be begun and completed. Not that the brain has no concern in the process, but only that it is not *essential* to it. It assists it voluntarily, by contractions, which, though not uterine, materially aid it at a certain stage, and acts upon it by the different emotions for good or ill.

What is the relation between the action of the uterus and

the spinal cord? Is the presence of the latter, or of that part of it with which the uterus is connected, necessary to parturition?

Experiments and cases unite in testifying to the power of the cord as respects the uterus. They show it with a force which nothing yet said of the influence of the sympathetic nerve over this organ seems at all to lessen. In coma there is parturition; in paraplegia there is parturition, if the source of it be such as not to separate the uterus from the cord; but there is no case to show that labour can take place unaided, if the cause of paralysis abstract the uterus from all relation with the spinal marrow.

I have read carefully the recent paper of Mr. Snow Beck.* His inference as to the independence of parturition on the spinal cord, founded on phenomena observed through the administration of the vapour of ether, is, in my humble judgment, anything but conclusive. He fails altogether to show that the act of parturition can be performed as well without spinal influence as where this is present It seems no unfair construction of his observations to suppose that such influence *is* present where he *thinks* it is not. Neither are his remarks consistent with themselves, as I am sure a comparison of two passages, which are *both* used to enforce precisely the *same* point, will make plain to himself. He says, "In many of the recent cases in which the inhaling of ether has been employed to relieve the pain of operations in midwifery, the *whole* of the functions of the brain and spinal cord, *including the reflex functions*, have been annihilated for a time, and yet the action of the uterus went on *as regularly, as vigorously*, as if all the functions of the nervous system were in full force." Mr. Beck then brings forward phenomena to illustrate this opinion, and proceeds materially to diminish, if not quite destroy, its force, by adding, "In a word, *all the most obvious* reflex actions are in abeyance;" which phrase, most vague and indefinite compared with his former one, and certainly not nearly so favourable to his conclusions, he repeats. Not *all*, then, but the *most obvious* reflex functions are, according to Mr. Beck, held in abeyance, though his authority might be quoted for the "*whole*" of them being so, were the passage selected in which that word occurs.

Again, when Mr. Beck speaks of "the most obvious" reflex functions, he omits to mention the act of respiration. Yet this is the chief of them all. This surely cannot be so long suspended as to enable us to determine that parturition can be completed with as much regularity and energy without all the reflex functions as with them. Æther often affects the brain only partially, and it may in like manner only partially act upon the spinal marrow, suspending some of its actions, whilst others remain.

M. Serres long ago performed some experiments from which it may be inferred that the activity of the spinal cord has greatly to do with uterine contractions.†

1. He found that when he divided the spinal marrow of pregnant animals, (rabbits, guinea-pigs, &c.,) in the lumbar region, some time before the period of parturition, they died without being delivered. It is of importance to know how long the experiments were made before the expected close of gestation—how long the animals lived after the injury of the cord—and what was their condition between the time of its infliction and their death. Animals so treated may die quickly from the effects of shock and other consequences of the injury, and no true conclusions can then, of course, be drawn.

2. He ascertained that the like experiments made during labour effectually arrested it.

3. He has shown, that by irritating the spinal marrow in the lumbar region, uterine action and abortion may be excited. And here, as it is hardly necessary to add, the uterus is affected just as the voluntary muscles may be affected, either by irritation of the spinal cord, or the trunks of their appropriate nerves, obediently to the law of Haller. Is there a single instance in which a muscle, so influenced by such irritation of the spinal cord after death, receives, notwithstanding, no motor power from or through it during life? Does not the experiment declare plainly enough that motor nerves proceed from the cord to the uterus? And if so, are we to hold those motor nerves superfluous, on the ground that the "sympathetic system" is of itself able to to effect parturition?

4. M. Serres has made a most instructive remark relative to the influence of strychnia on the uterus. He has discovered, that when injected into the veins, it affects the organ, even as the latter is excited by mechanical irritation of the cord. On the supposition, that the cord furnishes the uterus with motor power, the result of this experiment might have been foreseen, and very likely was anticipated, by M. Serres. Wherever the influence of the cord extends, there strychnia operates. But is there any experiment to show that it possesses power over the sympathetic nerve?

From this effect of strychnia upon the uterus, M. Serres concludes, that there is fear of this medicine producing abortion, if administered as a remedy for paraplegia, occurring during the time of pregnancy.

I will now pass from these experiments to two cases of paraplegia in pregnant women, related by Ollivier and Brachet, which have excited no little notice, and have an immediate relation to the subject.* In the one, labour was effected without aid; in the other, instruments were required.

First, as to that of M. Ollivier. It is entitled "Pregnancy; paralysis of the motion and sensation of the inferior extremities; spontaneous, painless labour; death the tenth day afterwards; hydatids external to the spinal dura mater, and compressing the cord." Here is given an outline of the case, and the source of its symptoms. The latter could not indicate their exact origin: it was clear that the cord was compressed, but no one could have discovered by what it was so. Two points mainly concern us here: Was the labour performed well and quickly, or the contrary? What was the spot of compression? In answer to the first question, one extract will suffice. "The labour was completed suddenly, and with so little pain, that the woman was only made conscious of it by the emptying of the abdomen and the cries of the child."

The remaining inquiry is of great moment. If the lesion had been found of such a kind, and so situated as to preclude the idea of the spinal cord having aught to do with the completion of the labour, there would have at least been recorded one case to show, that parturition can be accomplished without any assistance from the spinal marrow. But in this remarkable instance the cord was compressed remotely from the nerves it distributes to the uterus. There was a cyst in the thorax which contained hydatids. "The right lateral hole of the fourth vertebra, which gives passage to one of the dorsal nerves, was entirely open; its diameter was large enough to admit the extremity of a finger, and it led into the spinal canal. It appeared to us, then, that some of the hydatids contained in the cyst of the thorax had entered, through this opening, the vertebral canal. To leave no doubt upon this point, we opened the spine to a great extent, and found there a dozen of hydatids of varying sizes, which extended upwards from the inter-vertebral opening to the top of the first dorsal vertebra; there they were accumulated, attached to the external aspect of the dura mater, and embraced it circularly as a ring; in this spot the membrane was thickened, compact; its colour was reddish, its capillary vessels were congested, and it formed a sort of collar which compressed the spinal marrow." There was no morbid change noticed in the cord; it had suffered from compression only; its consistence was normal. Professor Chaussier observed, in some comments upon the case, that "the insensibility and paralysis of the inferior extremities supervened, when the hydatids, after having passed through the hole of the fourth dorsal vertebra, compressed, by their number and their volume, the spinal cord."

The case of M. Brachet has most different features.† It has been recently brought forward by Mr. Beck. Unfortunately, there seems no record of the seat of paralysis; but that it was very low in the cord might be inferred from the phrase,—"the loss of sensation was complete as high as above the pubis." I suppose the cord to have been involved where motor nerves are given to the uterus, and the case to exhibit the effects of the abstraction of the influence of the cord upon the act of parturition, and thus the incompetency of the uterus to expel its contents is to be accounted for. In expressing this view, I agree in the opinion already given upon the matter by Dr. Marshall Hall. But Mr. Beck, "granting the supposition to be correct," (as he has said,) observes, that there is no evidence to show that "the action of the uterus was slow, feeble, imperfect, and incapable of expelling the child." Let us examine the phenomena. When M. Brachet first made his examination, "the orifice of the uterus was open, and of remarkable softness." "He left parturition to Nature for twenty-four hours, yet it did not progress. The lady had been quick in her former confine-

* On the Structure and Functions of the Sympathetic Nervous System, as distinct from, and independent of, the Cerebro-spinal System. By T. Snow Beck, M.R.C.S. See THE LANCET, June 12th, and "Medical Gazette" of the same date.

† Anatomie Comparée du Cerveau, tome ii. p. 610.

* Traité de la Moelle Epinière, Deuxième Edition, p. 784.

† Recherches Expérimentales sur les Functions du Système Nerveux, p. 266.

ments, and wished to have this finished, from the feeling that she would not be able to complete it without assistance. By some titillations of the neck of the uterus, he tried to provoke contraction, but without effect; the soft organ admitted of being so much distended in every direction, that the orifice was *completely dilated*. The head of the child presented naturally."

I think most obstetrical practitioners will agree that this state of the orifice of the uterus was one which would promise a quick delivery under ordinary circumstances. I should not have expected much delay, especially if to this condition of parts were to be added, "rupture of the membranes." These were ruptured by M. Brachet. "Water escaped by the contraction of the uterus; the head descended, and engaged in the superior aperture of the pelvis, but did not move." For two hours it was attempted to excite contraction in various ways, but vainly. At length the forceps were used, and the child extracted. The placenta was not expelled, though "frequent friction of the abdomen was resorted to for more than an hour;" and when it was eventually extracted by the hand, the uterus contracted *with an extreme degree of slowness*. And all this happened in the case of a lady who had experienced already three confinements, which were "*very quick*." Might it not fairly be concluded from the irritation of the uterus and the friction of the abdomen, both alike failing to produce contractions, that no reflex actions could be excited in this case, as in general they can be? There was some contraction, it is true, just enough to be noted and to disappoint. Nothing more need be said; for I do not contend that the spinal cord is the sole source of the contractility of the uterus, but only that that portion of it which is connected with the organ would appear necessary to efficient or normal parturition. And this conclusion seems the more reasonable when the results of experiment are compared carefully with what pathology has informed us of.*

M. Brachet attributes the state of the uterus observed in this case, to the effects of the paralysis. M. Serres does the like. Dr. Tyler Smith has observed respecting it, in his remarks on parturition,—"In paraplegia from disease involving the lower portion of the spinal marrow, labour either does not take place, or proceeds with extreme inertia, as in the case related by M. Brachet." M. Serres observes: "The integrity of the inferior part of the spinal marrow would appear necessary, in order that the uterus may rid itself of the product of conception. In two paraplegic women, arrived at the term of labour, the uterus remained so inert, that in the one, the neck did not sufficiently dilate, in order to permit the introduction of the forceps; with the other, the infant was obliged to be extracted by the Cæsarian section."

M. Ollivier, contrasting his own case in which the labour was energetically accomplished, with that of M. Brachet, in which it was effected by instruments and not the uterus, suggests, that "the destruction of the tissue of the spinal cord is, perhaps, a necessary condition to the coëxistence of paraplegia and inertia of the uterus," seeing that, in the instance which he has himself related, that there was simple compression of the cord merely. But the question for consideration would seem to be, not *how*, but *where*, the spinal cord is affected, in reference to the performance or failure of parturition. Had the reflex function been known to this observer at the time of his making this remark, the difficulty which naturally struck him would have been lessened, if not altogether removed. If the seat of paraplegia be *above* the origin of that nervous supply which is received by the uterus from the spinal cord, there is nothing necessarily to impair its action, if it be dependent on the reflex function; for in this case, as Dr. Marshall Hall has pointed out, its incident and motor nerves and the arc connecting them, would be perfect still; but if the seat of lesion involve that arc, the result is different, and the case of M. Brachet is, very probably, an instance of the consequences to parturition which follow the abstraction of spinal influence.

I cannot but conclude that much more precise deductions may be drawn from the experiments and cases which have been referred to, than from the effects of ether, as described by Mr. Beck. Let any physiologist carefully read over the remarks of that gentleman, and then ask himself—Is it shown that labour goes on "as regularly, as vigorously," without the reflex functions, as with them? I have had the advantage of seeing severe operations performed on patients under the influence of ether, by Mr. Lawrence, Mr. Stanley, and Mr. Lloyd in the operating theatre of St. Bartholomew's Hospital, in which pain was indubitably and admirably prevented. Supposing that the reflex functions were altogether suspended in any of those cases, they most certainly ceased not for that length of time which would enable us to determine that the action of the uterus is altogether independent of the spinal cord. But in the instances I refer to, the cerebral functions appeared in abeyance, whilst those of the cord continued, at least in part; respiration remained, remained even where there was excessive relaxation of the voluntary muscles. It is enough, surely, to abolish sensation and volition, without going further. The effect to aim at is that effect which the least interferes with the vital functions, provided it suffice to annul sensibility. Nor is it so light a thing to suspend the respiration; for if this cease, and the heart's action yet continue, there is obviously danger of asphyxia, should the suspension be persevered in. How long can respiration be quiescent in such a case without risk of life? At any rate, there is need of observance and care.

Mr. Beck has made reference to the observations of Professors Dubois and Simpson, but the passages he has quoted do not sustain his opinions. They fail to demonstrate that the act of parturition can be effected as well without the spinal cord as with it. Professor Simpson, indeed, in the extract given, speaks of apathy and insensibility, and shows that labour can be effected independently of the brain; but if the reader will turn to the passage, he will not find one single syllable as regards the reflex function of the cord?

I do not venture to say that the sympathetic nerve has nothing to do with the contractile power of the uterus. This nerve has probably a certain action, if not such action as would effect labour independent of the cord. Its contractions may be of a double or mixed character, as are those of the œsophagus, of which Dr. Marshall Hall has observed, "The fact is, I believe, judging from my own experiments, that the action of the œsophagus in deglutitions is of a double or mixed character; prompt under the influence of the pneumogastric nerves, and of a slower character under the peristaltic action of its muscular fibres."

But to view the question in another light, I cannot but advert to the remarkable analogy between the contraction of the uterus and reflex acts in general. Let it be compared with respiration, so far as muscular action is concerned; emotion influences, volition helps them both. In one great respect parturition altogether differs from respiration. It is a periodical act. It may be performed or the contrary, being provided for, dependent on a peculiar state, which may or may not happen. The period at which it is wont to occur cannot be explained by anything we know, though we perceive the purpose that is gained by it. Specially and wonderfully adapted to its end, the organ of parturition bides its time, until the being to be born can live independently of her who is to bear it, and so it waits according to a law most definite, and framed in all wisdom. But respiration is continual, for its being so is necessary to life. So much for this contrast. Let us now note a few striking resemblances between parturition and respiration, which are apparent in the means whereby they are occasionally, provisionally excited. They are seen chiefly where the fœtus fails to provoke the one, and the pneumogastric ceases to excite the other. I cannot go fully into this important matter, and can only treat it cursorily. The contractions of labour may be produced by stimuli, when they cease to be occasioned normally; so may the movements of respiration. Both kinds of motion obey physical stimuli, and both acknowledge the effects of temperature. Both also may be excited by irritation affecting parts distant from the seat of action. By friction we may excite respiration, and once I produced the most active inspirations in a nearly asphyxiated infant by tickling the palm of the hand. In this case, how distant was the seat of irritation from the nerves and muscles necessary to breathing! The uterus is in like manner susceptible of remote stimuli. The drinking of hot and cold fluids seems thus to act.

At present we know not the different ways in which parturition may be excited remotely and reflexly. In cases of coma, may it not be occasioned, as respiration may, by the excitor nerves of the spinal marrow, far more variously and widely than is yet supposed. A very singular case of parturition during a state of complete insensibility is detailed by the illustrious Harvey.* Labour would appear to have been brought to a close by irritation of the fifth pair of nerves. That convulsive movements were thus produced is certain, during which the uterus would seem also to have acted; for it is expressly said that then the "labour advanced." Whatever may be the view taken of the case, it is so interesting

* Op. cit., p. 609.

* See Works of Harvey, edition of the Sydenham Society, p. 534.

that I will proceed to quote it. "I am acquainted," says Harvey, "with a young woman, who during labour fell into so profound a state of coma that no remedies had power to rouse her, nor was she, in fact, able to swallow. When called to her, finding that injections and other ordinary remedies had been employed in vain, I dipped a feather in a powerful stimulatory, and passed it up the nostrils. *Although the stupor was so profound that she could not sneeze or be roused in any way*, the effect was to excite convulsions throughout the body, beginning at the shoulders, and gradually descending to the lower extremities. As often as I employed the stimulus the labour advanced, until at last a strong and healthy child was born without the consciousness of the mother, who still remained in a state of coma." In the belief that at the time the convulsions were produced, the uterus was excited also, I think that it was possibly aroused to action in a reflex manner by the excitement of the fifth nerve indirectly acting on it through the spinal cord.

That it may be called into action, just as the respiratory muscles may, by cold applied to the cutaneous surface, has been long admitted. Cold, thus applied, has saved life often by contracting it in flooding; and thus used, I have known it very effective in expelling the placenta. And as in many cases of suspended breathing, cold and heat are most efficacious when used *alternately*,—for to surfaces of their own degree of temperature they are no excitants at all,—so, in like manner, when parturition lingers, they may accomplish by turns what neither could effect by itself. This fact has been most interestingly shown by Mr. Simpson, who was the first, I believe, to use this method of applying temperature in the case of labour. He says, "the cold water applied suddenly to the abdomen, was most effective in producing uterine contractions. After a little while, however, this lost its utility. The abdominal surface becoming cold from the repeated application, the water no longer acted as an excitant. Accordingly, warm flannels were applied, to restore the temperature, and then cold water was again applied, with decided effect."* Since the publication of this case, I have once had occasion to recommend temperature, where labour so lingered that it was feared instruments would at length be required, with satisfactory result. The other day I found a case in which cold had been used to produce delivery, and, as it would seem, not vainly. It is detailed in a letter of Dr. Pearce to Dr. Lettsom. "A woman, whom a midwife could not deliver, had cloths dipped in cold water laid upon the abdomen; as much cool air as possible was admitted; and everything she took given cold; in consequence of which, she was soon delivered of a large still-born child."

Inasmuch as cold has been long known to produce uterine action after the birth of the child, it is curious that it has not been used more frequently, with the view of exciting it before the birth is completed. Temperature could be used where the ergot would be utterly inadmissible, and I think it capable of a far more extended application than it has yet received, and the more especially, if it be used as Mr. Simpson employed it. Cold is every day persisted in, even in states of exhaustion, where it should be changed for warmth, at least for awhile.

The similarity between the action of temperature on the respiratory and parturient actions is very palpable; does it not operate, in both cases, through the same principle, and excite the reflex function of the spinal cord?

Lastly, let me observe, that the question before us simply is—What is the influence of the brain, what of the spinal cord, what of the sympathetic nerve, as respects parturition? First, if it be possible, let their separate effect, afterwards their combined powers, be determined. That the brain is not necessary, we know; but that it acts as an auxiliary, we know just as well. Let the inquiry be analytically and synthetically pursued, and as calmly as though it had never been discussed, pursued simply as a matter, not between this and the other physiologist, but between truth and error.

As to the share the sympathetic has in it, let it be well explored and discovered, if it can be; but let us be careful not so to comment on the office of this nerve as to provoke a repetition of the phrase of Müller—that pointed, called-for phrase,—"it explains everything, and yet nothing;" called for, because so many conclusions that have been hastened to, concerning it have proved to be fallacies—'*cecidere cadentque.*'

At present, we must confess how much is to be learned respecting parturition, ere we can explain many of its phenomena. As it is, to what a variety of queries must the candid physiologist at once reply, "I do not know"—words which should never be difficult of utterance to any one who feels that the confession of ignorance is a step to its removal, and who is a sincere inquirer after truth.*

* See THE LANCET for December, 1842, p. 437, and Dr. Marshall Hall's "New Memoir on the Nervous System," p. 85. I have endeavoured to insist upon this mode of *alternation*, with which temperature is effective, where without it, it would fail, in a short paper, to which I may here refer, in THE LANCET, May 13th, 1843.

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CASE OF

## AN ENCYSTED TUMOUR ON THE RIGHT SIDE OF THE NECK.

By CHARLES MAYO, Esq., F.R.C.S.E.

SENIOR SURGEON TO THE WINCHESTER COUNTY HOSPITAL.

FRANCIS M——, aged twenty-nine, came into the County Hospital, from Andover, on the 17th of March last. He had an oblong semi-elastic tumour in the right side of the neck, extending from the angle of the lower jaw to the clavicle, and filling the space between the sterno-cleido-mastoideus muscle and the trachea. During the act of deglutition, the tumour was raised, and sunk or depressed, in accordance with the motions of the larynx and root of the tongue, and could be made tight, by holding the breath. An evident fluctuation could be felt, by passing the finger into the bottom of the mouth, under the tongue, and making a counter-pressure on the tumour externally; and it appeared that, eleven years ago, a puncture had been made into the swelling under the tongue, by Mr. Westlake, of Andover, and a teacupful of albuminous fluid evacuated thereby. Since that time, it had gradually refilled and extended, and although not very painful, had become so cumbersome as to make him desirous to have it removed by an operation. The tumour would bear handling without pain, and might be grasped and drawn outwards, so as to show its independence of the surrounding structures; it was rather too soft for a fatty tumour, and more like the consistence of steatoma.

From March 18th to April 1st, his general health was attended to, and various local applications used, without benefit; among these were lotions of zinc, spirits of wine, iodine ointment, &c. But on this day, having been brought into the operating theatre, I first punctured the centre of the swelling with a small trochar, through which, about a tablespoonful of serous fluid escaped, but without sensibly diminishing the bulk of the tumour. I then divided the skin, which was quite loose upon it, to the extent of four or five inches, and dissecting it back on each side, came upon the platysma-myoides muscle, closely investing the parietes, or cyst of the tumour; a small portion of the cyst, however, could be perceived at the outer edge of the platysma, and I tried, with the handle of the scalpel, to detach it from the muscle and the subjacent structures, but finding that the sac extended so deeply into the hollow containing so many important vessels and nerves, I resolved not to attempt any further detachments in that direction, but to make a free opening, and take away as much of the anterior part of the cyst as possible. The incision into the cyst was followed by about half a teacupful of white fluid, and a pint bleeding dishful of greyish substance, of the consistence of fresh mortar, which I dug out, as it were, with the handle of the knife. In detaching a portion of the sac, with the muscle covering it, a considerable artery was divided, near the basis of the jaw, which gave us some trouble to secure, and at the lower part of the wound, two or three branches of the superficial jugular veins were cut, and filled the bottom of the chasm several times before we could secure them. With a view to restrain further hæmorrhage, the wound was filled with portions of lint, dipped in oil of turpentine; cold cloths were applied externally, and the patient put to bed, with the head and shoulders raised by pillows; he was ordered to have lemonade and cooling drinks, and to be kept quiet. In the evening, I found that considerable oozing had taken place, and I removed the cloths, and applied fresh ones, dipped in weak zinc lotion; as he complained of sore throat, and the respiration was rather obstructed, saline effervescing draughts were ordered every four hours.

April 2nd.—The pulse had rallied; the discharge from the wound had been profuse, chiefly serous; the throat more swollen; and deglutition difficult; I removed the lint soaked in oil of turpentine, and substituted other portions of lint, dipped in solution of sulphate of zinc, strong enough to

* Cuvier beautifully says, in his eloquent eulogy on Joseph Priestley, "Nothing was easier for him than to say these words, 'I do not know,' which cost the greater part of the learned by profession so much to pronounce."—*Eloges Historiques*, tom. i.

produce some smarting; ordered an acid gargle for the throat; and desired that he might inhale the vapour of warm water. To continue the saline draughts, and to take an aperient in the morning.

3rd.—Had passed a better night; more of the mortar-like substance came away with the discharge, which continued so abundant, as to require the lint and compresses to be changed twice or thrice a day, when the wound was thoroughly cleansed with a syringe and warm water.

6th.—Flakes or shreds of membrane came away with the discharge, which appeared to be the remains of the sac or cyst; the lint, with sulphate of zinc lotion, was continued; the large wound gradually became cleaner, and filled up; the soreness of the throat went off; appetite and strength returned; and on the 4th of May he was discharged cured.

*Remarks.*—Although the exact nature of the tumour was involved in considerable obscurity before the operation, the results above detailed can hardly leave a doubt as to its original and continued connexion with the basis of the tongue, and that it was, in fact, the gradual extension of an obstructed follicle, or Whartonian duct, in which the cretaceous deposit had gradually accumulated. Its freedom from pain, and the absence of any glandular enlargements in its neighbourhood, were evidences of its not being malignant; and the only apprehensions we had were from its deep-seated adhesions. The copious watery discharge from the wound proved that the salivary secretion still continued for two or three weeks; and the separation of the cyst or sac left in the bottom of the wound showed its limited vitality, and the futility of our anxiety for its entire removal, at the time of the operation.

For these reasons, and the apparent rarity of the case, I have thought it worthy of being placed on record.

Winchester, June, 1847.

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RESULT OF THE

## CASE OF OVARIAN DROPSY

*Treated on Mr. Brown's Plan, and Reported in* THE LANCET, *Jan. 24th*, 1846.

BY THOS. HUNT, Esq., M.R.C.S.E., Herne Bay.

THIS case was under treatment in the months of October, November, and December, 1845, and it was reported on the 24th of the following January, as apparently cured. The patient has continued in good health during the last fifteen months, and she was delivered of a full-grown male child on the 4th of April, after a natural and remarkably easy labour. A few days after her delivery, an examination of the abdomen discovered no tumour, except the contracted uterus in its proper position. She had previously borne five children, but had never before had an easy labour at the full period of gestation; the forceps having been used on three occasions, premature labour having been once induced artificially, and once occurring by accident. The tumour was first discovered as a recto-vaginal tumour impeding labour, in the year 1841. It had evidently existed long before this period, and had probably interfered with the process of parturition on previous occasions. The treatment, it will be recollected, consisted of mercurials, diuretics, tapping, and binding the abdomen tightly, and the case appears to have terminated satisfactorily.

It is now sufficiently established, that many cases of this disease will yield to these four remedies conjointly; not, however, as it appears from the facts published, without considerable inconvenience and danger. The simple operation of tapping, when the patient is in a state of salivation, is in some degree hazardous. The irritable condition of the system under the influence of mercury renders it unusually susceptible of inflammatory action. Could not the mercury be dispensed with, and the treatment confined to diuretics, tapping, and pressure? Dr. Locock is reported to have attested the success of tapping and bandaging alone, and even Mr. Brown has, I believe, so modified his practice, as to coincide with these views. Still, serious objections must ever exist against severe compression of the parieties of the abdomen. It interferes with the peristaltic action of the intestines, arrests the progress of the alvine contents, and excites flatulent spasms of a most distressing character, and sometimes severe vomiting. Perhaps a sort of truss, or spring tourniquet might be applied, so contrived as to press only on the locality of the cyst after it has been evacuated. These matters might easily be decided by experiments.

Herne Bay, April, 1847.

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A CASE OF

## HYDROPHOBIA CURED BY MERCURY.

BY W. F. HAINES, Esq., M.R.C.S.E., Pinner.

ON the 17th of September last, about seven o'clock in the evening, George S——, of Harrow Weald, called upon me to request my advice and assistance under the following painful and most distressing circumstances: He informed me he was bitten by a dog which had been for four or five weeks in a very singular and bad state, recently frothing a great deal at the mouth, with a sort of snatching or twitching, and occasional fits; quite unable to swallow anything, except what was forced down his throat; would not look at water; and was evidently in a rabid state.

The bite, which was in the thumb, occurred a fortnight before I saw the patient. The wound was so extremely slight that it was entirely forgotten till two days before he came to me, when, he says, the thumb became extremely "hot and prickly"—so much so that he was induced to put it into cold water, which appeared to make it worse. On the next day (Sunday) it was rather easier; but on Monday much worse, and kept getting worse all the time up to yesterday, (Wednesday.) That about Tuesday he began to feel very unwell, his head being very much affected with great giddiness and pain; he had great heat, thirst, and restlessness; and says, that when the thirst and heat left him, "water poured off his stomach clear like gin," and continued to do so until the next morning, (Thursday.) During the last week he had had bad and almost sleepless nights, with horrid dreams, waking him in great frights. On closely examining the thumb, I found it in a high state of inflammation, with violent pain extending to the shoulder, and discovered what appeared to have been a slight abrasion of the skin, and opened the part with the point of the lancet, and directed him to foment and poultice it.

Before he left me I gave him twenty grains of calomel in a pill, and twenty grains more, with twenty-five grains of jalap, in a powder, to take an hour after, with strict injunctions to let me hear from him very early next morning.

I may here remark that I found all the alarming symptoms described to me by the patient in full force, attended with loss of appetite, low, slow, and tremulous pulse, much watchfulness and anxiety of countenance, and very great dejection of spirits.

Friday, nine A.M.—Has had a bad, sleepless night, with pain in the left side and throat; much difficulty in swallowing, attended with painful "twitchings;" and complains of his breathing being "wonderfully tight." In the fore-part of the night, and when quite awake, he was affected with very sudden and peculiar "snatchings" five or six times in an hour, which convulsed the whole body. By this time the medicine had acted freely on the bowels, which appeared to have abated some of the unfavourable symptoms. I now gave him three grains of calomel, with two grains of aromatic powder, every three hours, and ordered him to continue the fomentation and poultice to the thumb.—Twelve at noon: The "snatchings," which are evidently spasmodic, still continue, with great dejection of spirits, as well as all the other unfavourable symptoms; the pulse scarcely perceptible.—Six P.M.: Has had a little sleep, which was again broken by frightful dreams, with much pain in the head, and very giddy.

Saturday, eight A.M.—Says he has had a little better night, but towards morning was awoke by bad dreams. I found all the violent symptoms somewhat mitigated, particularly the pain and inflammation in the thumb and arm, and the "snatchings" quite gone. The pulse was now quite perceptible, but very languid, weak, and tremulous; gums much swelled.—Five P.M.: Little or no change, except the gums more swelled, and the teeth painful.

Sunday, nine A.M.—Has had a little sleep during the night, but again disturbed with frightful dreams, and much troubled with aches and pains all over him; describes his head as being heavy, queer, and giddy, with very queer sensations and dreadful thirst; appetite worse; bowels confined; gums greatly swelled, and teeth loose; pulse again scarcely perceptible.—Five P.M.: Appears much relieved in every way; has had some refreshing sleep for the first time, and has taken a little mutton broth with relish; pulse still very feeble, with great depression of spirits. To continue the powders every four hours.

Monday, eight A.M.—Slept four hours, and awoke without dreams or fright; head aches and feels heavy; is thirsty, with weak, tremulous pulse; complains of pain at the bottom of the left foot, with violent twitchings in both legs; teeth still

loose, with difficulty in swallowing; the thumb nearly well; pain in the head better, and has had a good night, without dreams; bowels open. Powders every five hours.

Tuesday, nine A.M.—Has passed another good night, all the symptoms greatly abated, and going on well. Powders every six hours.

Wednesday, ten A.M.—Much better in every way. Powders every seven hours.

Thursday, nine A.M.—Has had an excellent night; appetite returned, and doing so well in every respect, as to be considered out of danger. Powders every eight hours.

Friday, at noon.—Has had a less favourable night, but felt better, till a person from Hertfordshire called upon him, and alarmed him exceedingly by offering him some quack medicine for the bite of a mad dog, and telling him he would be sure to die if he did not take it; but which, however, he very prudently refused to do, as he had been previously assured by me to be quite out of danger, and sent the fellow, with his nostrums, about his business. He now principally complains of the soreness of his gums and teeth, which, unfortunately, are still very troublesome. He says he had through the night a good deal of "twitching" in his legs, so as frequently to force one violently over the other, and had all the time great pain in the chest, with much difficulty in breathing; pulse still weak and tremulous, and great lowness of spirits, increased, no doubt, by the fright he had got in the morning; bowels well open. Powders every nine hours.

Saturday, eleven A.M.—Has passed a bad, sleepless night; has much headach, with loud noises through it, like the firing of a gun; spirits bad, with low weak pulse and bad appetite. Powders every ten hours.

Sunday morning.—Has had a much better night, and feels somewhat refreshed by it; but in other respects the same as yesterday. Powders every eleven hours.

Monday, noon.—Has had an indifferent night, and is not so well, and complains of much pain and twitching in the legs; gums and teeth much better. Powders every twelve hours.

Thursday, two P.M.—Another good night; appetite much better; teeth and gums less sore, and feels stronger; spirits good, and is improving very fast in every way. Powders as before.

Saturday.—Going on well. Visits discontinued.

Saturday following.—Is now quite well in every respect, and able to return to his ordinary work.

Pinner, June, 1847.

## Original Contributions to The Lancet in Abstract.

### MEDICINE, SURGERY.

*Directions for the Recovery of the Apparently Drowned.*

Mr. Nisbet, of Egremont, has forwarded a printed card of directions for the recovery of the apparently drowned, which he has circulated on the Wallasey shores of the Mersey, where, it appears, during the bathing season, accidents are constantly occurring. The most important of these are as follows:—

"*To restore warmth and circulation.*—Move a heated warming-pan, properly covered, several times over the stomach, heart, and spine. Apply warm flannels or a hot pillow across the stomach, and any heavier *hot* articles, such as bags or stockings of sand, salt, bran, or grains, bottles or bladders of water, bricks, or ovenshelves, covered &c. to the arm-pits, sides of the body, between the thighs and legs, feet, and hands. A strong hartshorn, or other stimulating embrocation, or turpentine, rubbed over the chest and spine, is highly useful. Fomentations and means for a warm bath should be got ready; but from frequent mismanagement they had better be left to medical superintendence, as also the burning of cotton wool, or paper soaked in strong spirits, or turpentine, on the pit of the stomach, and the use of electricity or galvanism.

"*To assist or restore breathing.*—When beginning, or very weak, imitate it by alternately pressing the belly rather upwards, and the ribs downwards, about fifteen times in the minute, and occasionally hold some sharp scent to the nostrils, and irritate them with a feather dipped in vinegar, hartshorn, or mustard. If suspended, gently inflate the lungs with common or dust bellows, having the pipe introduced into one nostril, whilst the other and mouth are closed by an assistant, who should afterwards release them, and compress the chest for expiration; at the same time, the upper part of the windpipe should be slightly depressed, and rather pushed back against the gullet, to allow a more certain access of the air. (A bent tube for direct communication with the larynx, having one end fitted by Indian-rubber to the nozzle of a bellows, should be kept by every medical man.) A more ready plan, especially for children, but defective, from the air being less pure, is managed by a person taking a deep inspiration, and instantly blowing through the mouth or nostrils of the body, either at once by applying the mouth, or by a tube, closing whichever is free with one hand, whilst the windpipe is handled, as above stated, with the other: thus continue, now blowing into, and afterwards compressing the chest, until natural breathing is restored, or the case appears hopeless."

Mr. Nisbet recommends that nothing should be administered internally, unless the power of swallowing exist; but stimulating enemata may be exhibited. The means of recovery should be persisted in for at least two hours, and if any signs of life appear, for even double that time. When recovery is apparently established, rest should be enjoined; but a strict watch should be kept for some hours, as sinking is apt to happen from subsequent neglect. Mr. Nisbet objects to the use of the warm bath, on account of its debilitating effects, and also because the chest, while in the bath, is generally bent on the stomach, so as to obstruct the breathing, and the means for artificial breathing are then often neglected.

*Strangulated Hernia.*

Mr. Allen, of York, describes the case of a lady, seventy-seven years of age, who has been subject to femoral hernia on the right side for thirty years, which, in spite of the use of the truss and of great care, has been frequently incarcerated, so as to require the application of the taxis for its reduction. This was the case about six months ago, and the rupture was then reduced with some difficulty. The same accident recurred a few weeks since, and Mr. Allen's assistance was required. Not being at home at the time, a medical friend of his accompanied his assistant to see the patient, and applied the taxis, failing, however, after repeated strenuous attempts, to reduce the protrusion. A cold lotion to the part was then ordered, and applied for two hours, until Mr. Allen's return. He found, on examination, the tumour about the size of a pullet's egg, with, he says, the usual aggravated symptoms indicative of strangulation. He had recourse to the taxis, but failed in his endeavours to restore the bowel to the cavity of the abdomen. He then directed warm and hot fomentations to be steadily applied for some time, the liquid being gradually diminished in temperature, until at last it was used quite cold. This plan was perseveringly followed for about three hours, when the tumour was found to be decidedly lessened in size, and its contents were readily reduced by a little pressure. Mr. Allen lays great stress on the manner in which the lotions were used in this case, and he appears to consider the employment of warm fomentations, with the gradual cooling of the liquid, an improvement on the direct application of cold, as previously used.

### MEDICAL POLITICS.

*The Medical Registration Bill.*

Consistency, in writing on the Medical Registration Bill, expresses his warm approval of a measure which, he says, with the simplest machinery, cannot fail to prove an ample protection to the medical profession. There is not any man, he adds, whether M.D., surgeon, or apothecary, member of the Faculty of Physicians and Surgeons of Glasgow, or of the National Institute, at present for or against the measure, who, if deserving the position he occupies, will not be benefited by the carrying out of the provisions of this Bill. He then proceeds to object to the twenty-seventh clause, which provides that the Act shall not extend to cuppers and dentists in practice before the 1st of March, 1847. He considers that preventing persons from practising as dentists, without having received a proper education, providing they were not in practice before March 1st, 1847, is a step in the right direction, and says it will confer a great benefit on society; but still he regards it as an imperfection, and is of opinion that its operation should be retrospective, and that all who were previously engaged in the practice of dental surgery should be obliged to register, so that those who are really unqualified should be under the necessity of quitting the profession. Cuppers and mechanical dentists ought, he thinks, to be exempted from the operation of the Act, the same as chemists and druggists. He avers that the Medical Registration Bill ought to be retrospective in every branch of medicine and surgery, and that all special branches should be in this respect on the same footing as general practice, nor does he consider that quack aurists, oculists, &c., should be afforded

protection, merely because they commenced practice before the 1st of March, 1847. One other question is mooted by Consistency, as to the limits of the surgical practice of the dentist. May he merely extract teeth and scarify gums, or shall he also be allowed to excise excrescences of the gums, make use of the trocar to evacuate the antrum after suppuration of the cavity, and to perform excision of tumours of the mouth, dependent on affections of the sockets?

*** Consistency forgets that there is this great difference between medical practitioners and cuppers, dentists, &c. The former have for years past been required by the legislature to possess a diploma granted by some authorized body, testifying to their possessing the requisite knowledge of the sciences they profess. A law therefore requiring them to register, is not retrospective. It does not call on them to obtain a title to practise, but merely to make known to the authorities that they really possess such a title. The latter, or, at all events, the majority of the latter, are altogether unprovided with any such document, and to call upon them to register their titles would either have the effect of driving them altogether from the practice of the profession, or else of compelling them to undergo a lengthened course study, and a subsequent examination, during the time occupied in which they must suffer great pecuniary loss. No law to be just can be really retrospective. It would not be right now to compel these special practitioners to obtain a diploma, with which they are at present unprovided, any more than it would have been, in 1815, to have enforced all practitioners then undiplomatised, to present themselves for examination at the Hall of the Society of Apothecaries. When the Registration Act is in operation, the public will have the means of judging, by the published lists, between the really qualified and the pretender. With respect to the non-extension of the Act to cuppers and mechanical dentists, the former should certainly come under its operation, as the proceeding is decidedly surgical, and the cupper should possess some anatomical knowledge—in cupping on the temple, for example. The mechanical dentist, as Consistency terms him, may be fairly exempted. He is not, in fact, a dentist at all, but merely a mechanic, no more than a surgical instrument maker is a surgeon. The last question mooted by Consistency is one that scarcely admits of an answer. It is difficult to define precisely the limits of a special class of diseases. There are many connected with the teeth and mouth, which fall under the care of the surgeon-dentist, which are intimately connected with the general health, and so again with the eye, the ear, &c. The dentist, the oculist, and the aurist, may fairly claim these as their perquisite, while the physician and the surgeon are as fully entitled to set up their claims. The fact is, the medical practitioner should possess a competent, knowledge of all the so-termed special branches of disease and be able to treat cases properly when they come before him; and he is only excusable for not undertaking their treatment, when, as in dentistry, mechanical appliances are necessary—the proper application and employment of which can only be acquired by extensive practice in that special art.

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*The Apothecaries' Act.*

Amicus Humanitatis, while contending that the Apothecaries' Act of 1815 has a tendency to promote quackery, gives three cases which have fallen within his own knowledge, in which its provisions have been evaded. The first is that of a lieutenant in the Royal Navy, who, he asserts, never served an apprenticeship nor attended a lecture, but obtained the requisite information and documents from a grinder, by whom he was also supplied with the indentures of apprenticeship. The next case appears to be something similar, with the exception that the professional information possessed by the surreptitious licentiate was obtained from Amicus himself, and the certificates were procured by purchase. The last case occurred in the person of a son of one of the examiners at the Hall, to whom, although retired from practice, the youth was bound, and by whom the indentures of apprenticeship were duly endorsed with the certificate of the completion of his servitude. Amicus adds, that the father informed him that he had paid for his son's lectures and hospital attendance at King's College, but that, being given to other pursuits, he neglected his professional studies. Notwithstanding this, he was pushed through the Hall, and obtained his licence, although he could not answer a question. So ignorant, indeed, does he appear to be, that Amicus states that at a post-mortem examination at which he was present, he could not distinguish *between a kidney and the prostate gland*.

*The College of Surgeons.*

Observer says, there are numbers of men, in practice in England and elsewhere, who have obtained the diploma of the Royal College of Surgeons after a period of study not exceeding two years. It is not quite so easy, he adds, to procure the licence of the Society of Apothecaries, on account of the servitude of five years' apprenticeship; but even that difficulty is occasionally got over, in some way or another. He further asserts, that it is his firm conviction, that half the druggists in Liverpool will be dubbed surgeons in three or four years, as they find, that without neglecting their business much, and with a comparatively trifling outlay for lectures and attendance at the infirmary, they can become members of the College of Surgeons in about two years. There are three or four practitioners in Liverpool who have obtained their qualification for practice in the time and manner just mentioned.

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*The Medical Registration Bill.*

Mr. Bush, of Frome, in referring to the Medical Registration Bill, takes a view precisely opposite to that entertained by Mr. Illingworth, which was published in The Lancet of the 12th inst. Mr. Illingworth objected to the admission of the mere M.R.C.S. to the enjoyment of equal privileges with the possessor of the surgical diploma and the licence of the apothecaries, and he contended, that the mere surgeon was, in the majority of instances, not possessed of the requisite knowledge for medical practice. Mr. Bush, while somewhat uncourteously treating Mr. Illingworth's communication as an absurdity, is guilty of a similar error in claiming all merit for the M.R.C.S., and requiring that the mere L.A.C. should be regarded as an apothecary only, and prevented, by legal enactment, from using the title of, and practising as, a surgeon. He avers, that there is an unfortunate omission in the Medical Registration Bill, which, if carried in its present shape, will indirectly and virtually encourage quacks, inasmuch as it will legalize the practice of surgery by M.D.s and apothecaries, who have not undergone any surgical examination, and perhaps have not even received any surgical education; and he asks, can that be a just proceeding to those who are members of the Royal College of Surgeons? or can it be otherwise than fearfully unsafe as far as the public are concerned? Mr. Bush adds: the only step in the right direction was that taken by the Poor-Law Commissioners, in March, 1842, when they ordered, that paupers should be attended by no medical gentleman who did not possess both a surgical and a medical diploma.

*** Both Mr. Bush and Mr. Illingworth are in error—their mistake consisting in referring solely to the curriculum of education, and the nature of the examinations, at the College and Hall, without making any reference to the previous course of study. It will be found, we believe, that the majority of general practitioners holding the Society's licence, but not the diploma of the College, are as well qualified, surgically, as scores of the Fellows of the College, while, on the other hand, members of the College of Surgeons, acting as general practitioners, having received a medical education, are fully qualified to discharge the duties they have undertaken, without a need existing for their possessing the Hall licence. All medical men at present receive a general medical education, no matter to what college or hall they belong.

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*The Necessity for Medical Coroners.*

Under this head, Mr. Cauwood, of Barnsley, refers to a case of extensive fracture of the skull, the result of suicide, from the details of which it appears that he was blamed by the coroner for making a post-mortem examination without his order.

The patient was a girl about twenty-one years of age, who, while labouring under the premonitory symptoms of fever, threw herself out of the window, and sustained such injuries on the right side of the head, that she died four days afterwards. The constables were informed of the fatal result of this sad affair, but as, on application to Mr. Cauwood, he said that he did not think an inquest necessary, none was held. A short time before the funeral took place, Mr. Cauwood made a post-mortem examination, and found the right temporal bone, the roof of the orbit, and the body of the sphenoid, fractured and comminuted, with somewhat extensive effusion of blood on the surface of the brain, and congestion of the pia mater. A few weeks after the funeral, the body was disinterred, and an inquest held on it, at which Mr. Cauwood, as above stated, was warned by the coroner not to make another post-mortem in such a case, without his order; the constables were reprimanded,

and the chief constable suspended for a month, with a prospect of ultimate dismissal.

*** The case decidedly was one requiring investigation by a coroner's inquest, and Mr. Cauwood was in error in the opinion he gave the constables, that such an inquiry was unnecessary. As the inquest was not held before the funeral took place, Mr. Cauwood was justified in making the post-mortem examination. The great error consisted in there not having been any notice given to the coroner or to his officers, of the suicidal cause of this unfortunate girl's death.

## Reviews.

*Mental Dynamics, or Groundwork of a Professional Education. The Hunterian Oration before the Royal College of Surgeons of England,* 15th February, 1847. By Joseph Henry Green, F.R.S. London: Pickering. 8vo.

Were this production merely one of the ordinary Orations, whose annual delivery honours us far more than it contributes to the glory of Hunter, we might pass it by almost unnoticed; but coming to us as Mr. Green's idea of what the "groundwork of a professional education ought to be," it is entitled to some respect and consideration at our hands.

After paying a just and an elegant tribute to the merits of Hunter, the Orator proceeds to consider "how far his excellence may be deemed a pattern for the formation of a scientific character, in unison with the requirements of our profession;" and here, he remarks, we are met, at the very outset of our inquiry, by the difficulty "that the predominant and characteristic trait of Hunter's mind was genius."

If, then, we regard genius as "absolutely a special gift of Providence, imparting to the mind of its possessor somewhat of the power originative and creative of the Divine Giver," it is manifestly impossible for us to attain this "peculiar excellence of Hunter by mental culture and self-exertion." But, says Mr. Green, this is not the signification we ought properly to attach to the word genius; and, in the next two pages, he proceeds to develop his own ideas of its right meaning. Here is the concluding passage:—"Instead, then, of treating genius as a mysterious endowment and occult faculty, I would say that it far rather designates the healthy balance and proportionate development of all the powers and faculties that are essentially human, and their harmonious constitution, to one."

What this "one" may be is not very clear, even with the aid of our author's long explanation in Appendix A, and, therefore, it is possible we have not rightly interpreted his meaning. This, however, is no fault of ours. It forms one of our gravest objections to Mr. Green's Oration, that many parts of it are couched in such ambiguous, and even meaningless sentences, that it is often impossible to understand them. What, indeed, are we to understand by such a passage as this, which occurs immediately before the one we have just quoted:—

"The processes of thought, which, in the mind of an ordinary man, form his distinct consciousness, and move separately and slowly before him, have by fusion and acceleration passed into the intellectual life of the man of genius in the moment of productive action."

We defy any one, without a very liberal exercise of imagination, to discover anything in this sentence but an empty sound of words. We have heard of the mountain in labour, and we know that it brought forth the "ridiculus mus." But to proceed. We understand Mr. Green to mean somewhat this,—that all the different powers of the mind, will, reason, imagination, and so forth, each in its highest perfection, so combine to act in such perfect harmony, that they conduce towards but one end, and form in the mind of the man of genius, in truth, but one grand, comprehensive, reasoning faculty. And thus, as in the well-trained troop, though each individual part acts independently for itself, yet all so combine as to work together for the production of one effect. Now this, we should rather judge to be the attribute of a well-regulated mind, certainly not the characteristic of what we call genius.

Sheridan and Byron were men of genius; so was Fuseli, the painter; yet no three men were ever more destitute of the very qualities which Mr. Green describes as essential to it. No three men had ever more ill-regulated minds, or powers less in subjection and harmony to each other. Milton, a man of greater genius than Sheridan or Byron, and Sir Joshua Reynolds, a greater painter than Fuseli, were men, also, of better regulated minds. As such they produced results more uniform and lasting; and this too, as the natural consequence of possessing those qualities which Mr. Green ascribes to genius, above and superadded to the natural endowment which we understand by the term. Addison says, Shakespeare was a *rare* genius. We are, therefore, very much inclined to take the word in its primary acceptation, as expressive of power inherent in the mind of an individual man, (γενναω,) but yet capable of education and improvement, by the fostering influences of time and exercise, to such a degree, indeed, that even those who originally were much inferior in mental powers, may, by a right use of these advantages, steal a march upon the man of *genius* who has neglected them. We thus arrive at the same end as Mr. Green, though by a somewhat different route, and can cordially agree with him in appreciating the "advantages of a liberal education."

To show in what this consists, and how its ends are best to be attained, more especially in reference to the regulations of the Council of the College, relative to the admission of fellows, was the aim of the Oration. In the framing of these enactments, we believe Mr. Green took an active part; his views may therefore, to a certain extent, be taken as an index to those of other members of the Council, on the subject of professional education.

Our author commences with the earliest childhood, and proceeds to develop, sometimes not very intelligibly, "the leading requisites and final intention of a liberal education," more particularly as regards that period when education is rather to be considered as the general training and strengthening of the powers of the mind, without direct reference to any particular profession in which the subject of it may afterwards engage.

He lays great stress upon the importance of cultivating, in the very outset of systematic education, those "elementary factors of thought, which we name Abstraction and Generalization."

Mr. Green has explained his meaning well in a note at the foot of the page, and here we can understand and go hand in hand with him:—

"Abstraction designates the process by which, in contemplating any object, our thoughts are directed to some one part or property exclusively, withdrawing our attention from the rest. Generalization indicates the process by which the mind occupies itself with like parts or properties in dissimilar objects, and in consequence of the likeness includes them in one genus or kind."

The difficulty of cultivating these powers is shown by the rarity of their possession, even by men of what is called good education.

In our own profession, of all others, they are of the highest importance: to be enabled, with eagle eye and ready wit, to separate the spurious from the true—to distinguish between what is important and what is unimportant—and, with ease, to extract the sparkling gem from the dross in which it is obscured—and then, when found, to store it by, and by degrees to work it up, until at last it grows to be a great comprehensive truth—are among the highest exercises of mind.

The first of these processes is performed, in varying degree, by every one who thinks at all; the second is a higher power—an attribute of a higher order of mind—we might almost say, a distinguishing mark of genius itself. Numbers do we see, of untiring energy and unwearying industry, both in the observation and recording of disease, who never get a step

beyond, but, accumulating case after case, stored up in their brains and desks, can, after all, not draw a single deduction from their long experience. Others there are, who possess powers of abstraction in tolerable degree, but in the higher quality of generalization are deplorably deficient: bring their crude speculations and half-digested theories to the sober test of reason, and they vanish like a mist before the sun.

Too much stress cannot be laid on the paramount importance of these qualities; it is their deficiency which mainly favours the progress of error. Were all our medical brethren equally endowed in these respects, we should hear less of homœopathy and mesmerism, of universal panaceas, and a thousand other absurdities. We should not then find some ascribing all diseases to the "stomach," or to the "liver," or to "spinal irritation." We should, in short, have more sound reasoning and less quackery.

To generalize in medicine is a dangerous attempt—it is only such a mind as Hunter's that can accomplish it in perfection.

Mr. Green next proceeds to speak of words, and of the importance of their right use. A considerable portion of this is, to us, out of place; much of it is mystical, even now, with the aid of explanatory notes: delivered as an Oration, it was utterly incomprehensible.

The poet Goëthe, speaking of the tails of animals, describes them as "the expression of the infinity of organized existence." This may be a very poetical description, but it is not a very intelligible one. In an Appendix to this part, Mr. Green explains his views of self-consciousness; and, plunging at once into the subtilty of metaphysics, discusses "Realism" and "Hume's Philosophy," and "Kant's Philosophy;" and finally, dragging in by the head and shoulders "John" and "Paul," concludes with a disquisition on the *Trinity!*

And this is the Hunterian Oration!

To say nothing of the *taste*, which has induced Mr. Green to disfigure his book by introducing one of the most controversial points of theology, we ask, in the name of common sense, what has all this to do with professional education?

If Mr. Green chooses to write a work upon metaphysics, or upon theology, let him do so, and for our parts, we will leave him to the tender mercies of the bishops; but we do protest against the theatre of the College of Surgeons being made the arena for promulgating individual views upon points of this kind. We are not ignorant that there are additions to the Oration since it was delivered; still they are explanatory to it—form part and parcel of it—without them Mr. Green's views would not be fully developed; and on these grounds they merit our strongest condemnation.

It is refreshing to turn to the next few pages of our book. Natural history and history in general are glorious themes for Mr. Green, and eloquently are they handled by him. We have rarely met with more forcible writing than Mr. Green's eulogy of natural history; at times it rises into eloquence of the highest order, and will well repay perusal. One passage, however, strikes us as so remarkable for the beauty of its expression, and for its novelty in the application of a figure it contains, that we are tempted to extract it entire. Referring to history, the orator remarks,—

"Out of the mists and clouds of mythological fables and poetic myths, which float round the well-head of mundane time, the narrow stream of history issues from the inaccessible heights of antiquity, tracked at first only by a gleam of the light of revelation; until, gathering in its course, and swelled by the confluence of many tributary waters,—story, song, legend, or tradition,—it reaches the plains of historic truth, and flows onward as a majestic river, securely embanked by written documents and recorded facts."

Want of space prevents our following Mr. Green into the subject of language. We can only express our cordial agreement in the remark,—and this applies especially to modern languages,—that "any additional language of which a man is master, is, as it were, a new limb without its deformity."

Discussing the importance of mathematics, and of the science of logic, Mr. Green is peculiarly happy. He ably distinguishes between the two, and clearly shows the absurdity of supposing that the one can ever be a substitute for the other in a liberal education. Mathematics should precede logic in priority of study; they prepare the mind for the easy reception of its truths; and few do not acknowledge their importance as a discipline to the mind.

It is to be feared, however, that in our profession the study of logic is very generally neglected. Yet so desirable a branch of information do we consider it, and so great are the benefits which we believe would accrue to each one from a knowledge of its principles, that spite of our unwillingness to increase the already too numerous lectures which students are compelled to attend, we are not prepared to say we should consider an attendance upon a course of lectures on logic as an unprofitable requirement from the student of medicine.

We are not disposed to enter upon the subject of the following pages; they are taken up by topics unsuited to the orator's audience, and, therefore, introduced in bad taste; not bearing upon the subject of practical education, and, therefore, unnecessary and perplexing. The remarks upon Medical Education which succeed, brief as they are, may be taken, as a whole, to be nearly unexceptionable. Now our orator has shaken off the trammels with which his adhesion to Coleridge has hampered him, and speaks out in a spirit of manly honesty, equally characterized by good sense and good feeling.

Whether, indeed, that enlarged education which every well-wisher to his profession must desire to possess, is best to be acquired in our universities and colleges, may be a matter of doubt. Of this, however, we feel quite sure, that most young men are compelled, by the existing regulations, to enter our profession much too early, before their general education is half completed, and are cast loose upon the world long before the *will* has gained the mastery over the *inclinations*. The system of apprenticeships (one of the many evils the Medical Registration Bill is intended to remedy) has much to answer for in this, and until it is abolished, we may look in vain for improvement.

The concluding passage of the Oration speaks of "professions united with each other, and in union with the *National Church*." Mr. Green has explained in Appendix D, what he means by the term, and certainly does much towards explaining away any offensive idea which, in the minds of some, might attach to it. Still it is a matter of deep regret that Mr. Green should make use of ordinary expressions, intending them to bear an extraordinary meaning.

We have thus at some length, and, we trust, faithfully, set before our readers the chief points of Mr. Green's production. As an Oration, we consider it wanting in that great essential clearness; parts of it are so obscure as to appear destitute of meaning. As a sketch of education it is incomplete and unpractical. The taste, too, which has dictated some of it,—we refer particularly to Appendix B,—may very fairly be questioned.

We should be loath to say, that, sharing the fate of most imitations, this is a bad imitation of Coleridge; but we may be permitted to doubt whether, when he set about its composition, Mr. Green had any very clear "*idea*" what he would be at.

Yet, after all, it is evidently the production of no ordinary man; it will repay perusal, and in parts afford high gratification. In other portions, it will serve to show that a rapid flow of words, and great choice of expression, do not constitute the only requirements of an orator.

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*On Wounds and Injuries of the Abdomen and the Pelvis; being the Second Part of the Lectures on the more Important Points in Surgery.* By G. J. Guthrie, F.R.S. London: J. Churchill. 1847. pp. 73.

In the affairs of this world good and evil are intimately mixed up, so that one is always associated with the other, neither is to be had apart. Thus war is regarded by all

civilized people as a great evil—indeed a monstrous one—which it is surprising should have so long devastated the human species, and marred human happiness; yet, in spite of this, not a few good results follow from it, although it would seem better that some other plan were adopted to bring them about. Among these good results, which are far, however, from counterbalancing the evil of their cause, may be enumerated the great surgical experience which is to be gained from a campaign, as is well illustrated by the work before us, and also by those which have preceded it, from the pen of the same distinguished surgeon. The experience to be gathered by the military or naval surgeon, amid the din and carnage of the fight, respecting numerous "important points in surgery," is far more extended and exact than that which can be attained by the civil surgeon, however favourably placed in the more peaceful prosecution of his profession, just for the reason of the far greater number of cases which fall under the care of the former, and of the greater command and control he can exert in their treatment. How much we and the country at large are indebted to the medical officers of the army and navy, for researches in operative surgery, into the laws of contagious diseases, of endemic and epidemic fevers, will appear by reference to the printed records of what they have done, and which form a basis for others to build upon; yet their valuable services are not appreciated as they ought to be, either by the public or by the Government.

Mr. Guthrie has laid the profession under a fresh obligation, by the publication of the present monograph on Injuries of the Abdomen and Pelvis, the result of his large experience during the protracted Peninsular war. It is of that peculiarly practical character which characterizes all his writings; it is a record of numerous cases which have fallen under his own notice, and of many which have been made known by other surgeons, English and foreign, with anatomical and surgical comments, and with deductions as to the practice to be followed. He has treated fully of the different kinds of wounds and injuries which the abdomen and pelvis may suffer, and also of the various consequences which may follow from them — such as laceration of viscera, internal hæmorrhage, hernia, &c.; and lastly, their pathology, and several symptoms, are lucidly explained.

From the character of the work being so practical, and from its being got up, although very well, at such a moderate price, as to be within the reach of every one to peruse for himself, we shall not attempt any analysis of its contents, but content ourselves with strongly recommending it to the study of every surgeon; for even the civil surgeon, in private practice only, will generally, in the course of his practice, meet with some of those serious accidents which form the subject of Mr. Guthrie's book, and concerning which, therefore, he should be fully informed. To the military and naval surgeon the work recommends itself; for in any engagements in which they may have to serve they must look forward to meet with many cases of wounds and injuries of the abdomen and pelvis.

The treatise just noticed is the Second Part of the Lectures on the more Important Points in Surgery given by Mr. Guthrie; and we hope soon to have to notice the third portion, on Wounds and Injuries of the Chest, which is alluded to in the list of the author's works given at the end of the present volume, as shortly to appear.

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At Liverpool, a large ship is advertised to sail some time in September, and to return in May, the voyage being to the climates best suited to consumptive, dyspeptic, and rheumatic cases. Invalids are to be provided with a physician, assistant-surgeons, and nurses. Such a voyage in search of health is certainly something novel. Of the value of sailing there can be no doubt; but it may be very much questioned, however, whether invalids would not do much better distributed in different ships, than collected together, so as thus to form a sailing hospital.

# Medical Societies.

## PATHOLOGICAL SOCIETY OF LONDON.

MONDAY, MAY 3, 1847.— DR. WILLIAMS IN THE CHAIR.

(*Concluded from p. 622.*)

Dr. PEACOCK exhibited a specimen of

LACERATION OF THE AORTA,

probably from violent muscular effort.

A powerful man, thirty-five years of age, was assisting several others in moving a frame of wood, about ten feet high and six broad, and of about three hundred weight, when a gust of wind over-balanced it, and it fell so as to press him beneath it. He immediately turned deadly pale, gasped a few times, and expired. The exterior of the body displayed no mark of violence, except a slight scratch on the left side of the neck. When, however, the integuments were removed from the front of the chest, the upper part of the sternum, and the sternal ends of the fifth, sixth, and seventh ribs, on the right side, and the cartilage of the seventh left rib, were found partially fractured, so that the whole point of the chest had been depressed. The intercostal muscles between the fifth and sixth ribs were extensively torn. Some bloody serum was effused into the sac of the right pleura, and the cavity of the left side contained nearly two quarts of blood; much blood was also infiltrated into the mediastina. The blood was found to have escaped from the aorta, which, about half an inch behind the origin of the left subclavian artery, was entirely torn across, so that the ends of the vessel were only retained in apposition by its cellular sheath. There was no evidence of direct injury to the vertebræ, or of any part in the neighbourhood of the ruptured vessel. The rest of the organs in the body were natural. Dr. Peacock remarked, that in the absence of any proof of direct injury having been sustained by the vessel in this case, its rupture could only be ascribed to the violent action of the heart, consequent on the effort to resist the fall of the frame, in the peculiar position occupied by the man at the time. This inference is confirmed by the state in which the heart was found when removed from the body. Both ventricles, but especially the left, were extremely contracted, so that their walls were much increased in thickness, and their cavities entirely obliterated; the organ thus afforded a very characteristic example of the condition described by Bertin as concentric hypertrophy. After, however, it had been macerated in water for two or three days, and the contraction had subsided, the cavities returned to their normal dimensions, and the walls became proportionately thinner. The heart was considerably above its natural size, weighing between eleven and twelve ounces avoirdupois. It is well known, that at the point of union of the obliterated end of the ductus arteriosus with the coats of the aorta, it is very usual that the canal of the latter vessel is found somewhat constricted; and this point is generally, also, one of the earliest seats of atheromatous degeneration. The existence of these changes at that point, in the present instance, seems to have determined the occurrence of the rupture of the vessel. Elsewhere, the coats of the aorta, though perhaps somewhat thin, were free from disease.

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Dr. GARROD exhibited

SEVERAL SPECIMENS OF CYSTINE,

and read the particulars of two cases in which this deposit occurred in the urine.

The first case, for which Dr. Garrod was indebted to Mr. Childs, occurred in a policeman, aged thirty-three, a native of Ely, who had suffered twenty years ago from a nine months' attack of ague.

Had frequently noticed a deposit of gravel in his urine, after exposure to cold, but always of a red colour. About three years and a half since, he accidentally injured himself in the perinæum, which part continued to swell and become painful, for about a month, when an abscess burst externally, and also into the urethra; it healed in about six weeks, but, since that time, pus had been formed, and the abscess opened three times.

About a year and a half since, had a violent attack of pain in the back, with vomiting &c.; soon after, several small calculi passed, and he became relieved. About three months since, the pain in the back returned, and soon after, a much larger calculus passed, together with many small ones; he has since continued, at times, to pass small stones. The urine also contained a matter which causes a deposit after standing a short time.

He is now a robust-looking man; appears, at first sight, in perfect health, but suffers from dyspepsia; tongue always having a white fur; he is thirsty; lips dry and cracked; frequently an acid taste in mouth; appetite pretty good, except when he has the sensation of nausea which precedes the passage of calculi; bowels regular; skin moist; often a papular eruption about face and neck; perspiration sometimes very sour; no disease can be detected in heart, lungs, liver, or spleen. Hereditary disposition: Father was subject to red gravel; mother still living, not subject to any such affection.

This patient's urine generally gives rise to a deposit which has a whitish appearance, not unlike that produced by a highly refracting crystalline body, as cholesterine, when floating in a fluid; this precipitate does not disappear when the urine is heated, nor when acetic acid is added, but alkalies and the mineral acids both dissolve it. Under the microscope, the deposit appears in the form of six-sided laminæ, (as will appear in the specimen;) these have frequently a tendency to aggregate, not to form rosetter, as described by some, but the crystals are arranged at right angles to each other. When separated from the deposit, the urine had a pale yellow colour, an acid reaction, which soon disappeared, and it became alkaline, with the formation of crystals of triple phosphate of ammonia and magnesia, which appeared on the surface and sides as a film. Odour strong, but not very peculiar. Specific gravity, 1014, at 60 F. Did not give a black precipitate with sub-acetate of lead, so that it contained no alkaline sulphuret. The addition of acetic acid did not cause the further precipitation of crystals of cystine. 1000 parts gave, on analysis, after separating mucus and cystine:—

| | |
|---|---|
| Water | 969.009 |
| Solid matters | 30.991 |
| Urea | 10.125 |
| Uric acid | 0.375 |
| Extracted matters, ammoniacal salts, &c. | 13.059 |
| Fixed salts | 7.432 |
| Soluble in water | 5.995 |
| Insoluble in ditto | 1.437 |

When the urine was kept, it soon became ammoniacal, and also a large quantity of an alkaline sulphuret was found in it, which caused it to precipitate the salts of lead black, and also to evolve sulphuretted hydrogen in abundance when an acid was added. At the same time, a green conferva was found in the fluid on its first becoming alkaline. This urine contained much more unoxidized sulphur than ordinary urine, most probably in the form of dissolved cystine. Healthy urine, however, always contains such a body; and it is possible that cystine is found in very minute quantities in health, but not in sufficient quantities to cause it to appear in a crystalline form. The quantity of urine passed in twenty-four hours was fifty-four fluid ounces; the quantity of uric acid, in the same time, about nine grains. The calculi passed by this patient consisted of pure cystine; on the surface they have a beautiful crystalline appearance, very much resembling crystallized raw sugar.

In the next case, the patient was a young man of fair complexion and scrofulous habit, aged twenty-three. One sister died lately, of phthisis; grandfather suffered from calculus; father also suffered from renal disease.

This patient, about a year since, had symptoms of dyspepsia. This was removed in a few days by an alterative and tonic plan of treatment. About six months after, he passed a small calculus, about the size of a pea, consisting of pure cystine, (No. 2,) having, for some days previously, suffered much from pains in the lumbar region. There was considerable pain when the calculus was passing the urethra. Lately, he has had another attack, and passed another small calculus. This patient has noticed that his urine has frequently a peculiarly sweet odour.

Dr. Garrod remarked that in both these cases we see that there are symptoms of dyspepsia which have been noticed by other observers; and in addition to this, in the first case above mentioned—disease in the urinary passages. The dyspepsia, in both these cases, was no doubt primary, but at times aggravated by the sympathy of the stomach with the kidneys. He had been induced to bring them before the Society more on account of the rarity of the occurrence of cystine, either in the form of a calculus or deposit in the urine, than from any particular novelty.

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Dr. Hensley exhibited a specimen of

ALVEOLAR (?) CANCER OF THE STOMACH,

taken from a patient of Dr. Protheroe Smith, aged fifty-six, who had suffered for five years from an obscure affection of the stomach, and had at several periods had acute attacks, characterized by great hypochondriac and dorsal pain, constant vomiting, and excessive eructation, accompanied with constipation and much febrile disturbance. In the intervals of the attacks, general debility, cough, and uneasiness in the left hypochondrium, nausea in the morning, occasional vomiting, spectral illusions, and habitual constipation, characterized her ordinary state of health. The acute attacks became severe in proportion to their frequency, and the attack from which she died was of a very aggravated form, the hypochondriac pain having extended to the base of the left lung, and other symptoms having supervened indicative of acute pleuro-pneumonia, the vomiting also being incessant. The post-mortem examination was made twenty-four hours after death. The heart was displaced to the right of the median line by the pressure of two quarts of bloody serum in the left pleural cavity, the lung itself being compressed into a small fleshy mass.—Abdomen: The peritonæum covering the under surface of the diaphragm was of a deep-red colour, and much injected. The stomach was firmly attached to the diaphragm by means of an oval lobulated tumour, of the size of a large egg, which was enclosed within the folds of the small omentum, and was closely connected to the lesser curvature of the stomach, extending from its cardiac to near its pyloric orifice. Externally it was covered by the omentum and fat. When cut across, it presented irregular radiating white fibres, dividing its substance into loculi, containing a yellowish-white substance of softer consistence. Portions of the tumour were more dense, consisting partly, however, of adipose tissue. The stomach was of its natural capacity; its mucous membrane, surrounding the cardiac orifice, was extensively ulcerated. A section of the tumour, subjected to microscopical examination, presented,

1. A granular blastema.
2. Numerous nucleated cells and parallelograms.
3. Other cells, nucleated and circular, in clusters, which, from their high refractive power, appeared to contain something analogous to fat.
4. Adipose tissue and oil globules.

The liver was small, pale, and fatty.

Dr. Hensley remarked, that from the history of the case we may justly conclude that the immediate cause of death was perforation of the stomach through the adherent diaphragm into the left pleura, exciting inflammation of that membrane, and rapid effusion. This, however, owing to the state of distention of the pleura with so much fluid, the unsuspected nature of the case, and the short time allowed for the inspection, could not be positively evidenced. With regard to the nature of the tumour, there could be but little doubt of its being that species of carcinoma described by Cruveilhier under the name of the pultaceous areolar cancer. Though it did not present the jelly-like material contained in distinct follicles, described by Otto as the characteristic of colloid cancer, it approached nearer to that form than to any other.

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# Foreign Department.

## French Medical Journals.

### *Wound of the Brain. Recovery.*

The *Journal de Médecine de Bourdeaux* contains the following interesting case of a wound of the anterior lobe of the brain, in a child, not followed by any mischief: A child, aged twelve, made a false step, holding at the time an open knife in his hand. In the fall, the knife, being directed towards the head, rapidly penetrated through the left orbit. The lad did not raise any cry, but ran into the infirmary of the establishment in which he lived, the knife still sticking in the head. When M. Gintrac was called to him, he found him laid upon his bed without consciousness, the skin cold, and the face pale, the pulse imperceptible. The knife had passed between the globe of the eye and the upper eyelid, about midway between the orbital angles, and had perforated the orbital portion of the frontal bone, in which it was tightly fixed. Its direction was oblique—viz., from below upwards, and from before backwards, forming with the facial line an angle of about 45°. The back of the blade was next the globe of the eye, and pressed it downwards and backwards, while the cutting edge raised the upper lid. M. Gintrac sought at once to remove the knife; his first attempts were fruitless, but by persevering for five minutes, and with the help of another, it was extracted. The entire length of the blade was three inches and one-fifth, its breadth two-fifths of an inch; it had penetrated, measuring from the margin of the eyelids, two inches. Whilst the pre-

ceding was going on, the lad remained quite insensible. Compresses, with cold water, were ordered to the eye and forehead, and sinapisms to the feet. Between four and five hours afterwards, the boy had recovered his senses, spoke freely, suffered no headach, and complained only of a smarting in the interior of the orbit; the pulse began to rise, and there was some swelling of the upper eyelid, but pressure on it caused no pain. He passed a good night, sleeping calmly. The next morning, the pulse was 60, and regular; intellect clear; answers naturally; no headach; some heat about the orbit; the eyelids not more swollen.

During the following days no new phenomenon presented itself; the tumefaction of the eyelids gradually decreased, and after the eighth day entirely disappeared, leaving the eye perfectly sound. All that was to be seen was a slight scar on the margin of the tarsal cartilage of the lower eyelid, made during the rapid passage of the knife past it. The patient was kept in bed fifteen days, during which his diet was very low; after this he resumed his studies and his ordinary employments.

To determine the question which necessarily arises in this case, as to whether the knife entered the brain, M. Gintrac had recourse to experiment: knowing the depth which the knife had penetrated in the above case, and the direction it took, he carefully drove, by a hammer, the same knife through the corresponding place in the orbit of a dead child, aged eleven years; then, having opened the head, he assured himself that the instrument had traversed the vault of the cranium, the membranes of the brain, and had penetrated into the anterior cerebral lobe nine-thirteenths of an inch. M. Gintrac would reject the notion as impossible, that the dura mater, with the brain, had, in the case related, only been pushed aside, on account of the intimate adhesion of the dura mater to the calvarium, its want of extensibility, the depth to which the knife had penetrated into the cranium, and the great resistance to its extraction.

The freedom from any after-accident from an injury of this nature is certainly remarkable, but by no means unparalleled; for, as is mentioned in the remarks on the above case, Mr. Selwin published in THE LANCET, in 1838, the account of a case in which the blade of a knife entered the cranium, in a child four years old, through the upper part of the orbit, to the depth of about three inches and a half, wounding in its course the optic nerve, and the levator of the upper lid. Its removal was long and troublesome, attended by some hæmorrhage, and the wound giving vent to some fragments of brain. The child recovered, retaining its senses, but losing the vision of the eye which was wounded.

To this case may be added another, reported by M. FOURNET, of an individual who, being desirous of destroying himself, took with his left hand a chisel, such as is used by cabinet-makers for making mortices in chairs, and having adapted it with its sharp edge to the centre of his cranium, armed his right hand with a wooden mallet, with which he drove the chisel into his skull up to the handle, this alone preventing its further penetration. In order to avoid too much movement in removing the instrument, M. Fournet made use of the proceeding adopted by Ambrose Paré to remove a portion of a blade from the cranium of the Duke of Guise: The patient was seated in a chair sufficiently low, the head being immoveably fixed. M. Fournet got upon a table, and after having very tightly fixed the handle of the chisel in a vice, laid hold of the vice with his two hands, and exercised upon it a vertical, uniform, and continued traction. The instrument was thus removed, and after awhile the patient got well. In order to make himself acquainted what part of the brain had been entered, M. Fournet drove into the cranium of a dead subject, at exactly the same point, in the same direction, and to the same depth, the very instrument which he had withdrawn from his patient. On opening the head, he found that it had traversed the inter-parietal (sagittal) suture, and the superior longitudinal sinus—had grazed by one side of the falx cerebri, between the two cerebral lobes, and had reached between the tentorium cerebelli, the posterior part of the corpus callosum, as far as the quadrigeminal tubercles, but without having at all injured them.

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*Topical Employment of Binoxide of Mercury in several forms of Skin-Disease.*

M. IBRELISLE has used this medicine extensively, and gives the following as the results of his experience with it:—Its application has appeared very useful in strumous and syphilitic skin-diseases. Indolent ulcers of the lower extremities have often been improved, or quite healed, from the inunction of this substance with lard; and he has frequently employed it in phagedænic ulcers, in the proportion of one part to four or five parts of lard. In inveterate ulcers, he has used it with lard in the proportion of one of the mercury to two of the lard, and continued its application for several hours.

The author looks upon this oxide of mercury as an excellent means of destroying the induration which attends syphilitic ulcers; and he has used the ointment with success in the pustules of syphilis, in chronic ulcers of a strumous character, in pustules and ulcers of the face, of the nasal fossæ, and of the neck, of a syphilitic or strumous appearance. The only accidents M. Ibrelisle has witnesssed from its application, have been pain in the teeth, after frictions about the face or the neck, and a slight febrile reaction, thirst and pain, after its use to large ulcerating surfaces. But whatever be its advantages, great caution is necessary in its employment.

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## ACADEMY OF MEDICINE.

*Colic from Lead and Copper.*

M. MILLON contributed a paper on the colic produced by lead, and that caused by copper, and on their differential characters. The author observed, that of an equal number of men working in copper and in lead, the former were much less frequently the subjects of colic than the latter; and that among those who worked with both metals, an attack of lead colic was by far the more frequent. As distinctive characters, M. Millon points out the tympanitic state of the belly, the diarrhœa, sometimes bloody, and the frequency of the pulse, in the colic from copper. According to him, the bones of those who have worked in copper may be recognised in a cemetery, by reason of the green colour they acquire from that metal. Their urine also contains salts of copper, as the urine of lead workers contains those of lead. Lead colic yields most easily to purgatives; the colic from copper, to emollients and sedatives. From experiments which were made, large potations of simple and refreshing drinks appeared to be beneficial in carrying out of the system some of the poisonous agent; since under such a plan amendment in the symptoms took place.

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## FRENCH ACADEMY OF SCIENCES.

*New Mode of Bandaging Wounds and Stumps.*

At the séance of the 6th of June, M. BAUDENS, chief surgeon of the hospital Val-de-Grace, made known, in a short note, a method, which he had lately devised, of bringing together the edges of wounds in order to unite, and which he is now daily employing with success at the hospital. For instance: in order to unite the two flaps of integument, after the operation for removing the foot at the ankle, as practised by him, a bandage is fixed circularly above the stump, and in it are inserted two strong pins, one in front, the other behind, leaving their heads and points free. Around the two ends of the pins thus left exposed a long and thick cotton thread is looped; the threads from both sides are next brought down to the edge of the stump, and crossed over the lips of the wound, which are held together by the fingers of an assistant. The thread, being crossed over to the opposite side, is now passed under the ends of the pin of that side, from which, again, it may be made to recross: by this crossing of the threads of both sides over the wound, a support is given to it similar to that afforded by a bandage. The crossing of the threads may be repeated as often as is deemed necessary; and the course of the threads of opposite sides may be parallel, or across, so as to make a figure of eight. The ends of the ligatures applied to the arteries, being also made fast to the pins, are in no danger of being torn away in removing any applications from the stump, as will sometimes happen with the old plan.

The advantages this plan offers are—the gentle pressure exercised by the thread; the avoidance of impregnation by the discharged matter, which cannot long remain in contact with the end of the stump; the open spaces left between the threads allows of a ready discharge of fluid matters from the wound; and the constant pull upon the circular bandage above the stump tends to draw the flesh towards its extremity, and so to render it conical.

This mode of bringing about the union of parts is, according to M. Baudens, applicable to all kinds of wounds, a suitable support being first contrived for the pins, on which the traction is exerted.

It may be remarked, however, that many surgeons object to a circular bandage being applied just above the stump, at least with any tightness, such as M. Baudens' method would require, on account of the impediment it offers to the circulation in the part, and the consequent tendency it has to pro-

duce an œdematous state, and even worse results. Nevertheless, even if the evils of constriction above a stump have not been magnified, the device of M. Baudens is very ingenious, and no doubt will prove very convenient and useful in procuring the adhesion of the opposite lips of wounds in many cases.

*Effects of Electricity on the Human Organism.*

M. Pallas, chief physician in Algeria, communicated the results of his most recent researches as to the influence of atmospheric and terrestrial electricity on the organism, and as to the power of insulation in modifying its injurious effects. He concludes his researches by the following summary of results:—

1. The greater number of diseases, and more particularly those which involve the nervous system, (belonging to the class of neuroses,) are caused by the excessive influence of general electricity, of which stormy clouds and marshy localities are the most abundant sources.

2. Marshes, by their geographical constitution, and their effects on the animal economy, offer the greatest analogy to the galvanic pile. Indeed, their noxious action is by so much the more formidable, as the water which exists in them holds in solution organic or saline matters; and this explains why salt-water marshes, and those near the sea-coast, are more especially injurious to the health. The drying up of marshes, or their submersion, present, us with similar conditions as when a galvanic pile is deprived of its liquid, or totally immersed; in either way, its action being rendered insignificant, or being quite annulled.

3. The works of physicians and physiologists have demonstrated that electricity produced by machines has a special action on the nervous system. Experience and rigorous observation of facts prove that the maladies which are developed in the proximity of marshes are always, primarily, of a nervous type; and that when they become inflammatory, it is by the reaction of the nervous system on the heart and entire vascular system, whence arise, consecutively, local or general inflammations.

4. Nervous maladies and intermittent fevers being occasioned, not by the action of a miasm, which has never been detected either in the air or in the water of marshes, but by the excessive (exaggerated) influence of electricity, some means which have in view the modification of this morbid influence should naturally and rationally be preferred.

5. Electrical insulation happily fulfils this indication. The insulation may readily be effected by fitting on to the ordinary forms of beds feet made of glass or of resin. A great number of observations have demonstrated to M. Pallas, that all the sick who have been thus insulated have been cured or relieved of their severe diseases, many of which had previously resisted all known means of cure.

The plan of treatment here advised has the strong recommendation of cheapness and the avoidance of trouble; but we fear that neither the treatment, nor the hypothesis on which it is built, will bear the test of experiment and experience. The prevalent and active source of so many diseases which infest mankind, and which M. Pallas thinks to be found in electricity, we should rather admit to be hidden at present; but judging from what we do know of the laws to which even this subtle agent, the source of fever, &c., must conform, there is a probability against its being electricity, and in favour of its being a miasm issuing from the earth under certain conditions, and we may perhaps proceed so far as to predicate a peculiar electrical state as one of those conditions. Neither is it any argument against the existence of a miasm, that it has never hitherto been made cognizant to our senses, save by its effects, as brought forward by M. Pallas.

*Albuminous Urine.*

At the séance of the 8th of June, M. Bouilland read a letter on the production of albuminous urine by the use of cantharides. Having had numerous cases under his care where albumen was detected in the urine, including true cases of Bright's disease, he determined to make some new researches concerning the different conditions or circumstances under which albumen may occur in the renal secretion. For a long time he had noticed it in those cases where there was undoubtedly serious disorganization of the kidneys, or Bright's disease; but besides confirming his previous knowledge in this matter his recent researches had brought to light one source of albumen in the urine which had escaped others, and that source existed in the action of cantharides. In many individuals, in whom there was no renal disease, he had large blisters placed on the skin in those places where they had been previously cupped. In a man who had moderate pleuritic effusion, but whose urine contained previously no albumen, after he had been cupped, a blister was placed over the cut part. The urine passed after this was put by, and on the next morning it was treated with nitric acid, when it became turbid and white, and altogether assumed the aspect and consistence of weak emulsion. The action of the cantharides on the kidneys, in this case, was evinced by the frequent desire to make water, the pain and agitation attending it; all which, as in other cases observed, passed off in twenty-four or thirty-six hours afterwards. This was the first case in which the experiment was tried; it was repeated in many others, all confirming the results above obtained. The action of the blisters in the way spoken of was greater, when applied to the skin after cupping, than when this was entire—a fact to be anticipated *à priori*. This curious form of albuminuria disappears at the end of two or three days, and is followed by no dropsy, as is the case where there is organic disease of the kidney.

In England this action of cantharides in producing albumen in the urine, as well as in causing the exudation of blood, has been previously noticed. The investigations of the French physician, however, are confirmatory.

## British Medical Journals.

ON THE PREVALENCE OF SCURVY.

Attention has recently been called to the recurrence of that once destructive disease in this country—viz., scurvy. It is true that many cases have presented themselves to notice, both in London and the provinces; yet from all we can learn, the symptoms have been mild in character, and readily susceptible of relief. The increased frequency of these cases has been very properly attributed to the absence of the potato (as it formerly was to the limited use of all vegetables) from the food of the poorer classes, and the consequent deprivation of an acid principle, which appears essential to the healthy condition of the blood. Similar cases have never been absent from the notice of those accustomed to treat the sick poor of large towns, where many persons, particularly poor females, are accustomed to derive their whole sustenance from bread—bread and tea. The treatment which has always succeeded in such cases has been improvement in the diet, and the free use of salt. Vegetable acids are remedies which cannot fail to be useful, and which may be readily made accessible to all. The following observations by Dr. Shapter are deserving of attention:—

"From all that has been now stated, we must come to the conclusion that the recent occurrence of scurvy in Exeter is due to this one cause—a deficiency of food containing acid principles; and that the potato has hitherto been the means whereby these acid principles have been supplied. We may farther conclude, that the peculiar symptoms of this disease are not developed until after the system has been deprived of food of this nature for some months; that the persons most liable to be affected by it are those naturally of weak constitutions, or who are submitted to inactive and depressing circumstances; and that protracted cold weather greatly predisposes, on the one hand, by depreciating the powers of the system—and, on the other, by checking the growth of fresh vegetables, and rendering such as are raised deficient in proper juices.

"From all that has now been stated of this disease—from its symptoms, its predisposing and remote causes—has any light been thrown on its nature or proximate cause? We see evidently that it primarily consists in a peculiar state of anæmia, and that this anæmic state, unattended by loss of appetite or irregularity in the alvine secretions, is accompanied by a general dusky pallor, weak pulse, breathlessness, and a disposition to syncope—a condition of the system early followed by, and complicated with, low feverishness and tendency to local deposits, causing swollen red gums, stiffness and swelling of the joints, together with petechiæ, hæmorrhage, and nodes—a series of phenomena distinctly indicating the proximate cause of this disease to be a disordered state of the blood, and which disordered state it would appear, from the investigations of Mr. Busk, mainly consists in the amount of

fibrin, albumen, and salts and water, exceeding the proportion of health, while that of the hæmatosine falls below it.

"In accordance with the above indications of the nature and origin of this disease, the mode of treatment pursued has mainly been the use of acids, and much benefit has resulted therefrom; otherwise, the use of potatoes, if they could be procured good, and other vegetables, has been enjoined, together with oranges, cider, vinegar, pickles, &c.—in fact, such treatment as is usually recognised amongst us as adapted for the cure and counteraction of scurvy."—*Provincial Journal.*

THE ELECTRIC MOXA

is a novel suggestion by Dr. Golding Bird. Its interest belongs to its novelty, for we cannot think it more efficient than some of the many agents already in use for the like purpose.

"It was long ago observed by Humboldt, and afterwards by Grapengiessier, that when a simple galvanic arc was applied to a blistered surface, the part opposed to the most oxidizable metal was more irritated than that to which the negative plate was applied. In applying such a simple arc to the treatment of paralysis, I was struck with the remarkable effects produced, and such a combination of its results induces me to propose the following ready mode of establishing a discharge from the surface of the body. Order two small blisters, the size of a shilling, to be applied to any part of the body, one a few inches below the other; when the cuticle is thus raised by effused serum, snip it, and apply to the one from whence a permanent discharge is required a piece of zinc foil, and to the other a piece of silver; connect them by a copper wire, and cover them with a common water dressing and oiled silk. If the zinc plate be raised in a few hours, the surface of the skin will look white, as if rubbed over with nitrate of silver. In forty-eight hours a decided eschar will appear, which (still keeping on the plates) will begin to separate at the edges in four or five days. The plates may then be removed, and the surface where the silver was applied will be found to be completely healed. A common poultice may be applied to the part, and a healthy, granulating sore, with well-defined edges, freely discharging pus, will be left. During the whole of this process, if the patient complains of pain at all, it will always be referred to the silver plate, where, in fact, the blister is rapidly healing, and not the slightest complaint will be made of the zinc plates, where the slough is as rapidly forming. A very interesting physiological phenomenon is observed in making an issue by these means. If the plates be applied to a limb, and on different places, contraction of the subjacent muscles will always be observed most severe when the patient is in the act of falling to sleep; and in a few cases these sensations have been sufficiently annoying to induce the patient to untwist the wires fixed to the plate, when by interrupting the current these feelings ceased. But if the plates were applied to opposite sides of the body, as when on the chest to different sides of the mesial line, no contractions whatever occurred. This admits of explanation by a reference to the fact of the nerves not crossing the middle line of the body."—*Medical Gazette.*

SUGGESTIONS FOR AN IMPROVED PRACTICE IN OPENING ABSCESSES.

In the *Dublin Medical Press*, Dr. Porter makes some remarks on this subject which are worthy of attention. The following principles will generally be admitted without objection:—

"1st. To open them in such a direction as to facilitate the evacuation of their contents. 2ndly. To make the opening in such a direction as that the movements of the patient cannot, q.p., interfere with the quietude and repose of the cutaneous structures. 3rdly. To guard against deformity and mal-position, resulting from what I shall term the pathological abnormal healing of the incision."

And he illustrates the object in view by the following argument:—

"My attention has been directed to this question from observing the results of opening abscesses in the groin, the rule imposed by the surgeon being to puncture them always parallel to Poupart's ligament. Let us examine the result: the lips of the wound are scarcely ever at rest, being dragged on one side by the movements of the abdominal integuments, and on the other by the motions of the thigh, which in its various movements must draw the inferior edge of the wound from the superior one. These actions cannot be prevented either by the patient or the surgeon: the latter cannot effect them even by position with the best applied spica inguinis bandage; the former is equally at fault to accomplish the same object, as the different functions he is obliged to perform, called for by his organization, with occasional change of position in bed, will prevent the attainment of such an end. The effects of this constant motility of parts is to keep the wound fretted, and if there is anything unhealthy in the system, this continued irritation will induce, I think, the wound to spread: lastly, if the abscess is a large one, and has been opened freely, or if it should become phagedænic, and finally heal, with much loss of cutaneous structures, unless extreme care is taken (which will sometimes not succeed) there will follow much limits to the motions of extension and rotation outwards of the thigh, in consequence of the femoral integuments becoming united to those of the abdomen in the iliac region. Added to these disadvantages, there will be great deformity in the same situation—a mark which even the most abandoned does not wish to carry on their person, though it is always concealed."

ON A FUNCTION OF THE RED CORPUSCLES OF THE BLOOD, AND ON THE PROCESS OF ARTERIALIZATION.

The following is an abstract of a communication submitted to the Royal Society by Dr. G. O. Rees. The author's position and previous inquiries, as well as the importance of the present observations, entitle them to consideration and further research:—

"Dr. Rees states that he was first led to the theory he has formed for the explanation of the chemical phenomena of respiration, and more especially of the change in the colour of the blood which occurs in that process, by having observed that a garlick odour, similar to that evolved from phosphorus, was produced by agitating in distilled water the clot obtained from some specimens of venous blood. His attention was consequently directed to the investigation of the state in which the phosphorus exists in the blood; and the result of this investigation was the theory, of which the following is a succinct outline.

"The venous corpuscles are known to contain fat in combination with phosphorus. This compound ingredient of the corpuscles, on coming into contact with atmospheric oxygen during the respiratory act, is consumed, and combining with that oxygen, forms the carbonic acid and water which are expired, and also phosphoric acid, which, uniting with the alkali of the liquor sanguinis, forms a tribasic phosphate of soda. This salt, like many others, acts upon hæmatosine in such a manner as to produce the well-known bright arterial tint.

"The analyses which the author has performed in order to test the correctness of this theory were made upon the blood, both of the veins and of the arteries, of the same animal; and also upon separated portions of the same venous blood; one of which portions had been artificially arterialized by having been brought into contact with air, while the other portion had not been so exposed. These comparative experiments showed that arterial blood, both when obtained from the vessels and when artificially produced, contains in its serum a larger proportion of tribasic phosphate of soda than that obtained from the veins. The venous corpuscles, as they are contained in the clot, yield a fatty matter combined with phosphorus; while those from arterial blood yield a fat, the ashes of which manifest an alkaline reaction. Thus, the venous corpuscles are shown to be acted upon both by respiration and by the artificial arterialization of the blood, in such a manner as to lead to the formation of tribasic phosphate of soda at the expense of the phosphorus they contain.

"No exact quantitative analyses were attempted by the author, the comparative experiments having been performed on small portions only of serum, (from twenty-five to forty grains,) sufficiently large, however, to furnish satisfactory evidence of the actual presence of the phosphate in arterial blood, and also in those portions of venous blood which had been arterialized out of the body, while no such indications were obtained from similar portions of the blood contained in the veins.

"At the conclusion of the paper, the author notices the experiments of Enderlin, in which no alkaline carbonate could be detected in the ashes of blood; and shows that this is the natural consequence of the phosphates of the clot being oxidized during combustion, and thus supplying a quantity of phosphoric acid sufficient to decompose completely the alkaline carbonate produced by the incineration of the lactate and albuminate of the serum. Most specimens of serum, even as obtained from arterial blood, yield an alkaline carbonate when incinerated; and this is always the case with the serum of venous blood. The author, therefore, thinks himself warranted in regarding the conclusion founded on Enderlin's experiments, that the blood contains no lactate, as being erroneous."

# THE LANCET.

LONDON, SATURDAY, JUNE 26, 1847.


THE abrupt and early termination of the present session of Parliament has rendered it incumbent on the Government to withdraw from the House of Commons many Bills, some of which had been under consideration during several months. Among them is the Railway Bill, to which great importance was attached by the Ministers. We believe that it is now determined that in less than twenty-one days the present session shall close its labours, and nearly at the same time the existence of the present Parliament will end.

Finding, in this state of things, that it would be utterly impossible to pass the MEDICAL REGISTRATION BILL in the present session, Mr. WAKLEY has considered it to be a duty to withdraw it for this session. This was due to those members of the House who had promised to support the measure in its various stages, and who had repeatedly attended for that purpose; and also to the Medical Registration Committee, whose labours have been so well-timed, energetic, and valuable; as well as to the many hundreds of medical practitioners who have supported that Committee, and petitioned in favour of the Bill. The hour of the triumph of the profession is delayed, but only *delayed*. Come it *must*, and decidedly in the first session of the new Parliament. The opponents of a measure which has received the almost unanimous support of the profession throughout England, Ireland, and Scotland, are now stating the grounds of their opposition before a Committee of the House of Commons. In that Committee five witnesses from the College of Physicians, including the President, the Senior Censor, and the Registrar, have been examined. From the Council of the College of Surgeons only one witness has yet stated his objections, that one being the President. In the next week, the evidence from the Council of the College of Surgeons will certainly be concluded, and—it is hoped—a portion, if not the whole, of the witnesses called from the Society of Apothecaries will by that time have been examined. These are the three corporations which have petitioned against a Bill that provides, throughout Great Britain and Ireland, for equality of *education*, equality of *qualification*, and equality in the amount of *fees to be paid*, by all future medical practitioners.

Such being the state of the case, it may truly be alleged that the cause of the medical profession has at last assumed, not only a prominent, but a splendid attitude; for the just complaints of the legally-qualified members of the profession are no longer disputed, and, by the appointment of the Medical Registration Committee of the House of Commons, the necessity of legislation on their behalf is admitted.

On Monday evening last, after the Government had abandoned the Railway Bill, and so many other of their measures, Mr. WAKLEY, seeing the impossibility of carrying the Medical Registration Bill, announced that he had determined to withdraw it. He, at the same time, stated that, should he occupy a seat in the House of Commons in the next Parliament, it was his fixed resolution to give notice of a motion for the re-appointment of the Medical Committee in the very first week of the session.

The subject must now be prosecuted to a successful conclusion. It cannot, and will not, be allowed to rest, until the fate of quacks and quackery, and that of all denominations of unqualified practitioners, has been settled by the enactment of a just medical statute.

We hope that the MEDICAL REGISTRATION COMMITTEE, which has held its sittings at the FREEMASONS' TAVERN, and which has laboured so admirably in the good cause, will not dissolve, or discontinue its exertions. We trust that at the very next meeting the members will come to an unanimous resolution to continue their sittings until a MEDICAL REGISTRATION BILL has been enacted into a statute of the realm. Time will now be afforded also to those friends of the cause who reside in distant counties, to organize district Committees. In a few days, the evidence which has been given by the five witnesses from the College of Physicians against the just system of registration which is proposed in the Bill, will be printed, and in the hands of the profession. The evidence yet to be taken will also be printed. Ample time will be obtained for an examination of the grounds of the hostility which has been exhibited by the old medical corporations of London against what we deem to be a strictly just measure; and, after maturely weighing all the objections which have been offered, the profession will determine whether Parliament ought to be influenced by them, and reject a just measure of policy, or whether the very foundation and principles of the opposition which has been exhibited do not offer sufficient inducements to the great body of the profession not to relax in their exertions until the rights of all the legally-qualified medical practitioners of these kingdoms are placed, by the law of the land, on a just, clearly-defined, and equable basis.

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WE revert to the subject of the ill treatment of the surgeons of the army and navy for many reasons. We feel that an injury done to so large and so meritorious a class is to prejudice the whole body of the profession. This feeling becomes a settled and rooted conviction, when we consider the manner in which the character of the entire profession has been upheld in the field and in cantonment—in peace and in war—by our military surgeons. They have ever shown knowledge, judgment, energy, indefatigable industry, resolution, address, and untiring patience. To all these they have added a courage that has not looked to rewards—a courage of the highest order. Their cause, we regret to say, is new to public discussion, although, from the works of our great military surgeons, it is evident that the iron code of class restriction, and of pseudo-economical rule, has always been written deep on their hearts.

ROBERT JACKSON—as truly brave a man as he was unequalled as a military physician—felt all this; but he lived in times when studied exclusion and neglect cast their dark shadows over him—when, in short, they constituted the law. He wrote, therefore, as a man whose condition had never been illumined with hope. He saw his class pass through their official lives unrepresented in the councils of the State, though all other interests and classes are there represented. He saw that in the hard campaign, and in the hour of battle, the surgeons of the army were lauded to the skies as the finest fellows in the world, risking their lives for nothing; but when peace came round, their lives became a sad routine—they

remained uncared for—their services were unchronicled and unrewarded.

We will now refer to a few recent personal examples of army surgeons who have served and suffered for nothing, so far as regards military rewards or distinction?—Mr. GUTHRIE was severely wounded in the ordinary discharge of his duty. He has conferred great benefits on the fleets and armies of England by his improvements in military surgery. The late Dr. THEODORE GORDON was thrice wounded—once severely through the neck, when called to the front to save his commanding officer. The officer whose remarkable course of service we now record died lately in Bengal—a climate where many a brave man has died, like him—"not by the sword, but by the fever." DONALD MACLEOD was a native of the Isle of Skye—the most suffering, but most patiently enduring, portion of the British empire during this calamitous year of famine. He served with the Duke of YORK in Holland in 1799; in the Mediterranean, to the end of the war, in 1802; at the capture of the Cape of Good Hope; at Monte Video, under Sir SAMUEL AUCHMUTY; and at Buenos Ayres, under General WHITELOCK. He went to Portugal under Sir ARTHUR WELLESLEY, and was in all the operations of that campaign, to the battle and embarkation at Corunna, under MOORE, BAIRD, and HOPE. He served during the whole of the disastrous campaign of Walcheren, and returned to Spain in 1811. He was in the battles of Salamanca and Vittoria, the siege and retreat from Burgos, the siege of St. Sebastian, and in the actions fought in the neighbourhood of Bayonne and Orthes. He embarked for Canada, and was present at Platsburgh, and in all the operations on the lower frontier. He then returned to Europe, and joined the army in France. He served in the colonies of New South Wales and Van Dieman's Land—in the presidences of Bombay, Madras, and Bengal, in which last he attained to the station of inspector of hospitals.

A circumstance is related of this brave and experienced officer that aroused the sympathies, while it shocked the feelings, of the army: At the siege of St. Sebastian, the subject of this notice was conversing with a younger brother—a captain, like himself, on duty in the trenches,—when a cannon-shot literally knocked the younger to pieces, covering the elder with his blood and brains.

Referring to the instances here briefly recited, (and to which we could add by the score,) we declare that for governments to grant military commissions, and to employ an highly educated class of officers in the manner so well described by the gallant Sir HOWARD DOUGLAS,—*giving nothing in return but pay,*—is wilfully to put a stigma on one of the most important and most deserving branches of the public service.

This is felt in an especial manner by the surgeons of the Indian army, whose pay and allowances are on a high footing of respectability. The exclusion from rewards lavished recently on the most ordinary persons, for the most ordinary services, and sometimes for no services at all, galls their feelings, and damps their zeal. Within a few years, four commissariat officers of the Bengal army have received the honour of the Bath. A captain is stated in the Indian newspapers to have been made C.B., major, and lieutenant-colonel, for services purely civil; and the last honour is reported to have been conferred for the battle of Ferozshah, in which he "was not even present." After this, we might reasonably urge the plea of advancement for the surgeons who actually went through the hard service of those battles. But we only claim, *that they be no longer left behind all other classes.* When we regard the numbers of medical officers, on the other hand, wounded and killed in the recent campaigns in India, we are forcibly struck with the absurdity and injustice of their treatment. The numbers wounded amongst the surgeons employed in the Affghan campaigns we have no means of knowing; but there were eight killed; and if we take the usual proportion of wounded to killed, we shall, for one particular service, reckon a goodly proportion of officers "who have served and suffered for nothing."

No men are more alive to the fact, that honour is the vital principle of armies, than our military and naval surgeons. But let them remember, that while concert, confidence, and union, aided by firm but respectful remonstrance, will secure the objects in view, there is nothing, on the other hand, so really weak as numbers devoid of energy, or benumbed by selfishness, mistaken in its aim.

We would also have them remember, that it is the merest weakness and folly to suppose that any Government, now-a-days, can declare any other *ultimatum* than a fair and just equality of reward to its public servants. To act on the contrary view—to *suppose* an inflexibility—is to give up all chance of doing good. Courts, and even cold courtly generals, "without passions or præcordia," must give way to experience, truth, and reason. Lastly, we would assure our friends of the army and navy, that only a few minutes' discussion of their cause is now required, in the House of Commons, to settle the question of their grievances *for ever;* and that discussion may take place ere long.

ROBERT JACKSON looked, fifty years ago, for improvement in military medicine, to "the legislative branch of the Government," there being then, as now, a "presumption, amounting almost to proof, that there is no chance of obtaining it from the executive."

These prophetic words receive vast additional force from the different character and constitution given to the "legislative branch" of our day, by the withdrawal, by Lord GREY, of "the bearing-rein from the English people."

We live no longer in benighted times, when Government was deemed an amusement and an inheritance of the aristocratic classes, rather than a trust for the benefit of the people.

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A CIRCULAR has, within the last few days, been forwarded to the Fellows of the Royal College of Surgeons of England, worded thus:—

"SIR,—I beg to inform you that the ANNUAL DINNER of the FELLOWS of the ROYAL COLLEGE OF SURGEONS OF ENGLAND will take place on THURSDAY, July 1st, 1847; and that JOHN SMITH SODEN, Esq., has kindly consented to preside, and the following gentlemen to act as stewards. * * * * *

"CHAS. HAWKINS, Hon. Sec."

Respecting this document, several communications have reached us. We have been asked, for instance, who fixed the day of the dinner?—who appointed Mr. CHARLES HAWKINS to the post of honorary secretary?—by whom, or on what principle, were the stewards selected?—and, above all, on *what principle* is such a dinner to be held? Several of our correspondents are of opinion that it is an offensive proceeding with respect to upwards of thirteen thousand members of the College—*highly and particularly offensive*, considering the

manner in which more than four-fifths of the present Fellows were chosen by a corrupt and condemned council. It certainly is notorious that many of the Fellows were not chosen in consequence of their merits, although, beyond doubt, they are a body of very respectable gentlemen. But are not the *members* of the College equally respectable? Confining a professional dinner to *a particular class* in a College, savours of vanity, of conceit, and of empty boasting. If there be not in it the evidence of an attempt to attach importance to a thing which in itself is worthless, and which renders, therefore, the whole affair *a species of quackery that ought to be scouted*, there is, avowedly, in it a sign of *cliqueism*, that calls for the stern reprobation of the great body of the profession. As the arrangements for the dinner for the present year seem to be completed, and as, we presume, it must now be held, we forbear offering any further remarks on it at this time; but should the offensive project be repeated; should such a proposition again be made, we shall feel it to be a duty to hold up the active agents in the proceeding, viz., the Chairman and Stewards, to the observation, and, we believe, the consequent indignation of our professional brethren. From the names which we observe in the list of stewards, we are inclined to believe that several gentlemen have consented to act in that capacity, without reflection on the character of the project in which they are engaged. If the gentlemen who became Fellows *by examination* had thought it right to set such a scheme in motion, infinitely less insulting and obnoxious would have been the proposal; for in that case it would have emanated from a body of persons who may have thought that they had just grounds for considering that by *merit*, and by that alone, they had been enabled to obtain what they regarded as a superior title and a superior position. But, with respect to the *nominated* fellows, who were *pitchforked* into their position, there is no foundation for *their* pretensions; and for such persons to arrogate to themselves that they belong to a higher class of practitioners than their neighbours, and that they are better qualified, and entitled to more public respect and confidence, than the members generally, the claim is too preposterous to be tolerated; in fact, if it be renewed in another year, its authors shall receive precisely that kind of notice which their presumption will deserve.

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In another column will be found a letter from "An Assistant-Surgeon, R.N.," describing the position of the young medical man on shipboard. The details are not less disgraceful to the entire naval service than it is a stigma to the medical profession. On a former occasion we pointed out the high qualifications demanded of the medical man before he enters the navy, and the treatment to which he is afterwards obliged to submit. In age he must be from twenty to twenty-four, on his admission; in intellect and professional acquirement he must be ripe and cultivated; yet the moment he gets his commission, he is made the companion and equal of boys both in years and education. He is obliged, before his admission to the service, to have learned *his* profession, and to have obtained his full professional diploma, (for the second examination, on becoming full surgeon, is little but matter of form,) yet he his herded with youths who are learning the alphabet of *theirs*. In the navy regulations, much is said about the importance of extra-certificates and diplomas, and the preference accorded to their possessors, but as regards treatment they have to submit to exactly that which an apprentice or medical pupil might expect. The navy demands a maximum of qualification, and then treats it with a minimum of respect. Those in authority do their best to quench all self-respect and honourable feeling in the young medical officers, and then they look for such noble and devoted services as those rendered by M'William on the Niger, and at Bona Vista, and by Sidney Bernard on board the Eclair.

On every side, the just rights of professional men are trampled on, but this state of things in the navy cannot last; it will not bear public exposure, and that, at least, we are determined it shall have.

The higher men in the medical department of the navy ought to exert themselves to remove the gross injustice practised towards the assistant-surgeons. Not a single medical man who has been, or who now is, connected with the service, but would be the more respectable for the removal of this evil. We should have thought the men of our profession, who either are or have been in the naval service, sufficiently influential to have brought about so just and necessary a reform without public discussion. Surely such men as Sir James Clark, Sir William Burnett, Sir D. Dickson, and Sir Richard Dobson, might, we should imagine, do much towards remedying the just complaints of the assistant-surgeons. Their present position ought not to render them indifferent to the welfare and credit of their younger brethren.

No excuse can be drawn from the class of men who form the body of assistant-surgeons. They are such as to deserve liberal treatment from Government, and from the naval service. As our correspondent remarks, "they are all members of some of the Royal Colleges of Surgeons, and many of them, in addition, have obtained the degree of doctor of medicine." Some of the best educated young men in the profession are at present acting as naval assistant-surgeons, and "denizens of the midshipmen's berth," if their service is on shipboard. On looking over the navy list, we find, that such men as the younger Hooker, the botanist, and Harry D. Goodsir, are assistant-surgeons; and also several graduates and undergraduates of the University of London. Among these, we may mention, T. H. Huxley, a medallist of 1845; Alfred Jackson, M.B., and University Exhibitioner of 1843; and F. J. Brown, M.D., both of London and Edinburgh; and many others, with different diplomas, who have distinguished themselves during their educational career, might be mentioned.

When the matter is thoroughly exposed, the interests of the navy will demand a reform in this matter. After its public discussion, young medical men of spirit and acquirement, such as are needed for the navy, will not enter the service so freely as they have hitherto done. There is something which would be positively grotesque, if it were not an insult to our profession, in the disparity between the official announcement from the "medical department of the navy," that in the selection of assistant-surgeons "a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the universities of Oxford, Cambridge, Edinburgh, Dublin, or London," and the rules of the naval service, which, after the said M.D.s are caught, shut them out from the ward-room and the society of officers equal to them in rank, consigning them to the noisy midshipmen's berth, and the luxury of "a chest of three feet

six in length," to serve for "library and wardrobe;" while a cabin is given to the gunner, boatswain, carpenter, and engineer.

Expediency, no less than justice, imperatively demands that such disgraceful anomalies should be amended.

## MEDICAL REFORM IN FRANCE.

It has often happened in general politics that similar principles have at the same time agitated different nations; and in the records of philosophy many instances are enumerated of the discovery, or of the elucidation, by different individuals, of some great fact or phenomenon, independently of each other, but simultaneously. During the present year, when a Bill has been introduced in this country to amend and regulate the profession of medicine, and when the minds of all the medical practitioners in the realm are earnestly directed to the subject, our medical brethren in France are equally interested in the fate of a measure brought before the French legislature, to improve the medical profession in France. The French "Project of a law for the teaching and practice of medicine in France," appeared on the 15th of January in the present year, and, consequently, almost at the same time as the Registration and Medical Law Amendment Bill, as published in The Lancet, and subsequently introduced into parliament.

Now, as many of the evils infesting the profession in France are similar to those which exist in our own country, we should inform ourselves as to the remedies which our Gallic neighbours propose, both those which are comprehended in their "Project," and those contained in any reports or remarks on them which have been published.

Of the chiefs evils affecting the medical profession in France, we may obtain an account from the Report made upon the "Projet de Loi," by the Count Benguot, before the Chamber of Peers. The first is, that the law now in operation having been framed in former times, and adapted to circumstances differing from the present, is replete with error and omissions, neither providing for the general interests of society, nor for the particular interests of those immediately affected by it. Again: medical men have accumulated to an extent injurious to their own interests in large towns, leaving the country as an open field for ignorance and empiricism. Further: although practitioners enjoy equal rights and privileges, yet this equality is injurious, from the fact that some have not entered into the practice of their profession until they have made great sacrifices, after a lengthened course of study, and the subjecting of themselves to the most perfect tests of qualification, and to the most rigorous examinations, whilst others have done the same only after more limited studies, incomplete tests, and valueless examinations. Lastly: however well-informed, however laborious, the physician may be, he cannot reckon upon a favourable career, for the law extends him but an ineffectual protection, with which the quack may sport without fear or shame; and the legislature, alive to the welfare of other liberal professions, seems indifferent to that of medicine, whose influence on the well-being of society is so extensive and powerful.

The law in force was promulgated during the Revolution, and admitted two orders of medical practitioners — viz., doctors in medicine or in surgery, and "officiers de santé," the latter being an inferior grade, admitted to practice (but this only in the department in which they were examined) after a less extended course of study than that required of candidates for the doctorate, who were to be four years at a school, to undergo five examinations, and to produce a thesis. The same law also established a school of pharmacy in each town where there then existed schools of medicine. In 1808, the schools were constituted faculties of medicine, and the University founded.

With this sketch of the state of the profession in France, and of the laws relating to it, the account we proceed to add of the chief clauses of the Bill now before the French Chamber, will be better understood. The "Projet" was introduced by the Count de Salvandy, the secretary of state for the department of public instruction, and grand master of the University. It contains five headings and forty clauses. The first heading concerns "the conditions for the practice of medicine." Its provisions are to the effect that no one shall practise medicine in France, unless furnished with a regular diploma of doctor in medicine, and duly registered; that none shall be admitted as doctor in medicine unless he have a degree of bachelor in arts, and possess the certificates of study required by the present Act. Every Frenchman having the diploma of doctor, and being registered, may freely practise his profession in any part of the kingdom, and bear the title of physician or of surgeon; but whoever shall assume either of those titles without having fulfilled the required conditions, shall be punished by imprisonment for six months or two years; and for a second offence, for two or five years. A Frenchman or foreigner, with a foreign diploma of doctor, cannot practise in France, except by royal authority, and after a declaration to the effect of the equal value of that diploma and of his qualifications, has been pronounced by the council of the University, with those required by this Bill. With regard to the foreigner, the authority to practise is always revocable, and may be limited to a department or to an arrondissement, or to his countrymen in France. All infringements of this article to be punished in the same manner as before laid down. "Officiers de santé," regularly qualified according to the old law, may continue to practise, but may not assume any other title; but they may present themselves for the doctorate if they possess a degree in arts, and may count one year of practice antecedent for six months of study. The profession of medicine is incompatible with the employment of apothecary, (pharmacien;) and every association, secret or open with it, is liable to the preceding penalties. But one practising in a place where there is no apothecary within two miles, may keep medicines by him; but shall then submit to all the laws regulating the employment of pharmacy. Lastly, all those tainted by crime cannot practise medicine.

The next heading refers to the conditions of study, and provides for two classes of schools—viz., preparatory schools and faculties of medicine. The degree of bachelor in medicine may be conferred by either; but the licence in medicine and the degree of doctor only by the latter. The duration of study for the degree of bachelor is two years; for a licence, four years; and for the doctorate, five years. In order to enter on the medical classes the pupil must have a degree in letters, (bacheliers-lettres;) and before his fourth year, must have become a bachelor of arts, (bacheliers-sciences.) Some clauses follow to provide for those who have already entered on their studies; and the third heading respects "the teaching of medicine." The first two years are to be passed in the preparatory schools, which are to impart instruction in those branches of knowledge which are fixed by the University programme; the preparatory schools to be placed under the jurisdiction of the State, and the necessary finances to be provided by the several communes. The instruction is to be afforded by professors and assistants, belonging to the medical faculties. The assistants (agrégés) are appointed for ten years, after which their engagement ceases. The professors and assistants, both of the preparatory schools and of the faculties, are to be elected by concours, and appointed by the minister of public instruction. No one can become a professor in a preparatory school unless a doctor in medicine, and twenty-five years old; nor a professor in a faculty unless he be one previously in a preparatory school, or at least, a member of the Institute, or of the Royal Academy of Medicine, or a chief physician to a city or chief town of 20,000 inhabitants.

The next heading is concerning the foundation of scholarships, or bursaries for deserving students, to be held on the condition to practise in any department ordered them for ten years, and the institution of provincial (cantonaux) physicians. The duties of the latter are specified as being, to visit the indigent; to succour those suffering from epidemics; to attend to all the departments of medical jurisprudence, everything concerning which is to be referred to them; to transmit to medical councils to be established, or to competent ministers, such facts and documents as may serve the interests of science and those of public hygiene. The clauses of which the above is a brief analysis are those which more particularly concern the medical profession, the twenty-two remaining ones are comprehended under the fifth heading—viz., "Instruction in Pharmacy, and Conditions of Study," and, as the title indicates, refer to the study and qualifications for an apothecary (pharmacien) chiefly; but two or three clauses provide for the preparation of a pharmacopœia and its publication, and for its revision every third year.

Such is an outline of the Bill as brought forward by the French minister of public instruction, one which certainly seemed to fulfil, in an effectual manner, the objects contemplated. When the Bill was introduced, a commission of the Chamber of Peers was appointed to consider it, and to make a report suggesting any amendments which might occur to them or be advanced by others. During its sittings, the commission received various deputations and letters from different bodies and individuals; and in a short time prepared a report

which was read by the Count Benguot, and delivered, with the "Projet de Loi," in an amended form, to the Chamber of Peers. The Report pronounced favourably concerning the Bill, as is evident from the following quotation. Having observed that little change was contemplated in the clauses on the teaching of medicine from that already in force, and which is highly satisfactory, it goes on to say: "The most important part is that which relates to the practice of medicine. The abolition of the class of officiers de santé, and of medical juries, the creation of medical councils and provincial physicians, the establishment of an effectual check to illegal practice, and of a table of matters which disqualify for the exercise of the profession,—such are the new means, and, in our opinion, sufficient ones, that the government offers in order to give to the medical profession that cohesion and strength which it requires, and to remove its grievances as far as possible. But in any such matter the legislator does not possess any unlimited power, but it is necessary that the medical body afford him their sincere aid in order to overcome all the difficulties which always hover around new laws and new institutions. This help will not be denied him, and French physicians will perceive that this law, superior to any by which their profession is regulated in other European states, can satisfy their chief interests, their true want, if not all their wishes, and that it will remain as an evident witness of the justice and of the benevolence of the government and of the Chambers towards them."

We will now present to our readers a notice of most of the amendments proposed by the Commission, omitting those concerning the mode of election of professors and assistants, and those more immediately relating to pharmacy and its practice. The original plan provided for the conferring of a degree of bachelor in medicine after two years' study, and of a licence to practise after four years. This the Commission objected to, as originating useless grades in the profession, and as tending to favour entering into practice of mere undergraduates; and, consequently, they reserved only the title of doctor, and regarded it as the only qualification for practice, but, at the same time, diminishing the period of study for the doctorate from five years to four. They would recognise but two special departments of medicine—viz., that of dentist and that of midwife, (sage-femme;) and to regulate these, they would require candidates for a certificate to possess the following qualifications,—viz., for a dentist—to have served with a recognised dentist for four years, or to have studied two years at a school or faculty of medicine, and to pass two examinations; for a midwife—to be at least eighteen, and not more than thirty-six years of age, to be able to read and write correctly, to be of a moral character, to study for two years, and to undergo two examinations. Orthopœdists and bandagists are not recognised as special professions, and they are disqualified from making any appliances, save under the direction of a physician, and from having patients under their care in their houses, for any deformity, except with the aid, and under the responsibility, of a physician. The Commission have also added the following very useful and necessary clause, such a one as is greatly needed in this country—viz., It is illegal to publish any advertisement, by the medium of journals, prospectuses, handbills, cards, or notices printed and distributed, having for its object to advertize advice, consultations, or any particular method of medical treatment. They have rejected the introduction of bursaries into the schools and faculties, as tending to favour a too ready admission into the profession, and so a too great number of medical men. They fully coincide with the law, however, in the abolition of that lower grade of practitioners known as "officiers de santé," as injurious to the profession and to the public, aiming thus to render the profession uniform as to qualification, rights, and privileges, and to give it a bond of union and concord, by removing jarring interests. To bring about this desirable end, they have proposed a still further relaxation of the law, in favour of the officiers de santé now in practice, and who, it seems, are nearly as numerous as those at present qualified as doctors, by allowing them to present themselves for the diploma of doctor after six years' practice, making them write a thesis and undergo two examinations.

The Commission, moreover, fully concurred in the government plan of legalizing an order of provincial district (cantonaux) physicians, which, it seems, have been voluntarily established in some departments, to visit the sick poor, to succour those afflicted by epidemics, to vaccinate gratuitously, to perform all the processes of legal medicine which should be entrusted to them for justice by the administration, and to transmit to the medical councils the facts and documents relating to science or to public hygiene which they may have collected.

The amended Bill supplies, also, some clauses relating to the institution of medical councils, having first abolished those known under the name of medical juries. A council is to be formed in every department, composed two-thirds of physicians and one-third of apothecaries, appointed for five years by the minister of public instruction. In those departments where there are no superior schools of pharmacy, nor preparatory schools, such of the council as are appointed by the administration shall have the power of visiting the shops of apothecaries. The councils shall prepare the lists of qualified practitioners, and forward them to the competent authorities and shall signify to them the names of all persons who illegally practise, or infringe the clause relating to medical men exercising pharmacy. They also shall carry out all the measures of medical police prescribed them, and likewise those operations in medical jurisprudence committed to them for the ends of justice; and shall collect documents relative to the hygiene and to the medical statistics of the department, and shall execute any scientific or medical commissions entrusted to them by the administration.

In the original plan, the same punishment befel the offender of any clause or portion of one, although the heinousness of the offence varied greatly; the Commission, observing this, have proposed fines in money for some of the lesser infringements, such as default of registering, for which, indeed, imprisonment, from six months to two years, was too severe a punishment.

The French medical press earnestly entered into an examination of the original Bill, some of the journals considering it clause by clause, and their opinion of it, as it stood, was unfavourable, although they could not help commending many of its clauses. Manifestoes were got up against it by societies, and by the Parisian students, who thought it tended to lessen the independence of the profession, by placing it so much under government control. The glaring fault of a severe punishment by imprisonment being affixed to all delinquencies, great and small, was at once seen and protested against; it was thought too severe to punish the officiers de santé for assuming the title of physician or surgeon, to which they have been used, although that of doctor is unallowable to them; that too much was required of the officier de santé if he wished to acquire the doctorate. It was regretted that the minister had not specified what particular branches of the profession should be recognised as special, nor what regulations such should be subjected to; and the existence of the majority of them was considered useless and mischievous. The journals further deemed that the law put too much in the power of the civil tribunals to declare who was incapacitated from practising his profession, on account of any assigned crime or misdemeanor, to do which, in many cases, a medical council would be much more fitted; and consequently, the institution of medical councils, for the purpose of discipline in the profession, was advocated.

By the amended "Projet," as drawn up by the Commismission, and of which we have given an outline, most of the objections which were urged against the original Bill have been removed, and therefore it has been brought to more nearly meet the wishes of the profession generally.

For a week or two past, the Bill of the minister, the Count de Salvandy, has been the subject of discussion in the Chamber of Peers; but its progress, from the many displays of oratory which have been attempted, and of which our neighbours are so fond, has been but slow. Baron Flourens has advanced an amendment of his own, providing for two grades of medical practitioners: one of licentiates, who may practise after three years' study in a medical school, or two years in a school of medicine, and one in a faculty of arts, but who are not eligible to professorships, or to posts in hospitals; the other of doctors, who require five years of study; and enacting, further, that preparatory schools may have the privilege of entirely educating for, and of giving, the grade of licentiate in medicine, whilst faculties of medicine can alone give the title of doctor. This amendment at once met with the opposition of the journals, and was lost when it was put to the vote in the Chambers of Peers. In the discussion of the several clauses, the order adopted in the amended Bill of the Commission has been kept to; consequently, the Chamber has been occupied, during its late sittings, with the heading relating to the provisions for affording instruction in medicine. The result of the voting, so far as it has yet proceeded, is to establish two orders of schools—preparatory and medical faculties: the former to educate pupils for the first two or three years only; the latter alone to confer the degree of doctor; the preparatory schools to be put under the control of the State; the faculties to be composed of professors and assistants, (agrégés,)

the latter to be appointed for ten years. But the most remarkable event in the progress of the French medical Reform Bill is, that the election of professors by concours has been entirely thrown aside, on a motion by Baron Cousin, providing for their appointment by the minister of public instruction, who is to select from three lists, of two persons each, sent in severally by the Academy of Sciences, the Academy of Medicine, and the members of the faculty in which the vacancy occurs.

Thus, while in this country just legislation is prevented by a host of selfish interests, there is every prospect that our brethren in France will obtain, during the present year, an entirely new code of laws, fitted to uphold the credit and position of the medical profession, and to provide for the welfare of the French nation. Not only medical men, but the greatest names of France, have entered warmly into the subject, and exerted themselves to promote the welfare and advancement of the profession. With all the advantages of our free institutions, it affords a striking contrast to what has occurred in this country. In medical legislation we are a century behind the French nation.

## MEDICAL REGISTRATION COMMITTEE.

A Meeting of this Committee was held last Monday, at the Freemasons' Tavern; Dr. Lankester, F.R.S., in the Chair.

A large number of petitions in favour of the Bill were received, to be forwarded for presentation to the House of Commons.

The Sub-Committee announced that they had authority to annex to the Protest against the proceedings of the Council of the National Institute the names of the following gentlemen:—

Samuel Clarke, Whitby; Robert Calvert, Drogheda; W. T. Borthwick, Castle House, Chesterton; John Lilly, Cambridge; Frederick John Lilly, Cambridge; Thomas Hodson, Egremont, Cheshire; D. Sinclair, Halstead, Essex; Charles Clarke, Silver-street, Notting-hill; H. S. Taylor, Liverpool; J. B. Barrow, Liverpool; J. Bruce, Liverpool; T. Inman, Liverpool; William J. Macarsie, Clay-cross, Chesterfield; William Furnivall, Hutton, near Weston-super-Mare, Somersetshire; R. Falder, Alnwick.

That the members of the Institute deeply resent the conduct of their Council, the following letters, selected as a specimen, will clearly prove:—

16, Rodney-street, June 13th, 1847.

Dear Sir,—As far as I can recollect the Protest, in The Lancet you refer to, I have no objection whatever that my name should be attached thereto. I do not see upon what rational or at least reasonable grounds, the Council of the Institute can oppose Mr. Wakley's Registration Bill, and so consider myself perfectly at liberty to express my disapprobation of their conduct.—I am, dear Sir, yours very sincerely, T. Inman.

To A. H. Hassall, Esq.

Liverpool, June 12th, 1847.

Dear Sir,—In reply to a letter from you, received this day, I beg to inform you that I can have no possible objection to have my name attached to the Protest alluded to, believing as I do, that the opposition offered by the Council of the National Institute is factious, and contrary to the wishes of the majority of the members of that Association.—I am, dear Sir, yours very faithfully, B. Barrow.

To A. H. Hassall, Esq.

Liverpool, June 11th, 1847.

Dear Sir,—I shall feel obliged by your attaching my name to the Protest against the conduct of the Council of the National Institute, in opposing Mr. Wakley's Bill. Every effort has been made in this town to ensure the success of the Bill, and a separate petition has been sent from the medical officers of every public charity, in its favour. I may say that, with one or two exceptions, the members of the medical profession of this town are extremely anxious that the Registration Bill should be carried this session.—I am, yours most obediently, J. Bruce.

To A. H. Hassall, Esq.

Prescot-street, Liverpool, June 12th, 1847.

Sir,—Having signed the petition of the members of the National Institute, practising in Liverpool, I cannot have any objection to your adding my name to the Protest. I consider the Council of the National Institute have most shamefully betrayed the confidence reposed in them by the members; the least they could have done, before offering any opposition to Mr. Wakley's Registration Bill, would have been to canvass the opinions of the members on the subject, but this would not have suited their purpose; they well knew that had they adopted this course, their boasted thousands would at once desert their ranks. The part they have taken does not speak much for their honesty, since they would wish the legislature to believe that they represent a large portion of the profession; whereas, if the truth were known, I suspect in this point they represent but very few. The Council would have shown their wisdom had they kept their tongues quiet, but now it is too late; the members have witnessed their duplicity, and are forsaking them in disgust. Their days are numbered; and ere long, their idol Institute—"the head and home"—will be spoken of as a thing that has been.—I am, Sir, yours respectfully, H. S. Taylor.

To A. H. Hassall, Esq.

Enfield, June 12th, 1847.

My dear Sir,—I think you will find my name appended to the protest addressed to the Council of the National Institute, and published in last week's Lancet. I am favourable to the Registration Bill, and you may at any time use my name to ensure its success.—I remain, my dear Sir, yours faithfully,

To A. H. Hassall, Esq. W. G. Taylor.

A letter was received from S. M. Phillipps, Esq., acknowledging the receipt of the following Memorial, addressed to Sir George Grey by the Registration Committee:—

*To the Right Hon. Sir George Grey, Bart. M.P., her Majesty's principal Secretary of State for the Home Department.*

The Memorial of a Committee appointed to watch over and promote the passing of a Bill now before Parliament, intituled "A Bill for the Registration of Qualified Medical Practitioners, and for Amending the Law relating to the Practice of Medicine in Great Britain and Ireland," showeth,—

That your memorialists are legally-qualified practitioners of medicine, holding diplomas from the Colleges of Physicians and Surgeons and other bodies, granting licences to practise the various branches of the medical profession. That the Committee was appointed at a meeting of legally-qualified medical men, held in London, May 3rd, 1847, and that they represent the opinions and sentiments of a very large proportion of the medical practitioners of the United Kingdom, as is proved by the numerous petitions presented in favour of the Medical Registration Bill now before the House of Commons.

That the medical profession of this country is composed of the graduates and licentiates of no less than seventeen universities, corporations, or societies, none of which institutions have the power of granting to their graduates or licentiates permission to practise throughout the United Kingdom. In consequence of this, those who have obtained licences to practise in one part of the United Kingdom are not legally recognised in another; and they are frequently compelled, at a great loss of time, and at a great expense, to undergo other examinations, after having been declared by the statutes of the realm capable of practising their profession; and this, not only as regards England, Scotland, and Ireland, but in the instance of the London College of Physicians, as regards London and the provinces.

That in the various medical universities, colleges, and societies, very different courses of study are required, and very different kinds of examinations instituted—some of the courses of study being of the most extended nature, whilst others are evidently insufficient to supply the medical student with the necessary amount of scientific information. That the examinations, even where most rigorous, are not what they ought to be—practical, and do not test the qualifications of a man to practise medicine; whilst some of them are so trivial as scarcely to offer a criterion of professional skill.

That this difference in the requirements of the examining boards is the source of much evil in the profession, some of the boards offering a low test for a low fee for the purpose of increasing the number of their graduates or licentiates; whilst others require a peculiar test with a high fee, for the purpose of excluding the great bulk of the practitioners of medicine, and of reserving to themselves a higher rank in the profession.

That the differences thus produced are the cause of incalculable dissensions and heartburnings, and demand that some effectual means be taken to suppress practices so highly detrimental to the profession.

That under the present condition of the medical institutions of the United Kingdom the members thereof have no control over, or influence with, the various councils, senates, and

examining boards, who are entrusted with irresponsible power, and who have used this power rather for the purpose of aggrandizing themselves and for their own benefit, than for the welfare of their members.

That these powers have been entrusted to the above bodies, not only for the good of the medical profession, but also for the advantage of the public, by preventing ignorant and illiterate persons from practising physic.

That so far from this end being obtained, there never was a period in the history of our country where the ignorant, the illiterate, and the unexamined, could practise physic with so much impunity, as is proved by the fact that more than 300 persons, ascertained to be totally unqualified, besides chemists and druggists, calling themselves physicians, surgeons, and apothecaries, are at this moment practising in London alone.

That it would therefore, on all accounts, be desirable that the examining boards and councils of our medical institutions should be responsible to the government, at least until such time as measures can be taken to make the executive of our various medical institutions responsible to the members whom they ought to represent.

That the medical profession, although governed by seventeen institutions, is not protected from the injury which they sustain from ignorant and unqualified persons being allowed to practise all branches of the profession; and that the public is thus exposed to the dangerous consequences which result from no restraint being placed on the practice of persons falsely calling themselves physicians, surgeons, and apothecaries.

That although the members of the different medical institutions are registered in their respective colleges, &c., yet, from the want of a proper publication of the registers, but more especially from the want of a summary power of prosecution vested in the magistracy, to be necessarily enforced against all persons practising without possessing any licence or diploma of the United Kingdom, no broad line of distinction is drawn between the educated practitioner and the ignorant pretender.

That the public opposition to the Medical Registration Bill has eminated chiefly from a body who have already memorialized her Majesty's government on the subject of medical reform, under the title of the Council of the National Institute of Medicine, Surgery, and Midwifery. That amongst your memorialists are several members of the said Institute, who do not feel themselves represented in this respect by their council, and who have protested against their opposition to this Bill; and who, in the course of a very short period, obtained the permission of more than seventy other members of the Institute to attach their names to a Protest against the course of opposition which the council of that body have thought fit to pursue towards the Medical Registration Bill.

That your memorialists, having carefully considered the details of the Medical Registration Bill now before the House of Commons, believe that it is well adapted to remedy the evils to which they have referred, and they trust that her Majesty's advisers will see the necessity and advantage of giving their unqualified support to that measure, which your memorialists feel assured is as much calculated to confer a great boon upon the community at large, as it is to elevate the character and promote the interests of the medical profession.

EDWIN LANKESTER, Chairman.
JAMES RHODES, } Hon. Secs.
W. M. POWELL, }

Freemasons' Tavern, June 16th, 1847.

## Correspondence.

### ON MEDICAL FEES.

*To the Editor of* THE LANCET.

SIR,—The profession are deeply indebted to Mr. Henry Smith for his just and independent efforts to set at rest the question of fees to medical gentlemen to whom the Insurance Offices apply for their professional and confidential opinion on the eligibility for insurance of a given life or lives.

Oblique and distorted must that vision be which does not now see this question in its fair and upright position.

The profession are not less indebted to Sir C. M. Clark, Bart., for his candid and generous statement, (now that he has left our ranks,) quoted in THE LANCET, p. 631. Let us "help ourselves and each other." An excellent motto, verily! Let no one view his own case as isolated; but let one and all, on all occasions of wrong, make a forcible appeal to the public for the good of the profession.

It is from this motive that I now address you.

I was called upon, some time ago, by a gentleman, (as I supposed,) the mayor of a provincial city; and was consulted by him many times respecting a patient, (a beneficed clergyman of £2000 a year,) in regard to whose pecuniary matters he was agent, (for he was an attorney.) The questions were—Whether his client was insane, and—What course should be taken for his welfare. Besides many consultations with this gentleman in town, I was thrice directed by him to proceed to the distance of fifteen miles to visit his client; and I was twice authorized by him to take another physician with me—making five journeys of thirty miles each, amounting in all to 150 miles.

For moderate fees for all this I have applied to this attorney in vain. He refers me to another gentleman into whose hands the patient's affairs have passed, but of whom I know nothing, except that he, at the first, refused to pay the just account of a medical gentleman to whose house this same patient went, but who was not to be so trifled with; a *writ* having been served, the thing was soon settled.

But, Sir, what is a physician to do under these circumstances? *His* fees are a debt of honour. The appeal on the plea of honour is made in vain. Can he not, even at common law, demand at least his expenses and the value of his time? For I must add that we have never been reimbursed even our actual expenditure!

I must also add, that I have appealed to the successor in the mayoralty of the attorney to whom I first alluded, and to the daughter of the patient, (a lady of forty,) whom I saw with her father, equally in vain.

I hope, Sir, you will deem this a proper subject for publicity, and allow me, on some early day, to address you upon it again more in detail.

Well might Sir C. M. Clark say, "Mankind care little for the profession"! It may also be said, with too much truth,—that, when the law is out of the question, they care little for their own honour. What is left, but an appeal to the public?

I am, Sir, your obedient servant,

London, June 13th, 1847. M.D.

### FEES FROM LIFE ASSURANCE COMPANIES.

*To the Editor of* THE LANCET.

Uxbridge, June 14th, 1847.

SIR,—In your number of last week you draw attention to the Legal and Commercial Assurance Office, and its directors, and quoted an extract from the Address in their circular, dated February, 1847, showing their extremely liberal conduct towards the medical profession, &c.

As I am desirous that you, as well as my medical brethren, should fully understand their position with this liberal office, I subjoin copies of a correspondence I have had with these worthies, through their Secretary, and merely remark, that I intend to finish the affair by issuing a summons to the County Court, under the Small Debts Act, held at Uxbridge, for the remainder of my fee.—I remain, Sir, your obedient servant, WILLIAM RAYNER.

P.S.—You will perceive a good profit is attached to this scheme of demanding two guineas for expenses, and paying the doctor ten shillings and sixpence, making a clear profit of one guinea and a half by every application. I should observe, the assurance, as might be expected, was not effected.

(COPY.)

Uxbridge, Nov. 1st, 1846.

SIR,—A few days ago, I returned to your office the answers to the several queries contained in your letter respecting Mr. Hall, together with a statement that my fee for the same was one guinea. To this I have had no reply. I therefore shall defer answering any more questions until my fee is remitted, and remain, Sir, your obedient servant,

To J. C. Hardy, Esq., WILLIAM RAYNER.
Legal and Commercial Assurance Society.

The questions above referred to related to another party, who was also about to insure.

(COPY.)

Legal and Commercial Assurance Society,
London, Nov. 7th, 1846.

SIR,—In reply to yours of the 1st instant, I beg to state that the fee allowed by this Office, for Medical Reports, is ten shillings and sixpence, as by the second form you received, you will perceive, and in no instance has a greater sum been

paid; your claim for one guinea cannot, therefore, be acceded to. In pursuance of our usual course, I forward you, however, an order for the amount I have named, and shall be happy to receive your report in the second case referred to you, on the same terms. With many apologies for not having previously answered your note, I am, Sir, your obedient servant,

W. Rayner, Esq. J. C. HARDY, Secretary.

(COPY.)

Uxbridge, Nov. 8th, 1846.

SIR,—In reply to yours of this morning, enclosing a post-office order for ten shillings and sixpence, I beg again to state that my fee is one guinea, and that I decline to answer any questions relative to any other party, until my entire fee is remitted. I cannot allow the Society to assume to itself the power of determining what amount of fee I am to receive, nor can I see its justice in offering so paltry and pitiful a sum, when it has previously obtained from the party desirous to insure, no less a sum than two guineas, for the express purpose of paying the expenses of an inquiry. I have therefore to request a further remittance of ten shillings and sixpence, which I shall enforce, if not complied with immediately; and I beg the Society to understand, that I shall expect the fee of one guinea (the sum I receive from every other office) in any future transactions with the Society, and remain, Sir, your obedient servant, WILLIAM RAYNER.

To J. C. Hardy, Esq.,
Legal and Commercial Assurance Society.

(COPY.)

68, Cheapside, Nov. 9th, 1846.

Mr. Hardy has to inform Mr. Rayner of his having received Mr. Rayner's letter of yesterday's date.

## CASE OF MR. W. H. OSBORNE.

*To the Editor of* THE LANCET.

SIR,—My name being frequently mentioned in the letters and paragraphs which have appeared in "THE LANCET" regarding "Mr. Osborne's Case," I think it due to myself and the Medical School of Glasgow to state what I *know* of his certificates.

Some months ago Mr. Belfour enclosed the copies of the certificates which Mr. Osborne had procured for attendance on my lectures on surgery, and for hospital attendance in the Glasgow Royal Infirmary, and begged to be informed if they were correct. I replied that the certificate of attendance on my surgical lectures was correct, but that the hospital certificate was false, and had either been falsified or obtained on false pretences. To this letter I had no answer, and not having seen the schedule, I am not in a position to say which of these suppositions is correct.

I am, Sir, very obediently yours,

Moore-place, Glasgow, June, 1847. J. A. LAWRIE.

*To the Editor of* THE LANCET.

SIR,—I address you on the subject of John Henry Osborne, at the suggestion of Mr. Fosbrooke, with whom I have communicated on this matter.

The object I have in view is to render the deception in Osborne's case more apparent. Now I first became aware of his being a member of the College of Surgeons last week from the pages of THE LANCET. On looking over the schedule as published in THE LANCET, I observed two falsehoods—viz., Mr. Lyon's certificate for a course of lectures on surgery in the summer of 1844. I am aware of a course of surgical lectures delivered in May, June, and July, 1842, by Mr. Lyon; and also I am aware that Mr. Lyon advertised in April, 1845, a course on surgery, to be given between the months of May and August of the same year, if a sufficient number of students came forward. Now it is a little remarkable that Osborne should have attended these lectures in 1844.

As to the hospital attendance from November, 1843, until August, 1845, the signatures of the surgeons who were able to attest the truth are wanting. I allude to the circumstance of Drs. Buchanan and Pagan being in office, jointly, until May, 1844, when Dr. Hannay succeeded Dr. Buchanan. This is six months after the apparent commencement of Osborne's attendance at the Infirmary. It may be a trifling affair to certify for six months more than a surgeon is aware of, but surely twenty-one months' attendance on the practice of a hospital ought to be certified by the surgeons attending that hospital.

Was Dr. Lawrie in a position to do so on the 1st of August, 1842? I answer no. At this date he could only have been for three months surgeon to the Infirmary, as Dr. Pagan was in office up to the 30th of April, when his time would expire, and Dr. Lawrie, on the 1st of May, would take charge of the wards.

I was acquainted with Osborne in Glasgow in the session of 1844-45. I knew him as a first-year's student; indeed, he told me so himself; also that his father had predated the indentures, to enable him to go up for examination at the Hall, by the curriculum prior to 1835.

I am quite confident that he did not attend the Glasgow Infirmary in the session 1843-44. I am not able to say when he entered to the Infirmary, but the register kept by the superintendent will show the date of his admission, were the house committee applied to from an official quarter.

I may add, that by the rules of the Glasgow Infirmary, each surgeon has charge of half the surgical wards for two years. On the first of May, every year, the senior goes out of office, and is succeeded by another gentlemen: (1842, Mr. Lyon and Dr. Buchanan; 1843, Drs. Buchanan and Pagan; 1844, Drs. Pagan and Hannay,—were surgeons.)

I trust that, after all we have read on the late nefarious proceedings, the attention of the Council will be drawn to this case by remonstrance from the members of the College.

I am, Mr. Editor, yours truly,

South Shields, June, 1847. J. S. DENHAM, M.R.C.S.E.

## ASSISTANT-SURGEONS IN THE NAVY.

*To the Editor of* THE LANCET.

SIR,—It is unnecessary to allude to our professional qualifications, further than to state, that we are all members of some of the Royal Colleges of Surgeons, and many of us, in addition, have obtained the degree of doctor of medicine. Previous to our admission into the service, we are compelled to submit to another examination before our talented director-general, Sir William Burnett. We are then sent on board ship, and thrust into a filthy, dark den, called the midshipmen's berth, among a set of noisy, half-educated school-boys. We are excluded from the ward-room mess, and denied the use of cabins, not being deemed suitable company for second-lieutenants of marines and naval schoolmasters, and who, strange as it may appear, nominally rank below us in the service.

Let me now contrast our degraded position with that of our more fortunate brethren in the army, &c. They have all comfortable apartments, and mess with the field-officers and captains of their respective regiments.

Why, then, are these marked distinctions allowed to exist in our service? Will any one be rash enough to say, that the medical officers of her Majesty's navy are in any respect inferior to those of the army, &c.? Our greatest enemies dare not say so.

We are told, indeed, that there is no place to put up cabins for us: then why and where is there space found for the cabins of the gunner, boatswain, carpenter, and engineer, in all ships and steamers. All these officers are non-commissioned, except the engineer; whilst we are commissioned officers, and rank with lieutenants in the army. The first engineers have lately been very deservedly admitted to the ward-room. May I ask, what are we inferior to them? Is not our education superior to theirs in every respect, except mechanics?

Such partiality would be most unaccountable, were it not too well known that a deep-rooted prejudice exists against our oppressed class throughout the service. We are envied our paltry pay of seven shillings and sixpence per diem, and exposed to the low scurrility of every parish boy who finds his way into our service as clerk's-assistant, &c. Situated as we are, without a cabin, where we can retire for study, we can make no farther progress in our profession, so far as books are concerned; we must make up our minds to close them for ever, and of necessity forget much of that valuable information which we have toiled so hard to acquire.

We are allowed a chest of three feet six in length, and this must serve for library, wardrobe, and toilet, &c. If we are sick during the day, we may sleep on the lid of it, if we can.

In this state of things, it may appear strange, that any young medical man of spirit would enter the navy; nor would they, if they only knew half the indignities they have to endure.

In conclusion, allow me to entreat you, and every conductor of the medical press of Great Britain, to urge the great body of the profession to call on Government to place us on a perfect equality with assistant-surgeons in the army, &c. We will never be content with less.

AN ASSISTANT-SURGEON R.N.

## ARMY AND NAVY MEDICAL MEN.

*To the Editor of* THE LANCET.

SIR,—It is passing strange that marks of the sovereign's special approbation (as the conferring of orders, pensions for distinguished services, &c.) are never extended to the medical department of the army and navy. Yet the principal medical officer in a campaign, on whom the entire responsibility of providing for the care of the sick and wounded, &c., devolves, has duties as important and more arduous to perform than many of his own relative rank in the army, on whom such distinctions are conferred.

May we not here again trace the working of that evil you are so strenuously endeavouring to conquer,—the under-estimation of the profession, consequent on the absence of a broad line of demarcation between the members of the same and traders in drugs, quacks, and such like, who illegally assume its titles and exercise its functions; on the want of a medical list, and of the power to punish the imposture of the would-be practitioner, qualified by nought save his insolent pretensions?—I remain, Sir, your obedient servant,

Military Lunatic Asylum, Yarmouth, June, 1847. C. L. ROBERTSON, M.D., Medical Staff.

## NEW MEANS OF AUSCULTATION.

IN the series of papers by Mr. CORFE, of the Middlesex Hospital, which we recently announced for publication in THE LANCET, the name of "Heautophonics" (a Greek compound, intended to be significative of the English expression, "sound of your own voice"—Εαυτον-φῶνη) is given by that gentleman to a method of examining the body to detect disease, which he regards as altogether novel, and exceedingly valuable, especially in the diagnosis of morbid changes within the chest. To facilitate the practice of this method he has designed an instrument under the name of the "Heautophonon," the study of which, and its applications in the practice of medicine, he terms "Heautophony." The varied modifications of sound produced or elicited by the medical practitioner, through the medium of the instrument, when applied over the region of diseased or healthy organs, he denotes by the term "Heautophonics." Mr. CORFE wishes us to state that he intends to publish shortly, in a cheap form, a description of the instrument, and the manner of using it. Ample illustrations of its uses at the bed-side, in cases which have occurred at the Middlesex Hospital, will be contained in his papers on "The Physiognomy of Diseases."

## THE COUNCIL OF THE COLLEGE OF SURGEONS AND MR. SKEY.

*To the Fellows of the Royal College of Surgeons of London.*

GENTLEMEN,—A recent circular of the College will have apprized you of my relation to the Council of that institution. The circumstances which have afforded me this disagreeable notoriety are peculiar, and inasmuch as they point to my possible exclusion from the Council for ever, I trust I may stand acquitted of indelicacy if I intrude my name once more on your attention.

My tale is, fortunately, short, and is not without its lesson to succeeding aspirants to the honour of a seat at the College Council Board.

At the nomination of 1846, I was informed that my name would be announced for election. It was so announced. It passed, however, unnoticed, and my junior was elected. I owe my non-election to a morbid opinion I entertain, that every office of public trust, like that to which I though it not improbable I was about to be appointed, should come by right and not by favour. Having no personal inclination to gratify, which might warrant a personal obligation, I felt that it would derogate from my honour, and from my independence, if I made a private application, even to a friend, the path to success. However willing I may have felt to undertake the duties and responsibilities of the Council, I did not estimate the value of my services so highly as to warrant my adoption of indirect means, and I declined to adopt them. My present opinions and my future intentions, notwithstanding the experience of the past, remain to this hour unchanged, and with such opinions, be they right or wrong, I will not compromise myself so far as to accept an office, which demands the advocacy of public and often contending interests, by the instrumentality of private favour. I do not conceal the fact of my disappointment in the result, but I have never reproached myself for my failure.

Many of my personal and intimate friends were present on the occasion in question. That they reproached themselves for my exclusion I am quite content to know. One and all endeavoured to acquit themselves by the assurance, that "I had no one to blame but myself;" but as I do not blame them, I do not see why the charge of failure should necessarily recoil on myself. It is a source of great satisfaction to me to acknowledge, that any regret I felt at my, possibly, temporary exclusion, was more than compensated by the kind interest expressed to me personally, by the almost entire body of the Council, at an event which was apparently the result of accident merely.

On the 1st of July, a vacancy will be declared by the necessary retirement of three gentlemen from the Council Board. Let it not be supposed that I aspire to fill either of the three offices thus vacated, notwithstanding the announcement of my name in the College circular as eligible for the office. These three gentlemen, with high professional rank, and the experience of two years of the duties of the office, will be re-elected as a matter of course. Should, however, either of the three fail of re-election, my name will be proposed, and, if unsuccessfully, I am informed that, in obedience to the requisitions of the College Charter, I shall be excluded from the Council for ever. This negative position I am not ambitious to fill. While I would shrink from obtruding myself, either on the Council or on the notice of the Fellows at large, I do not pretend indifference to the honour of a seat at the Council-board of the College of Surgeons of England.

I am, Gentlemen, your most obedient servant,

June, 1847. F. C. SKEY.

## FATAL CASE OF FLOODING.

*To the Editor of* THE LANCET.

SIR,—In your journal of May 22nd is a letter, headed, "Fatal Case of Flooding, in which the Placenta was taken away Before the Child," and signed, Auditor. It details the particulars of a case which occurred near Lisson-grove, the operations performed, and the result; and ventures on the opinion, that the end may have been different had the established rules of practice not been abandoned. Now, some of my medical friends have thought the writer alludes to a case which occurred to me on the night of the 28th of April, and seeing that no one has replied to the letter, I am inclining to the same opinion; but there is this very great difficulty in the way—that I did not, as supposed by the writer, perform a double operation; I did not first remove the placenta, and then extract by version, or attempt it, or even propose such a proceeding to my own mind; and the history of the case shows that it was one in which the warmest advocates of the new theory would have adopted the old practice. I found a case of complete placental presentation, with the os uteri open to the size of half-a-crown, and, posteriorly, the placenta already detached. I decided at once on the course to be pursued, performed without any great difficulty the old operation, and the feet came down with the withdrawal of the hand; no hæmorrhage took place during or after the operation, and the patient seemed, at the time, but little distressed by it; she talked cheerfully and happily. Twenty minutes after turning, and before the head had been extracted, (for no urgent symptoms requiring it, and the patient being feeble, I had not been over-hasty in completing the delivery,) she died, almost instantaneously, and certainly to my surprise. Such is the history of the case, and as I was not permitted to examine the body, the cause of death remains a question; but I incline to the opinion, that it could not be referred to the operation, as she had suffered during the evening from severe spasmodic pains about the region of the heart, and had had brandy administered, and friction used by the friends for its relief.

If the communication of Auditor refers to my case, it must have been written quite under an erroneous impression concerning the practice actually adopted, and ought of course to be corrected.—Your most obedient servant,

Percy-street, Bedford-square. WILLIAM HARDING.

## MR. SNOW BECK'S ANATOMY.

*To the Editor of* THE LANCET.

SIR,—May I be permitted, through the medium of your columns, to inquire from Mr. Snow Beck, how much of the anatomical detail given in his paper, On the Structure and Functions of the Sympathetic Nervous System, (THE LANCET, p. 615,) he considers to have been made out by himself. The use of the terms, "I endeavoured to show" a number of anatomical facts, certainly appears to imply a claim to priority in their discovery? The reader will find almost all, however, in

the first edition of Baly's Müller, vol. i. (1838.) Two statements only appear new—1. "That the grey cord between the spinal and sympathetic nerves is not a root of the sympathetic, but a branch proceeding from the posterior part of the ganglion, and chiefly distributed to the parts in the neighbourhood." 2. "That the gelatinous fibre, previous to its ultimate distribution, becomes entirely separated from the tubular fibre."

With the exception of these two dicta, the remainder, so far as anatomy is concerned, is familiar enough: so much so, that its publication as the result of Mr. Beck's "endeavours to show," excites a similar feeling to the publication of a few of Sir C. Bell's, or of Dr. Marshall Hall's conclusions, as the result of Mr. Somebody's endeavours to show what others apprehended before.

Will Mr. Beck admit my correctness in affirming that he has no claim to having pointed out anything not known before, in the anatomical part of his last paper, beyond the two statements I have extracted? If not, will he favour the profession with a distinct statement of what he does consider he has discovered? We shall then be in a position to form an accurate estimate, which, as few practitioners read up in modern physiology, is quite necessary to prevent a writer from palming off the labours of others as his own.

June 14th, 1847. TYRO.

## MEDICAL REGISTRATION AND MEDICAL LAW AMENDMENT BILL.

*Petitions in favour of the Bill, received for Presentation by Mr. Wakley, M.P.:—*

William Macdonald, M.A., M.D., &c., Glasgow; Geo. Henderson, Albert-street, Regent's Park; Henry Willan, Albany-street, Regent's Park; Joseph Benson, Bedford-square; Samuel Richards, Bedford-square; William Moore, South Shore, Lancashire; John Lane, Kilkhampton, Cornwall; Medical Practitioners of Watford, Herts, four signatures; William Reeves, Egremont; Richard Johnstone and Henry Taylor, East India Road; F. W. Osborne, Sheffield; George Whitehead, Sheffield; James Gleadhall, Sheffield; Samuel Parker, Sheffield; W. Mainwaring, Sheffield; W. Skinner, Sheffield; J. H. Smith, Sheffield; W. Dawson, Sheffield.

# Medical News.

NEW ACADEMY OF SCIENCES, VIENNA.—Last year the foundation of an Academy of Sciences at Vienna, Austria, was announced in the foreign journals. This Academy has just been definitely constituted by patent letters imperial, dated May 14th, according to which it will receive from the treasury of the state an annual endowment of 40,000 florins, independently of handsome incomes granted to the president, vice-president, and secretaries. Apartments are to be furnished for the Academy in some building prepared by government. The Academy is divided into two departments, one of physical and mathematical science; the other of historical, philological, and archæological science. It is to be composed of forty-eight ordinary members, (twenty-four for each department,) of a certain number of honorary members, not exceeding twenty-four, and of an unlimited number of corresponding members. An ordinary member is to be selected from amongst three, whose names have been proposed by the Academy; the honorary and corresponding members are directly named by the Academy. The Academy will yearly distribute four prizes, and it may besides give honours to works that it shall judge worthy of them; but of such works it will require the exclusive property. The imperial press is placed gratuitously at the disposal of the Academy; and lastly, the Academy is placed under the immediate protection of the Emperor. Does not all this cast a reflection on our government, which shows itself so tardy and so chary in the support and countenance it lends to science?

STATE LIMITATION OF THE DOSES OF MEDICINE.—On a proposition made by the College of Medicine, the Prussian government has recently enacted a measure having for its object the prevention of accidents in the prescription of those medicines which, in too strong a dose, may prove mischievous or fatal to a patient. The sanitary council has fixed the maximum dose of each of the medicines in use, which the apothecary may sell or make up from the prescriptions of physicians; and if a physician judges it necessary to order more than this maximum quantity, he must mention in his prescription his reasons for so doing, without which an apothecary is forbidden to make up such prescription, under a penalty of from 80 to 200 francs.

UNIVERSITY OF GIESSEN.—The University of Giessen has promulgated some new regulations concerning the conferring of degrees in medicine, and the education required for them, and which are very liberal in their character. Among other peculiar points, candidates for medical degrees may study wherever they please and may think best. The only guarantee of a proper education, reserved to itself by the government, exists in the examinations which candidates are required to pass in order to be qualified to practise, and these examinations are to be public. The first examination is to be in the natural sciences, and to consist of two parts, oral and written. The second examination is in medicine, theoretical and practical, and is divided into five parts. A thesis is to be written in German, and also defended in that language. At all the examinations the chancellor of the university and a royal commissioner are required to assist.

A SPECIMEN OF QUACKERY.—The *Bury and Suffolk Herald and Yarmouth Chronicle*, contains, under the heading of "Caution to the Public," an account of a gross deception played on a medical man from London, by a quack residing at Great Yarmouth, under the name of Dr. Curtis. It appears, from the evidence of the surgeon, in his appeal to the mayor, that, being in search of a practice, and seeing one advertised at Yarmouth, he made application, and after some correspondence visited the place, when he found the advertiser to be a quack, who had been there about five months, and could have no practice to dispose of. His window was filled with loathsome and disgusting specimens of disease, and his general plan was that adopted by the quack fraternity. The correspondence was read by the mayor, who hoped the case would be made public, although he could afford the applicant no relief in it, since it was one which required a civil action. The impostor, calling himself Dr. Curtis, in his letters sent to the plaintiff, represented that he was doing by practice, without midwifery or retail, from 15*s.* to 20*s.* a day; and this he offered to sell for £100, either entirely or as a partnership, —the sum payable at once or by instalments—making out that there were numerous other applications for it. He further represented himself as sixty years of age, an invalid, and to have been in practice before 1815; and to make a better show, requested the party in treaty to furnish a reference. This being complied with, he, in a further letter, announced that he was perfectly satisfied with it, and would give the applicant the first refusal: he entered also further into particulars respecting his practice, as he called it, and his reasons for relinquishing it. He stated that it was not a first-rate business, there being but few gentry in the town, although there were numerous wealthy individuals; that he had no retail or midwifery, and little visiting, saying that what little there was fell to the share of his assistant, who had lately accepted a union, and gone into practice in Hampshire. That he had but to see his patients at home, who came even from twenty and thirty miles round to consult him. That he was offered a club, and always was paid ready money. Garnishing this part of his lying epistle with a Latin quotation, he went on to say that his practice was too tiring for him, as an invalid, and therefore wished to sell it or obtain a partner; that his *modus operandi* was peculiar; that he had labels ready printed with directions, to facilitate the dispensing department; adding, "but a partner or purchaser will alter all that, should he consider it derogatory to professional dignity." To convince its would-be, as he hoped, purchaser, of the moderation of the sum required for the practice, he hints that his lawyer tells him that he ought to have asked £300 instead of £100 for it. He fears "that the class of patients would not be deemed sufficiently respectable by one accustomed to a West-end practice," then adds, to show the greatness of his mind, "but, for myself, I would not refuse a legacy of £1000, even were it amassed by the sweeping of chimneys, nor a sovereign from the canvas bag of a farmer, or the tarry hand of a blue jacket. Lastly, with a gentleman-like complacency, he requests his correspondent to let him "know by what train or steamer he would come," subjoining, "and I will either send my servant, or meet you myself." Here is an instance of one of the Protean forms in which the quack may enshroud himself, in order to feather his nest from the pockets of the simple and unwary; and this he does in civilized England—who boasts of the perfection of her laws—with something like impunity.

EUROPEAN ASSOCIATION OF NATURALISTS.—It is announced that there will take place a meeting, for the present summer,

of the most renowned naturalists and physicians of Europe, at Aix-la-Chapelle. This ancient city of Charlemagne presents in its environs numerous mineral productions, and affords a good field for natural history. Professor Noeggerath has been very active in getting up this meeting, and several societies of Aix-la-Chapelle are making preparations to give as splendid a reception as possible to the scientific individuals who will take part in the association; amongst those who have already signified their intention of being present is Baron Liebig. The meeting will open about the end of August.

Death of Dr. Lynch.—This distinguished advocate of sanitary reform expired, on Wednesday last, at his residence in Farringdon-street, at two o'clock, of inflammation of the throat, after a few hours' illness. He was one of the common councilmen for the ward of Farringdon-without, and senior surgeon to the West London Union. Even so late as Saturday last, he enjoyed the society of some of his friends. He was the architect of his own fortune, and having achieved an honourable name, he died at the early age of thirty-eight years. Through his life he was the popular and eloquent advocate of progressive measures for the reformation of abuses both in civil and commercial affairs. His premature and unexpected death has caused considerable sensation in the city.—*Morning Chronicle.*

Dr. Lynch's able exertions in the cause of medical reform will be long remembered. He was stimulated to his public attempts by the partial conduct of the Council of the College of Surgeons in the nomination of fellows, and by the unjust provisions of their Charter. He was the author of a Life of Cosmo de Medici, a History of Cholera in Paris, and of Essays on the Chemical Treatment of Fever and on Laryngitis. In the year 1845, the Hunterian Oration being omitted at the College of Surgeons, he was requested to deliver an Oration at Exeter Hall, and though with but a few days for preparation, produced an Oration, which, for fervid diction and strength of thought, may vie with many of those delivered within the walls of the College. Dr. Lynch has left a widow and young family to deplore his untimely death.

Royal Free Hospital.—The Nineteenth Anniversary Festival of this hospital was held on Wednesday, June 16th, and was very numerously and respectably attended. Mr. Benjamin Bond Cabbell filled the chair. The Medical Report for 1846 states that 35,507 persons have participated in the benefits of the charity, making a total of 231,725 patients received since its foundation in 1828. Subscriptions to the amount of 1100*l.* were announced in the course of the evening.

## CORRESPONDENTS.

*Manumissus* writes to confirm the statements made by Mastigia, relative to the ill-treatment received by medical assistants, and asserts that, were it otherwise, and were they better remunerated, there would be fewer instances of secession to quackery. Manumissus and Mastigia have both been unfortunate. That there are still a few persons in the profession, who treat an assistant as a menial, is far from impossible, but we hope and believe the case is far otherwise with the majority of practitioners.

*R. S. T.*—Surgeons obtain different fees for attendances in different Courts. Such fees are regulated generally by the presiding authorities of such Courts. The Judges of Assize regulate the fees on trials for capital offences and misdemeanors. The witnesses are not entitled to full payment, until after the attendances have been made by them.

The application of *M. N. S.* should be made to the Secretary of State for the Home Department, at Whitehall, if our correspondent persists in his humane object; but we would advise him seriously to reconsider the subject, and weigh well what might be the results of his proceeding.

The communication of *Mr. John Churchill*, of E. Street, E. Square, (we cannot better decipher the address,) was received.

*L. T., Med. Stud. Univ. College.*—We had already seen the "Exposure" printed and circulated at "respectable houses" by the dirty quack.

*An Apprentice.*—There can be no doubt that the apprenticeship system is a great hindrance to medical education. Many things are, we admit, learned by living five years with a respectable and able practitioner, but not so much as might be learned in other ways. Nothing can be more ridiculous than the terms even of an indenture. These things belonged to the time when a pupil followed his master, and learned his profession from him, if it could then be called a profession. Now a student's master or masters should be medicine and the sciences collateral thereto. The French opinion of the apprenticeship is very emphatic.

*A Licentiate and Member* writes truly and impressively. The general practitioners of this country are too hard worked to write, and sign, and send petitions to Parliament, without just and moving cause. Time is to them more precious than to most others of the community. When the labours of the day are over, and the chance of night-calls before them, they are too weary to enter on the consideration of politics unless their hearts and souls were in the matter, as they have been in the Registration Bill. Petitions more numerous, and more numerously signed, have before now been sent to the legislature, but never any which commanded and deserved greater respect than those emanating from the medical profession, within the last few months. It is one thing to get hundreds of thousands of names attached to one political petition, but it is another to so move a profession like that of medicine, scattered over the kingdom, and following a pursuit which renders meetings or even professional intercourse a great difficulty, that its members should singly write out many hundreds of petitions, and dispatch them to their representatives. We believe we may safely say that not a single city, town, or hamlet, in the kingdom, but has produced its petitions in favour of medical registration.

*Mr. Seth Gill.*—We shall perform our promise respecting the paper acknowledged in a former number, as early as possible.

*Mr. Geo. Millett Davis.*—The details furnished by our correspondent respecting fever at Liverpool, are most startling. Our correspondent was quite justified by the emergency in adopting the course he did. The cases referred to we shall be most happy to receive.

*A. M. H.* (Saint Bartholomew's Hospital) will see that we have availed ourselves of his able article. We shall be glad to hear from him respecting the regulations for the fellowship.

*H. M. H.* writes to the effect that in demanding fees for the answer to the long lists of questions forwarded to medical men by Life Assurance Companies, a distinction should be made between proprietary and mutual offices. He would give it to the mutual offices without fee, but demand it from the proprietary bodies. This, we think, unsound. If justly due, it should be demanded from *all*. We do not see why, because in one case the profits go in the direction of the shareholders, and in the other in the direction of the assured, that therefore the latter should not pay for services rendered. But we shall shortly consider the whole subject in all its bearings. Meanwhile we would beg professional men to send us all documents relating to the subject, which they may have in their possession. We might then have sufficient data to set the question *justly* at rest for ever.

*Dr. Evans.*—We shall insert the letter in our next, but without the author's name. The point is not one to be answered in a moment. Such a nice case of conscience would almost have puzzled the casuists of former centuries.

*The Age of Manuals.*—The letter of "Justicia" shall be inserted, if possible, in our next. We have no other desire than that the important subject should be fairly discussed on both sides.

*W. Taylor* (Enfield.)—We have received a letter of the above signature and place, asking very naively—Whether a person practising medicine at the present time, without any qualification or diploma, would be included in the profession by a Registration Bill. We should rather think not. There are quite enough possessing qualifications and diplomas, the fruits of toil and labour.

*G. G.*—The consultee should write and learn the fee required by Dr. Monroe; of course Dr. Conolly should be fee'd if required to join the consultation.

*Omega*, referring to the practice of medicine in Spain, lately referred to in our columns, states, "by personal application to the Spanish Consul on this very subject, that a British medical diploma would not be received as a licence to practise in Seville. Shortly before my inquiries were made, a Spanish gentleman took out the diploma of the Royal College of Surgeons of England, and proceeded to his native country. But he no sooner commenced practice, than the authorities stept in, and obliged him to desist. The last I heard of him was, that he was going through the regulations prescribed by the Spanish Colleges; and I have ascertained that any foreigner doing the same may procure permission to settle in Spain as a medical practitioner."

*An Admirer of the Society for the Prevention of Cruelty to Animals* advocates the formation of an anti-quackery society for the prevention of robbery and death to human creatures! We are obliged to him for his letter. He may rest assured we have only as yet commenced our anti-quackery crusade.

*Dr. G. W. Balfour.*—Our correspondent would cease his wonder if he could see the immense mass of matter relating to *human* pathology and practice we have under consideration. An abstract of the remarks shall be published.

*Mr. G. Hill Smith.*—The "M.D." of Harley-street may or may not have a diploma; but his system of puffing, publication, and advertisements, is that of an undoubted quack.

*Mr. C. R. Bree*, (Stowmarket.)—We have received a copy of the petition in favour of the Medical Registration Bill, adopted unanimously by the Norfolk and Suffolk branches of the Provincial Medical and Surgical Association, held at Beccles on the 17th instant. We shall give it in our next, together with the report of the meeting.

*Mr. John Morison*, (Hutton.)—The name cannot be "appended." A petition should be forwarded with the name attached.

The letter and enclosure from *Mr. P. J. Hynes* (Beeston) were duly received.

Communications have been received from—An Apprentice; Mr. Charles Clarke; Mr. W. F. Barlow; Mr. W. D. Emmett, (Darlington;) Dr. Lawrie, (Glasgow;) Dr. Marshall Hall; Mastigia; Mr. Robert Ransom, (Cambridge;) Mr. George Corfe; A "Licentiate" and "Member;" Mr. W. Seth Gill; Dr. James L. Clarke; Justicia; Mr. J. Ranald Martin; Omega; Mr. William George Gill; Mr. C. R. Bree, (Stowmarket;) Mr. Atkinson, (Barton, Lincolnshire;) Dr. George W. Balfour; Mr. J. Goodwin; Mr. G. Hill Smith, (Stevenage;) Dr. G. A. Rees; Forceps; Dr. O'Rourke, (Enniscorthy;) Mr. Wollaston, (Bishop's Castle,) &c., &c.

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